
MARKING SCHEME

2008

CLASS XII
COMMERCE SUBJECTS



CENTRAL BOARD OF SECONDARY EDUCATION
DELHI

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COMMERCE SUBJECTS



CENTRAL BOARD OF SECONDARY EDUCATION
DELHI

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Manuscript as such highlights the main value points and does not represent a complete ideal answer.
Manuscript may vary from time to time and year to year.

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PREFACE

CBSE as a pace setting national Board has constantly been striving to design its evaluation process in a manner that it is used as a powerful means of influencing the quality of teaching and learning in the classroom situation. Also, it has to be so designed that it provides constant feedback regarding the effectiveness of the course content, classroom processes and the growth of individual learners besides the appropriateness of evaluation procedures.

As a move in this direction, CBSE started the practice of publishing the Marking Schemes with twin objectives in mind-(i) making the system more transparent and at the same time, (ii) ensuring high degree of reliability in scoring procedure.

Who are the markers of answer scripts? How do they mark the answer scripts? How can it be ensured that marking is fair, objective and reliable? Questions of these types naturally arise in the minds of candidates appearing in the public examination. These questions are equally pertinent to the teachers who are not adequately exposed to the CBSE system of marking.

Answer Scripts marking is a specialised job. It is assigned to teachers-PGTs for Class XII and TGTs for Class X who are in direct touch with the subject and have a minimum of 3 years experience of teaching the subject at that level. Appointment of examiners is made in accordance with the well-defined norms. Markers examine scripts with the help of detailed guidelines called the 'Marking Schemes'.

It is this tool (Marking Scheme) alongwith the extensive supervisory checks and counter-checks through which CBSE tries to ensure objective and fair marking. The present publication is being brought out with a view to serving the following objectives :

- (i) To give an opportunity to the teachers and students to look into the Marking Schemes that were developed by the Board and supplied to the evaluators in 2008 main examination in some selected main subjects.
- (ii) To receive feedback and suggestions from institutions/subject teachers on the utility and further improvement of Marking Schemes.
- (iii) To encourage institutions to undertake similar exercise of developing marking schemes for classes other than those covered by the Board's examination with a view to increasing teachers' responsiveness to them as the essential tools of evaluation.

HOW TO USE

Teachers and the students preparing for Class XII examination of the Board constitute the primary interest-group of this publication. Marking Schemes of Question Papers in the subjects of English Core, Functional English, Mathematics, Economics, Business Studies, Accountancy and Entrepreneurship administered in Delhi and Outside Delhi during the 2008 main examination have been included in this document. Some tips on their usage are given below :

(a) To Teachers :

- Go through the syllabus and the weightage distribution for the subject carefully.
- Read the question paper to find out how far the question paper set subscribes to the prescribed design. Grade every question by difficulty level for students who have taken the main Board examination.
- Consult the 'Marking Scheme' for each question, with reference to steps into which answers and awards have been divided.
- Work out concrete suggestions for the Board.

(b) To Students :

- Study each question carefully, comprehend them and write down the main points of the answer and note down their difficulties for clarification.
- Examine a question in conjunction with the Marking Scheme and find out the proximity of the answer to that suggested in the Marking Scheme.
- We will feel motivated if this publication is commented upon by practitioners in the context of its impact on their teaching learning strategies. Contribution of the experts and the officials of the Board in bringing out this document is gratefully acknowledged.

We urge the teachers to encourage their students to make use of this publication and at the same time to enrich us with their free and frank reactions.

M.C. SHARMA
CONTROLLER OF EXAMINATIONS

भारत का संविधान

उद्देशिका

हम, भारत के लोग, भारत को एक '[सम्पूर्ण प्रभुत्व-संपन्न समाजवादी पंथनिरपेक्ष लोकतन्त्रात्मक गणराज्य] बनाने के लिए, तथा उसके समस्त नागरिकों को:

सामाजिक, आर्थिक और राजनैतिक न्याय,

विचार, अभिव्यक्ति, विश्वास, धर्म

और उपासना की स्वतंत्रता,

प्रतिष्ठा और अवसर की समता

प्राप्त कराने के लिए,

तथा उन सब में,

व्यक्ति की गरिमा और ² [राष्ट्र की एकता

और अखण्डता] सुनिश्चित करने वाली बंधुता

बढ़ाने के लिए

दृढ़संकल्प होकर अपनी इस संविधान सभा में आज तारीख 26 नवम्बर, 1949 ई० को एतद्वारा इस संविधान को अंगीकृत, अधिनियमित और आत्मार्पित करते हैं।

1. संविधान (बयालीसवां संशोधन) अधिनियम, 1976 की धारा 2 द्वारा (3.1.1977) से "प्रभुत्व-संपन्न लोकतन्त्रात्मक गणराज्य" के स्थान पर प्रतिस्थापित।
2. संविधान (बयालीसवां संशोधन) अधिनियम, 1976 की धारा 2 द्वारा (3.1.1977 से), "राष्ट्र की एकता" के स्थान पर प्रतिस्थापित।

भाग 4 क

मूल कर्तव्य

51 क. मूल कर्तव्य - भारत के प्रत्येक नागरिक का यह कर्तव्य होगा कि वह -

- (क) संविधान का पालन करें और उसके आदर्शों, संस्थाओं, राष्ट्र ध्वज और राष्ट्र गान का आदर करें;
- (ख) स्वतंत्रता के लिए हमारे राष्ट्रीय आंदोलन को प्रेरित करने वाले उच्च आदर्शों को हृदय में संजोए रखें और उनका पालन करें;
- (ग) भारत की प्रभुता, एकता और अखंडता की रक्षा करें और उसे अक्षुण्ण रखें;
- (घ) देश की रक्षा करें और आह्वान किए जाने पर राष्ट्र की सेवा करें;
- (ङ) भारत के सभी लोगों में समरसता और समान भ्रातृत्व की भावना का निर्माण करें जो धर्म, भाषा और प्रदेश या वर्ग पर आधारित सभी भेदभाव से परे हों, ऐसी प्रथाओं का त्याग करें जो स्त्रियों के सम्मान के विरुद्ध हैं;
- (च) हमारी सामासिक संस्कृति की गौरवशाली परंपरा का महत्व समझें और उसका परिक्षण करें;
- (छ) प्राकृतिक पर्यावरण की जिसके अंतर्गत वन, झील, नदी, और वन्य जीव हैं, रक्षा करें और उसका संवर्धन करें तथा प्राणि मात्र के प्रति दयाभाव रखें;
- (ज) वैज्ञानिक दृष्टिकोण, मानववाद और ज्ञानार्जन तथा सुधार की भावना का विकास करें;
- (झ) सार्वजनिक संपत्ति को सुरक्षित रखें और हिंसा से दूर रहें;
- (ञ) व्यक्तिगत और सामूहिक गतिविधियों के सभी क्षेत्रों में उत्कर्ष की ओर बढ़ाने का सतत प्रयास करें जिससे राष्ट्र निरंतर बढ़ते हुए प्रयत्न और उपलब्धि की नई ऊंचाइयों को छू लें।

THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a ¹
[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC] and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the ² [unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

1. Subs. by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "Sovereign Democratic Republic (w.e.f. 3.1.1977)
2. Subs. by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "unity of the Nation (w.e.f. 3.1.1977)

THE CONSTITUTION OF INDIA

Chapter IV A Fundamental Duties

ARTICLE 51A

Fundamental Duties - It shall be the duty of every citizen of India-

- (a) to abide the Constitution and respect its deals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

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Senior School Certificate Examination (XII)

Marking Scheme

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EXAMINATION, 2008**

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ENGLISH (Core)

Time allowed : 3 hours

Maximum Marks : 100

General Instructions:

- (i) *This paper is divided into three Sections: A, Band C. All the sections are compulsory.*
- (ii) *Separate instructions are given with each section and question, wherever necessary. Read these instructions very carefully and follow them faithfully.*
- (iii) *Do not exceed the prescribed word limit while answering the questions.*

QUESTION PAPER CODE 1/1/1

SECTION A : READING

20 Marks

- 1.** Read the passage given below and answer the questions that follow: (12 marks)

1. The word 'depressed' in common usage means sad, frustrated, fed up, bored up and pessimistic. The mood of a depressed person is much lower at his or her best moments than the mood of the normal person at his or her worst. Depression is a state of mind. It is specifically a mental disorder characterised by a lowering of the individual's vitality, his mood, desires, hopes, aspirations and of his self-esteem.
2. Depression arising out of environmental factors is called reactive depression whereas depression arising out of some biochemical changes in the brain is called endogenous depression. If depression is mild or moderate and if the individual is in touch with his surroundings, it is known as neurotic depression. If the individual is severely disturbed and is not able to comprehend what is happening around, such a state is called psychotic depression.
3. Old age is one of the stages of human development, where a person attains wisdom, maturity, social and economic stability with social recognition and emotional fulfilment. Generally, societies show a great respect and consideration for the aged. In ancient times old people were considered as the guiding stars in Indian families, since they were symbols of tradition, respect, wisdom and experience. In primitive, ancient and medieval cultures, old persons had a recognized social role. They were of great value because they could impart knowledge and skill to youngsters. The old people were considered as repositories of wisdom and traditions and were not perceived as problems.

4. At present, social structures and values are undergoing transformation from traditional to modern. There is a rapid stride in urbanization and industrialization leading to the breaking up of joint families and property. This has ultimately weakened the traditional families, social position and status of the aged in the family. From time to time changes in the institutions of marriage and family have diminished the control of parents over their children. It has increased the freedom of children and they view the aged as a useless and non-productive entity. Modernization has eventually led to the degradation of their status and authority. Consequently the integrity of the family and the existence of the elderly as an integral part of the family are being uprooted. The importance of their functional positions thus declines and consequently their authority and much of the respect and prestige that they enjoyed earlier get faded. These changes generally bring about depression in older people.
5. As old age advances events at home may also contribute more to their problems. The ‘empty nest’ feeling arising as a result of the grown up children leaving the home, daughters departing as a result of wedlock and sons leaving station in pursuit of higher education or jobs may make the aged more lonely. The loneliness also arises because of premature loss of spouse. This would deprive the person of a long standing emotional bond that had provided plenty of emotional succour and security. The loss wherever it might occur in the later years leaves the individual terribly lonely and at the mercy of the sons and daughters-in-law. Added to these the increasing gap and interactional stress and strain in the family may leave the elderly without peace of mind. The elderly as a result of these developments feel marginalised, alienated and left out of the main stream. The foregoing are the common problems faced by most of the elderly. These either directly or indirectly lead to a state of depression and make ageing for many an unwanted and unpleasant event to be abhorred.
6. Usually, the mild depression which is caused due to environmental factors is temporary. The person reconciles within a short time and tries to forget the loss. Kind words, and timely support of friends, relatives and family members help one recover from depression.
 - (a)
 - (i) What does ‘depressed’ mean in common usage? 2
 - (ii) What is reactive depression? 1
 - (iii) What was the status of the old people in ancient India? 2
 - (iv) What are the causes for disintegration of joint family system? 2
 - (v) How does one recover from mild depression? 2

- (b) Pick out the words from the passage that mean the same as the following:

3x1=3

- (i) decreased (para 4)
- (ii) to feel that they do not belong to a group (para 5)
- (iii) a husband or wife (para 5)

2. Read the passage given below and answer the questions that follow: (8 marks)

A vast blanket of pollution stretching across South Asia is cutting down sunlight by 10 per cent over India, damaging agriculture, modifying rainfall patterns and putting hundreds of thousands of people at risk, according to a new study.

The startling findings of scientists working with the United Nations Environment Programme indicate that the spectacular economic growth seen in this part of the world in the past decade may soon falter as a result of this pollution.

Research carried out in India indicates that the haze caused by pollution might be reducing winter rice harvests by as much as 10 per cent, the report said.

“Acids in the haze may, by falling as acid rain, have the potential to damage crops and trees. Ash falling on leaves can aggravate the impacts of reduced sunlight on earth’s surface. The pollution that is forming the haze could be leading to several hundreds of thousands of premature deaths as a result of higher levels of respiratory diseases,” it said. Results from seven cities in India alone, including Delhi, Mumbai, Ahmedabad and Kolkata, estimate that air pollution was annually responsible for 24,000 premature deaths in the early 1990s. By the mid 1990s they resulted in an estimated 37,000 premature fatalities.

“The haze has cut down sunlight over India by 10 per cent (so far) - a huge amount! As a repercussion, the North West of India is drying up,” Prof. V. Ramanathan said when asked specifically about the impact of the haze over India. Stating that sunlight was going down every year, he said. “We are still in an early stage of understanding of the impact of the haze.

Asked whether the current drought in most parts of India after over a decade of good monsoon was owing to the haze, he said, “it was too early to reach a conclusion. If the drought persists for about four to five years, then we should start suspecting that it may be because of the haze.”

India, China and Indonesia are the worst affected owing to their population density, economic growth and depleting forest cover. The preliminary results indicate that

the build up of haze, a mass of ash, acids, aerosols and other particles is disrupting weather systems, including rainfall and wind patterns and triggering droughts in western parts of the Asian Continent. The concern is that the regional and global impacts of the haze are set to intensify over the next 30 years as the population of the Asian region rises to an estimated five billion people.

- (a) On the basis of your reading of the above passage make notes on it using headings and sub-headings. Use recognizable abbreviations, wherever necessary. 5
- (b) Write a summary of the passage in 80 words using the notes made and also suggest a suitable title. 3

SECTION B : ADVANCED WRITING SKILLS

35 Marks

3. You lost your wrist watch in your school auditorium. Write a notice in not more than 50 words for your school notice board giving a detailed description of the watch. You are Anirudh/Arundhati of class XII of Springfield School, Pune. 5

OR

You are Dr. Madhu, M.D. You are looking for an independent house in Ghaziabad on a reasonable rent for your residence-cum-clinic. Draft a suitable advertisement in not more than 50 words to be published in Hindustan Times, New Delhi. Your telephone no is 12341234.

4. You are Amrit/Anuradha of B.M.B. Public School, Dalmianagar. Recently your school celebrated Environment Week. Giving details of the celebrations write a report in 100-125 words for your school magazine. 10

OR

You are Akash / Ambika. You attended a seminar arranged for class XII students by AMC School, Chennai on the topic, 'How to face the examination with confidence.' Write a report in 100-125 words for your school magazine. Invent the necessary details.

5. As Sports Incharge of A.C.C. Public School, Secunderabad, write a letter to the Secretary of the Sports Authority of India, Delhi, requesting him to send the details of scholarships admissible to different categories of students of the school, who have achieved excellence in various sports. 10

OR

You are the Librarian of T.H.S.S. School, Kolar. Write a letter to Messrs Vikas Publishers, Chennai placing an order for some books for your school library. Mention

the details of the books (at least four) and ask for the discount available on the purchase.

6. National Cadet Corps is an organization which not only inculcates discipline in the youth but also prepares them for the defence of the country. It also provides an opportunity to the students to participate in various other activities such as adventure, culture etc. Write an article in 150-200 words on the need to make N.C.C. compulsory in all schools in the country.

10

OR

Joint family system is gradually disintegrating in the country. Many elderly people get neglected because of the nuclear set up of families. It increases the need of homes for the aged. Write an article in 150-200 words on the topic entitled "Should there be Homes for the Aged in India."

SECTION C : LITERATURE

45 Marks

7. (a) Read the extract given below and answer the questions that follow: (4 marks)

.....but soon
put that thought away, and
looked out at young
trees sprinting, the merry children spilling
out of their homes.

- | | |
|---|---|
| (i) Who looked out at young trees? | 1 |
| (ii) Which thought did she put away? | 2 |
| (iii) What do young sprinting trees signify ? | 1 |

OR

Perhaps the Earth can teach us
as when everything seems dead
and later proves to be alive.
Now I'll count up to twelve
and you keep quiet and I will go.

- | | |
|--|---|
| (i) What does the earth teach us ? | 2 |
| (ii) Why does the poet count up to twelve? | 1 |
| (iii) What will keeping quiet help us achieve? | 1 |

(b) Answer any **three** of the following questions in 30-40 words each: 3 x2=6

- (i) What was the plea of the folk who had put up the roadside stand?
- (ii) What does the poet wish for the children of the slums?
- (iii) How does the poet describe Aunt Jennifer's tigers?
- (iv) What makes human beings love life in spite of troubles and sufferings?
(A Thing of Beauty)

8. Answer the following questions in 30-40 words each : 5x2 = 10

- (a) Garbage to them is gold. Why does the author say so about the ragpickers?
- (b) How was the scene in the school in the morning of the last lesson different from that on other days?
- (c) How do we know that ordinary people too contributed to the freedom movement?
- (d) Why did everybody in the studio think of giving the author some work to do ?
- (e) State the reason for the huge success of the novel, 'The Name of the Rose.'

9. Answer the following question in 125-150 words: 10

What was Douglas's fear? How did he overcome that fear?

OR

Compare and contrast the character of the iron master with that of his daughter.

10. Answer the following question in 125-150 words: 7

How did Mr. Lamb's meeting with Derry become a turning point in Derry's life?

OR

The world's geological history is trapped in the Antarctica. How is the study of this region useful to us ?

11. Answer the following questions in 30-40 words each: 4x2 = 8

- (a) Do you think that the third level was a medium of escape for Charlie? Why?
- (b) How did the tiger king celebrate his victory over the killing of the 100th tiger?
- (c) How did the gardener react when Dr. Sadao told him about the wounded American soldier?
- (d) How does Jo want the story to end and why?

QUESTION PAPER CODE 1/1

SECTION A : READING

20 Marks

1. Read the passage given below and answer the questions that follow: (12 marks)

- 1 The word 'depressed' in common usage means sad, frustrated, fed up, bored and pessimistic. The mood of a depressed person is much lower at his or her best moments than the mood of the normal person at his or her worst. Depression is a state of mind. It is specifically a mental disorder characterised by a lowering of the individual's vitality, his mood, desires, hopes, aspirations and of his self-esteem.
- 2 Depression arising out of environmental factors is called reactive depression whereas depression arising out of some biochemical changes in the brain is called endogenous depression. If depression is mild or moderate and if the individual is in touch with his surroundings, it is known as neurotic depression. If the individual is severely disturbed and is not able to comprehend what is happening around, such a state is called psychotic depression.
- 3 Old age is one of the stages of human development, where a person attains wisdom, maturity, social and economic stability with social recognition and emotional fulfilment. Generally, societies show a great respect and consideration for the aged. In ancient times old people were considered as the guiding stars in Indian families, since they were symbols of tradition, respect, wisdom and experience. In primitive, ancient and medieval cultures, old persons had a recognized social role. They were of great value because they could impart knowledge and skill to youngsters. The old people were considered as repositories of wisdom and traditions and were not perceived as problems.
- 4 At present, social structures and values are undergoing transformation' from traditional to modern. There is a rapid stride in urbanization and industrialization leading to the breaking up of joint families and property. This has ultimately weakened the traditional families, social position and status of the aged in the family. From time to time changes in the institutions of marriage and family have diminished the control of parents over their children. It has increased the freedom of children and they view the aged as a useless, and non-productive entity. Modernization has eventually led to the degradation of their status and authority. Consequently the integrity of the family and the existence of the elderly as an integral part of the family are being uprooted. The importance of

their functional positions thus declines and consequently their authority and much of the respect and prestige that they enjoyed earlier get faded. These changes generally bring about depression in older people.

- 5 As old age advances, events at home may also contribute more to their problems. The 'empty nest' feeling arising as a result of the grown-up children leaving the home, daughters departing as a result of wedlock and sons leaving station in pursuit of higher education or jobs may make the aged more lonely. The loneliness also arises because of premature loss of spouse. This would deprive the person of a long standing emotional bond that had provided plenty of emotional succour and security. The loss wherever it might occur in the later years leaves the individual terribly lonely and at the mercy of the sons and daughters-in-law. Added to these the increasing gap and interactional stress and strain in the family may leave the elderly without peace of mind. The elderly as a result of these developments feel marginalised, alienated and left out of the mainstream. The foregoing are the common problems faced by most of the elderly. These either directly or indirectly lead to a state of depression and make ageing for many an unwanted and unpleasant event to be abhorred.
 - 6 Usually, the mild depression which is caused due to environmental factors is temporary. The person reconciles within a short time and, tries to forget the loss. Kind words, and timely support of friends, relatives and family members help one recover from depression.
- (a)
 - (i) What does 'depressed' mean in common usage? 2
 - (ii) What is reactive depression? 1
 - (iii) What was the status of the old people in ancient India? 2
 - (iv) What are the causes of disintegration of joint family system? 2
 - (v) How does one recover from mild depression? 2
 - (b) Pick out words from the passage that mean the same as the following: 3x1=3
 - (i) decreased (para 4)
 - (ii) to feel that they do not belong to a group (para 5)
 - (iii) a husband or wife (para 5)

2. Read the passage given below and answer the questions that follow: (8 marks)

A vast blanket of pollution stretching across South Asia is cutting down sunlight by

10 per cent over India, damaging agriculture, modifying rainfall patterns and putting hundreds of thousands of people at risk, according to a new study.

The startling findings of scientists working with the United Nations Environment Programme indicate that the spectacular economic growth seen in this part of the world in the past decade may soon falter as a result of this pollution.

Research carried out in India indicates that the haze caused by pollution might be reducing winter rice harvests by as much as 10 per cent, the report said.

“Acids in the haze may, by falling as acid rain, have the potential to damage crops and trees. Ash falling on leaves can aggravate the impacts of reduced sunlight on the earth’s surface. The pollution that is forming the haze could be leading to several hundreds of thousands of premature deaths as a result of higher levels of respiratory diseases,” it said. Results from seven cities in India alone, including Delhi, Mumbai, Ahmedabad and Kolkata estimate that air pollution was annually responsible for 24,000 premature deaths in the early 1990s. By the mid 1990s they resulted in an estimated 37,000 premature fatalities.”

“The haze has cut down sunlight over India by 10 per cent (so far) - a huge amount! As a repercussion, the North West of India is drying up,” Prof. V. Ramanathan said when asked specifically about the impact of the haze over India. Stating that sunlight was going down every year, he said, “we are still in an early stage of understanding of the impact of the haze.”

Asked whether the current drought in most parts of India after over a decade of good monsoon was owing to the haze, he said, “it is too early to reach a conclusion. If the drought persists for about four to five years, then we should start suspecting that it may be because of the haze.”

India, China and Indonesia are the worst-affected owing to their population density, economic growth and depleting forest cover. The preliminary results indicate that the build-up of haze, a mass of ash, acids, aerosols and other particles is disrupting weather systems, including rainfall and wind patterns and triggering droughts in western parts of the Asian continent. The concern is that the regional and global impacts of the haze are set to intensify over the next 30 years as the population of the Asian region rises to an estimated five billion people.

- (a) On the basis of your reading of the above passage, make notes on it using headings and sub-headings. Use recognizable abbreviations, wherever necessary.

- (b) Write a summary of the passage in 80 words using the notes made and also suggest a suitable title.

3

SECTION B : ADVANCED WRITING SKILLS

35 Marks

3. You are Saran / Swati, Cultural Secretary of Queen's Senior Secondary School, Patna. Write a notice in not more than 50 words for your school notice board, giving details of the cultural programme to be organised by your school. Invite the names of the participants.

5

OR

You want to sell your car as you are going abroad. Draft a suitable advertisement in not more than 50 words to be published in the classified columns of 'The Hindu'. Give necessary details of the car. You are Suman/ Sushil, 21 Ram Nagar, Delhi.

4. Your school celebrated the Diamond Jubilee year of India's independence. Write a report in 100 - 125 words for your school magazine, giving details of the celebrations. You are Amit / Anita of Maharani Laxmibai Senior Secondary School, Gwalior.

10

OR

You are a staff reporter of 'The Hindu', New Delhi. You have witnessed a road accident involving a lorry and a Maruti car at Mathura Road. Write a report in 100 -125 words. You are Ashok / Aruna.

5. You are Krishan / Kiran studying at Hindustan School, Chennai. The road leading to your school is full of potholes causing a lot of congestion. Students and parents are often caught in traffic jams. In spite of several representations the Chennai Corporation has not done anything to improve the condition. Write a letter to the Editor of 'The Hindu', Chennai, drawing the attention of the Corporation authorities to the problem. Also offer your suggestions for improvement.

10

OR

You are Gaurav / Garima, 13, Vaishali, Delhi. Read the advertisement given below and write a letter to the advertiser, applying for the job. Also give your detailed resume which you would send along with your letter of application.

WISDOM PUBLISHERS LTD.,

10, Sector 24, Faridabad

Wanted Sales Manager

Qualification: M.Com. / M.B.A.

Experience: 5 years for M. Com.; 1 or 2 years for M.B.A.

Competency : Knowledge of computers, finances and related commercial activities.
Salary commensurate with qualification and experience.
Apply to the General Manager.

6. You are Gopal/ Gopika, a social worker. You have observed that young boys and girls go on increasing their academic qualification without proper direction. Most of them do not get any employment creating the problem of the educated unemployed. Some of them drift into unsocial activities. Write an article in 150 - 200 words on how this problem of the 'educated unemployed' can be solved. 10

OR

Cyclones often hit the coastal areas causing a lot of devastation in terms of life and property. Helping the sufferers requires a lot of assistance from private and public sources. A scientific mechanism is necessary to cope with the situation in time of emergency. Write an article in 150 - 200 words on how the victims of cyclones can be helped. You are Kamal/Kamala.

SECTION C : TEXT BOOKS

45 Marks

7. (a) Read the extract given below and answer the questions that follow: (4 marks)

Fishermen in the cold sea
would not harm whales
and the man gathering salt
would look at his hurt hands.

- | | | |
|-------|---|---|
| (i) | What does the poet expect of the fishermen and why? | 2 |
| (ii) | What will the man gathering salt do ? | 1 |
| (iii) | What do the hurt hands imply? | 1 |

OR

A thing of beauty is a joy forever
Its loveliness increases, it will never
Pass into nothingness; but will keep
A bower quiet for us, and a sleep
Full of sweet dreams, and health, and quiet breathing.

- | | | |
|------|--|---|
| (i) | How does a thing of beauty remain a joy forever? | 2 |
| (ii) | Mention any two sources of joy which a thing of beauty provides to us. | 2 |

(b) Answer any three of the following questions in 30 - 40 words each: 3x2=6

- (i) What was the plea of the folk who had put up the roadside stand?
- (ii) Describe the tigers created by Aunt Jennifer.
- (iii) Why does the poet, Stephen Spender call the map a bad example?
- (iv) What do the parting words of the poet, Kamala Das to her mother signify?

8. Answer the following questions in 30 - 40 words each: 5x2=10

- (a) What is Saheb looking for in the garbage dumps? Where has he come from and why?
- (b) How did the drowning experience affect Douglas?
- (c) Why did the peddler accept Edla's invitation? How did he feel?
- (d) How was Gandhiji able to influence the lawyers?
- (e) Why was Sophie jealous of Geoff's silence?

9. Answer the following question in 125 - 150 words: 10

Describe the effect, on life at school, produced by the passing of Alsace and Lorraine into Prussian hands.

OR

Why did Umberto Eco start writing novels and when? What does Eco say about the huge success of his novel, 'The Name of the Rose' in spite of it being a difficult and very serious novel?

10. Answer the following question in 125 - 150 words: 7

The astrologer's prediction about the death of the Tiger King came to be true. Do you agree with this statement? Explain why or why not.

OR

What oppression and discrimination did Zitkala-Sa and Bama experience during their childhood? How did they respond to their respective situations?

11. Answer the following questions in 30 - 40 words each:

4x2=8

- (a) Who do you think has outwitted the other – Evans or the ‘Governor? How?
- (b) How does Mr. Lamb try to remove the baseless fears of Derry?
- (c) How can a visit to the Antarctica be an enlightening experience?
- (d) How did the Skunk’s mother get his old smell back?

Marking Scheme — English Core

General Instructions :

1. Answer scripts should not be given to the evaluators for evaluation until and unless the given Marking Scheme has been thoroughly discussed with them in group or individually on the first day of their starting evaluation.
2. The Head-Examiners have to go through the first five answer-scripts evaluated by each evaluator to ensure that the evaluation has been carried out as per the Marking Scheme only. The remaining answer scripts meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.
3. Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one's own interpretation or any other consideration - Marking Scheme is the only guideline.
4. The Marking Scheme carries only suggested value points for the answers. These are only guidelines and do not constitute the complete answer.
5. If a question has parts, please award marks on the right hand side for each part. Marks awarded for different parts of the question should then be totalled up and written out in the left hand margin and circled.
6. If a question does not have any parts, marks must be awarded on the left-hand margin.
7. Where marks are allotted separately for content and expression as per the Marking Scheme, they have to be reflected separately and then totalled. This is a mandatory requirement.
8. A slash (/) in the marking scheme indicates alternative answers to a question.. If a student writes an answer which is not given in the Marking Scheme but which is equally acceptable, marks should be awarded only in consultation with the Head-Examiner.
9. If a child has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out.
10. Q1 under Section A (Reading skills) and Q7 (a) under Section C (Literature) questions have been designed to test a student's understanding and his ability to interpret, evaluate and respond to the given passage. In other words, only the ability to comprehend the given passage on the part of the students must be tested so that the examinees are not unnecessarily penalized for language errors.

11. However, where questions have been designed to test the writing skills of students, expression (grammatical accuracy, appropriate use of words, style, spelling, organization and presentation of relevant matter in a coherent and logical way) is important.
12. Wherever the word limit is given, no deduction of marks is to be made if the word limit exceeds only upto 25%. However, beyond this permitted limit, marks are to be deducted as follows:

Penalty for exceeding the word limit

For a 50 word answer:

Above 60 - deduct ½ mark

For a 125 word answer:

150 to 175 words - deduct ½ mark

Above 175 words - deduct 1 mark

For a 150 word answer:

175 to 200 words - deduct ½ mark

Above 200 words - deduct 1 mark

For a 200 word answer:

225 to 250 words - deduct ½ mark

Above 250 words - deduct 1 mark

However, no marks should be deducted in respect of short answer type questions (under Q7, 8 & 11).

13. If a student, in response to a short-answer-type question, writes a single word answer which constitutes the core of the answer, it may be accepted and awarded full marks.
14. If a student literally lifts a portion of the given passage as an answer to a question, no mark(s) are to be deducted for this as long as it is relevant and indicative of the desired understanding on the part of the student (especially in questions under Q 1 and Q7).
15. A full scale of marks - 0 to 100 - has to be used. In case of an answer book deserving 95 and above marks, award marks in consultation with the Head Examiner only.

QUESTION PAPER CODE 1/1/1
EXPECTED ANSWERS/VALUE POINTS

SECTION A: READING

20 Marks

1 COMPREHENSION PASSAGE

- (a) NOTE: No mark(s) should be deducted for mistakes of grammar, spelling, or word limit. Full marks may be awarded if a student has been able to identify the core ideas. If a student literally lifts a portion of the given passage as an answer to a question, no mark(s) to be deducted for this as long as it is relevant
- (i) unhappy / sad / frustrated / fed up / mental disorder / bored up and pessimistic 2 marks
- (ii) depression arising out of environmental factors 1 mark
- (iii) – considered as guiding stars 2 marks
– had a recognised social role
– were of great value as they could impart knowledge
(any two)
- (iv) – transformation of social structures and values from traditional to modern 2 marks
– rapid stride in urbanisation and industrialization
- (v) – with kind words 2 marks
– timely support of friends, relatives and family members
- (b) (i) diminished / degradation / declined / weakened 1 mark
- (ii) alienated / marginalised / left out 1 mark
- (iii) spouse 1 mark

2 Note

- **If a student has attempted only summary or only notes, due credit should be given.**
- **1 mark allotted for title be given if the student has written the title either in Q2(a) or Q2(b) part**
- **Min. 3 main headings and 3 sub-headings to form content**

The notes provided below are only guidelines. Any other title, main points and sub-points should be accepted if they are indicative of the candidate's understanding of the given passage, and the notes include the main points, with suitable and recognizable abbreviations. Complete sentences not to be accepted as notes.

Numbering of points can be indicated in different ways, and these should be accepted as long as a consistent pattern is followed.

(a) **NOTE MAKING**

Distribution of Marks

Abbreviations / Symbols (with /without key) - any four 1 mark

Title 1 mark

Content (minimum 3 sub-headings, with proper indentation and notes) 3 marks

Suggested Notes

Title: Pollution / Effects of Pollution / Global Impact of Pollution
/ Any other suitable title)

- 1 Effects of polln. (in S. E. Asia)
 - 1.1 cuts sunlight - 10% in India
 - 1.2 damages agri.
 - 1.3 modifies rainfall patterns
 - 1.4 people at risk / hindering eco. growth
- 2 Findings of UNEP
 - 2.1 blanket of polln. across S. E. Asia
 - 2.2 growth may falter
 - 2.3 might reduce winter rice harvest
- 3 Research about India
 - 3.1 acid rains damage crops & trees
 - 3.2 ash on leaves reduces sunlight
 - 3.3 respiratory diseases
 - 3.4 2400 premature deaths
 - 3.5 N. W. India drying up due to drought

- 4 Far reaching global impact
- 4.1 esp. in India, China, Indonesia due to
- popu. density
 - economic growth
 - depleting forest cover
- 4.2 effect
- haze disrupts weather system
 - triggers drought in West Asia

(b) **Summary**

The summary should include all the important points given in the notes.

Content

2 marks

Expression

1 mark

SECTION B: ADVANCED WRITING SKILLS

35 Marks

NOTE: The objective of the section on Advanced Writing Skills is to test a candidate's writing ability. Hence expression assumes as much importance as the content or the answer.

3 **NOTICE**

Format

1 mark

Content

2 marks

Expression

2 marks

Suggested value points

(LOST / LOST WRISTWATCH / LOST AND FOUND)

- day & date / time / location
- description of wristwatch - make, looks, design, shape etc
- whom to contact / where
- incentive for finder

OR

ADVERTISEMENT

Content

3 marks

Expression

2 marks

Suggested value points

(ACCOMODATION WANTED)

- location
- facilities required for house-cum-clinic
 - 24 hours water
 - electricity backup
 - fully furnished
 - big rooms
- approximate rent
- contact address / phone

4 REPORT WRITING**Format**

1 mark

1. title, reporter's name

Content

4 marks

Expression

5 marks

Grammatical accuracy, appropriate words and spellings

[2 ½]

Coherence and relevance of ideas and style

[2 ½]

Suggested value points:

(ENVIRONMENT WEEK)

- when
- where
- activities/programmes conducted during the week
- any other special feature(s)

OR

Suggested value points

(SEMINAR ON HOW TO FACE THE EXAMINATION WITH
CONFIDENCE)

- when
- where

- details of seminar
e.g. panel of experts / student interaction / response
- any other special feature(s)

5 **LEITER WRITING**

[Note: - No marks are to be awarded if only the format is given. Credit should be given to the candidate's creativity in presentation of ideas. Use of both the traditional and the new format is permitted.]

Format 2 marks

1. sender's address, 2. date, 3. receiver's address, 4. subject heading, 5. salutation, 6. complimentary close.

Content 4 marks

Expression 4 marks

Grammatical accuracy, appropriate words and spelling [2]

Coherence and relevance of ideas and style [2]

(DETAILS OF SCHOLARSHIP)

Suggested Value Points

- mention the categories
- what excellence has been achieved
- how to apply for scholarship

OR

(ORDER FOR BOOKS)

Suggested Value Points

- list of books / author / no. of copies
- request for bulk discount
- mode of payment
- deadline for delivery of books

6 **ARTICLE WRITING**

Format: (Title and writer's name) 1 mark

Content 4 marks

Expression

Grammatical accuracy, appropriate words and spelling [2 ½]

Coherence and relevance of ideas and style [2 ½]

Suggested Value Points

(NCC / A Must for All Schools / NCC and Schools / any other suitable title)

- activities of NCC
- how it inculcates discipline in youth
- what do children learn as a cadet
- motivates youth to be adventurous
- grooms youth
- close to culture
- prepares for defence forces
- reasons to make NCC compulsory
- any other relevant point

OR

Suggested Value Points

(SHOULD THERE BE HOMES FOR THE AGED IN INDIA?)

Reasons

- joint family disintegrating - setting up of nuclear families
- elderly alienated - children getting married / going abroad

Solutions

Yes	No
<ul style="list-style-type: none">– safety for elders– combats loneliness– medical attention– like-minded people stay together– enjoy pastime– have freedom – no burden on children <p>(any four)</p>	<ul style="list-style-type: none">– basically a western concept– against Indian culture– the aged need physical & mental support from family members– families can utilise their maturity / wisdom– provide support system for the family <p>(any four)</p>

SECTION C: LITERATURE

45 Marks

NOTE: The objective of the section on Literature is to test a candidate's ability to understand and interpret the prescribed text through short answer and long answer type questions. Hence both content and expression in answer to the given questions deserve equal importance while awarding marks.

- 7 (a) [This question has been designed to test the students' understanding of the text and their ability to interpret, evaluate and respond to the questions based on the given stanza. In other words, it attempts to test their reading comprehension only]

Value points:

- (i) – the poet / Kamala Das / narrator 1 mark
- (ii) – thought of separation / death / unpleasant thoughts of old age 2 marks
- (iii) – continuity of life / life / youthfulness / energy / passage of time 1 mark

OR

- (i) – everything not dead on this earth / there is life under apparent stillness 2 marks
– teaches us to be alive / regeneration / power to recover from loss
- (ii) – there are twelve markings on the clock to measure time / there are 12 months / taking time to calm down 1 mark
- (iii) – understanding of ourselves / peace and tranquillity / ceasing of all cruel activities / introspection 1 mark

- 7 (b) **Short answer type questions (Poetry)**

Distribution of marks:

Content: 1 mark

Expression 1 mark

(deduct ½ mark for two or more grammatical/ spelling mistakes)

Value points:

- (i) – desired the city dwellers to buy goods 2 marks
– wanted flow of cash for better standard of living
- (ii) – for the governors, inspectors, visitors / authorities to bring about a change 2 marks
– to widen their horizons

– to take the children closer to nature / liberate them from their miserable condition

– provide good education

(any two)

(iii) – topaz / golden coloured

2 marks

– prancing, bright-eyed denizens

– free and fearless

– sleek and chivalric

(any two)

(iv) – nature is the best healer

2 marks

– brings beauty and joy to our life

– the memory of the beautiful experiences help us to bear our sorrows/
provide a bower / a peaceful retreat

(any two)

8 Short answer type questions (Prose)

Questions are to be answered in 30-40 words,

Distribution of marks:

Content:

1 mark

Expression :

1 mark

(deduct ½ mark for two or more grammatical/spelling mistakes)

Value points:

(a) – expect to get some coins, notes or valuables

2 marks

– sometimes they find a rupee or even a ten-rupee note

– for children garbage is wrapped in wonder

– for adults - a means of livelihood

(any two)

(b) other days

2 marks

– noisy and boisterous

– day of the last lesson

- unusually silent / M. Hamel dressed in his best suit / classmates already in their places / village people sitting quietly in the class
- (c) – thousands of people demonstrated around the court room where Gandhi was summoned which made the Britishers feel challenged and baffled. 2 marks
- Prof J B Kriplani received Gandhiji at the station with a large body of students.
- sharecroppers from Champaran came barefooted to see Gandhiji.
- Muzzafarpur lawyers too called upon him.
- Raj Kumar Shukla, a peasant initiated Gandhiji's fight in Champaran.
- (any two)
- (d) – Ashokmitran's job was to cut newspaper clippings and preserve them in a file. 2 marks
- everybody thought he was practically doing nothing.
- (e) – different kinds of novels (personal, narrative, unconventional style) 2 marks
- probes into metaphysics, theology and medieval history
- detective and serious yarn
- written at the right time
- (any two)

Q 9 & 10 [These questions have been set to test the students' understanding of the text and their ability to interpret, evaluate and respond to the issues raised therein. Hence no particular answer can be accepted as the only correct answer. All presentations may be accepted as equally correct provided they have been duly supported by the facts drawn from the text. The important thing is that the student should be able to justify his or her view point.]

9 Distribution of marks:

Content 5 marks

Expression 5 marks

Grammatical accuracy, appropriate words and spelling [2 ½]

Coherence and relevance of ideas and style [2 ½]

Value points:

fear

– aversion to water since childhood (California beach and YMCA pool incidents)

overcoming fear

- decided to get an instructor to learn swimming and conquer his fear
- instructor made him practise five days a week
- taught him how to exhale under water and inhale above water
- made a swimmer out of Douglas piece by piece
- dived off a dock at Triggs Island
- swam two miles across Lake Wentworth in New Hampshire
- practised different kinds of strokes in swimming

OR

ironmaster

- commits judgemental error - mistakes the stranger as his old regimental friend, requests him to come home
- shows friendliness by sending his daughter when the stranger declines invitation
- attitude changes when the truth revealed that the stranger not his friend
- calls him dishonest and threatens to hand him over to the sheriff

daughter

- more sedate, understanding and affectionate
- intervenes to stop her father from ill treating the stranger
- treats him like a captain and gifts him a suit
- provides him with peaceful atmosphere
- is able to bring about a change in the peddler's attitude

(any five points)

10 Distribution of marks:

Content:

4 marks

Expression

3 marks

Grammatical accuracy, appropriate words and spelling

[1½]

Coherence and relevance of ideas and style

[1½]

Value Points:

- both Lamb and Derry handicapped

- Derry in the beginning withdrawn and defiant
- couldn't stand people staring at him
- Lamb open-minded and generous
- kept garden gate open and welcomed all
- had a positive attitude, taught Derry not to indulge in self pity / love life
- taught him the ways of dealing with people
- Derry confessed to his mother that Lamb talked of things that nobody had ever talked of - things that gave him an optimistic outlook
- even defied his mother
- Derry's return to Lamb's garden shows his appreciation for Lamb / restored confidence

(any four points)

OR

- Antarctica - only place in the world remaining pristine (never sustained human population)
- holds in its ice-cores half million year-old carbon records
- only place to study Earth's past, present and future can enable us to
- study problems of global warming (glacier retreating, ice-shelves collapsing)
- concept of evolution and extinction
- significance of Cordilleran folds and granite shields; ozone and carbon

11 Short answer type questions

Questions are to be answered in 30-40 words

Distribution of marks:

Content : 1 mark

Expression : 1 mark

Value points :

(a) If Yes 2 marks

- it was a waking dream
- a wish fulfilment
- provided escape from modern day fear, insecurity, worry

If No

- then the place really existed as Charley describes vividly-railway station, people, dresses, newspaper and counters
- Sam exchanging money, disappearance, letter in the first day cover

(any two)

- (b) – filled with joy 2 marks
 – exclaimed that his vow had been fulfilled
 – ordered the tiger to be brought in a grand procession
 – turned his attention to his son
 – gave him a special gift on his birthday
 (any two)
- (c) – old gardener pulled a few hairs on his upper lip 2 marks
 – strongly opposed his master for treating the wounds of the enemy
 – said that the sea wished to kill him
 – the gun-wound intended to kill him
 – refused to obey the orders
 (any two)
- (d) Jo wants
 – Roger Skunk to smell like rose and not have the skunk's foul smell
 – the wizard to take revenge on the mother by hitting her
 – to assert her own point of view
 – can understand the need of Skunk to be accepted by peers
 (any two)

QUESTION PAPER CODE 1/1

EXPECTED ANSWERS/VALUE POINTS

SECTION A: READING

20 Marks

1 COMPREHENSION PASSAGE

- (a) NOTE: No mark(s) should be deducted for mistakes of grammar, spelling, or word limit. Full marks may be awarded if a student has been able to identify the core ideas. If a student literally lifts a portion of the given passage as an answer to a question, no mark(s) to be deducted for this as long as it is relevant
- (i) unhappy / sad / frustrated / fed up / mental disorder / bored up and pessimistic 2 marks

- | | | |
|---------|--|---------|
| (ii) | depression arising out of environmental factors | 1 mark |
| (iii) | – considered as guiding stars
– had a recognised social role
– were of great value as they could impart knowledge
(any two) | 2 marks |
| (iv) | – transformation of social structures and values from traditional to modern
– rapid stride in urbanisation and industrialization | 2 marks |
| (v) | – with kind words
– timely support of friends, relatives and family members | 2 marks |
| (b) (i) | diminished / degradation / declined / weakened | 1 mark |
| (ii) | alienated / marginalised / left out | 1 mark |
| (iii) | spouse | 1 mark |

2 Note

- **If a student has attempted only summary or only notes, due credit should be given.**
- **1 mark allotted for title be given if the student has written the title either in Q2(a) or Q2(b) part**
- **Min. 3 main headings and 3 sub-headings to form content**

The notes provided below are only guidelines. Any other title, main points and sub-points should be accepted if they are indicative of the candidate's understanding of the given passage, and the notes include the main points, with suitable and recognizable abbreviations. Complete sentences not to be accepted as notes.

Numbering of points can be indicated in different ways, and these should be accepted as long as a consistent pattern is followed.

(a) NOTE MAKING

Distribution of Marks

Abbreviations / Symbols (with /without key) - any four	1 mark
---	--------

Title	1 mark
--------------	--------

Content (minimum 3 sub-headings, with proper indentation and notes)	3 marks
--	---------

Suggested Notes

Title: Pollution / Effects of Pollution / Global Impact of Pollution
/ Any other suitable title)

- 1 Effects of polln. (in S. E. Asia)
 - 1.1 cuts sunlight - 10% in India
 - 1.2 damages agri.
 - 1.3 modifies rainfall patterns
 - 1.4 people at risk / hindering eco. growth
- 2 Findings of UNEP
 - 2.1 blanket of polln. across S. E. Asia
 - 2.2 growth may falter
 - 2.3 might reduce winter rice harvest
- 3 Research about India
 - 3.1 acid rains damage crops & trees
 - 3.2 ash on leaves reduces sunlight
 - 3.3 respiratory diseases
 - 3.4 2400 premature deaths
 - 3.5 N. W. India drying up due to drought
- 4 Far reaching global impact
 - 4.1 esp. in India, China, Indonesia due to
 - popu. density
 - economic growth
 - depleting forest cover
 - 4.2 effect
 - haze disrupts weather system
 - triggers drought in West Asia

(b) Summary

The summary should include all the important points given in the notes.

Content

2 marks

Expression

1 mark

SECTION B: ADVANCED WRITING SKILLS

35 Marks

NOTE: The objective of the section on Advanced Writing Skills is to test a candidate's writing ability. Hence expression assumes as much importance as the content or the answer.

3 NOTICE

Format 1 mark

Content 2 marks

Expression 2 marks

Suggested value points

(CULTURAL PROGRAMME)

- what
- where
- when
- details of cultural programmes
- conditions of participation
- last date for submission of names

OR

ADVERTISEMENT

Content 3 marks

Expression 2 marks

Suggested value points

(FOR SALE / CAR FOR SALE)

- make, model and mileage
- colour, condition and price
- contact name and address
- any other feature

4 REPORT WRITING

Format 1 mark

1. title, reporter's name

Content 4 marks

Expression 5 marks

Grammatical accuracy, appropriate words and spellings [2 ½]

Coherence and relevance of ideas and style [2 ½]

Suggested value points:

(DIAMOND JUBILEE YEAR OF INDIA'S INDEPENDENCE)

- what
- where
- when
- guests and dignitaries present
- highlights of the cultural programme
- audience response
- any other relevant details

OR

Suggested value points:

(ROAD ACCIDENT)

- what
- when
- where
- casualties and damage
- response of authorities / local people
- suggestions

5 LETTER WRITING

[Note: - No marks are to be awarded if only the format is given. Credit should be given to the candidate's creativity in presentation of ideas. Use of both the traditional and the new format is permitted.]

Format 2 marks

1. sender's address, 2. date, 3. receiver's address, 4. subject heading, 5. salutation, 6. complimentary close.

Content 4 marks

Expression 4 marks

Grammatical accuracy, appropriate words and spelling [2]

Coherence and relevance of ideas and style [2]

(POOR CONDITION OF ROADS)

Suggested Value Points

- frequent traffic jams / accidents
- great inconvenience to all
- inaction by Chennai authorities
- suggestions for improvement i.e. improvement of roads, better implementation of laws, greater awareness
- any other relevant details

OR

(APPLICATION FOR JOB)

Suggested Value Points

- post applied for
- skills
- resume
 - name
 - father's name
 - age
 - address and contact no.
 - educational qualification
 - experience
 - hobbies
 - references
 - testimonials attached

[NOTE: résumé may be a part of the letter or attached separately]

6 **ARTICLE WRITING**

Format: (Title and writer's name) 1 mark

Content 4 marks

Expression 5 marks

Grammatical accuracy, appropriate words and spelling [2½]

Coherence and relevance of ideas and style [2½]

Suggested Value Points

(EDUCATED UNEMPLOYED)

- qualification without direction
- leading to educated unemployed
- some drift into unsocial activities (any two)

suggestions

- guidance and counselling to create awareness of employment opportunities
- need for vocational courses
- scope for self-employment
- any other relevant point

(any two)

OR

Suggested Value Points

(HELPING CYCLONE VICTIMS)

- devastation caused by cyclones in coastal areas
- loss of life and property
- short-term and long-term help / rehabilitation programmes required from public and private agencies
- scientific mechanism required for warning / precautions
- disaster management cells - medical and financial help
- appropriate construction norms to be established
- training / awareness programmes on coping with the aftermath

(any four)

SECTION C: LITERATURE

45 Marks

NOTE: The objective of the section on Literature is to test a candidate's ability to understand and interpret the prescribed text through short answer and long answer

type questions, Hence both, content and expression in answer to the given question deserve equal importance while awarding marks.

- 7 (a) [This question has been designed to test the students' understanding of the text and their ability to interpret, evaluate and respond to the questions based on the given stanza. In other words, it attempts to test their reading comprehension only)
- (i) Value points:
- not to harm the whales 1 mark
 - peace / togetherness may prevail/to protect the environment 1 mark
- (ii) – he would look at his hurt hands / introspect / will stop all work 1 mark
- (iii) – hurtful/hostile activities of man / symbolic of unending toil / work 1 mark

OR

- (i) – a thing of beauty is a source of constant joy 2 marks
- its beauty increases
 - never passes into nothingness / emptiness
- (any two)
- (ii) – sweet dreams, peaceful breathing, health and comfort 2 marks
- (b) **Short answer type questions (poetry)**
- Distribution of marks:
- Content:** 1 mark
- Expression** 1 mark
- (deduct ½ mark for two or more grammatical/spelling mistakes)
- (i) **Value points:**
- to stop and buy / to pay attention to what they sell 2 marks
 - they want to earn more money to improve their standard of living
- (ii) – have the traits of the beasts of prey 2 marks
- topaz denizens of green forests
 - well built and well groomed
 - chivalric and full of confidence
- (any two)

- | | |
|--|---------|
| (iii) – because the map does not depict the poor / negative world of narrow lanes and hovels
– sharp contrast to the cheerful world outside | 2 marks |
| (iv) – reassure her that they would meet again
– emotions hidden behind the smile | 2 marks |

8 Short answer type questions (prose)

Questions are to be answered in 30-40 words.

Distribution of marks:

Content	1 mark
----------------	--------

Expression	1 mark
-------------------	--------

(deduct ½ mark for two or more grammatical/spelling mistakes)

- | | |
|--|---------|
| (a) Value points:
– gold
– Dhaka / Bangladesh because homes and fields had been swept away by storms | 2 marks |
| (b) – revived his aversion to water / created haunting fear in his heart
– avoided water / swimming / fishing | 2 marks |
| (c) – because of her compassionate and friendly manner
– her voice made him comfortable / felt reassured | 2 marks |
| (d) – Gandhiji was ready to be imprisoned for the sake of sharecroppers' cause
– lawyers realised it was also their duty to support the cause | 2 marks |
| (e) – he was silent and did not share his experiences / she felt excluded / she had never been to the places where her brother had been | 2 marks |

Q 9 & 10 [These questions have been set to test the students' understanding of the text and their ability to interpret, evaluate and respond to the issues raised therein. Hence no particular answer can be accepted as the only correct answer. All presentations may be accepted as equally correct provided they have been duly supported by the facts drawn from the text. The important thing is that the student should be able to justify his or her viewpoint.]

9 Distribution of marks:

Content

5 marks

Expression

5 marks

Grammatical accuracy, appropriate words and spelling

[2½]

Coherence and relevance of ideas and style

[2½]

Value points:

- orders from Berlin, only German to be taught
- school was unusually quiet and serious
- M. Hamel's last class
- Hamel's dress / appearance / behaviour
- villagers present - to thank M. Hamel
- understood the significance of the French language
- everyone thought it was the best French class by Hamel
- everyone emotional about loss of language / identity
- any other relevant point

(any five)

OR

- university professor who wrote novels on Sundays
- became novelist by accident
- started writing novels at the late age of 50
- writing novels was secondary / occasional occupation
- 'The name of the Rose' acquired fame / acquired the equivalent of intellectual superstardom with it
- the medieval background was one of the reasons for its success
- phenomenal success of the novel was a mystery
- difficult and serious novel
- proved journalists and publishers wrong
- thought it was written at the most appropriate time, hence the success
- story told like the Chinese wise man
- narrative, playful and personal style

(any five)

10 Distribution of marks:

Content

4 marks

Expression

3 marks

Grammatical accuracy, appropriate words and spelling

[1½]

Coherence and relevance of ideas and style

[1½]

Value Points:

- prediction after the King's birth
- tiger king resolved to kill 100 tigers / told to be careful of the 100th tiger / hunt became an obsession / tigers became extinct / bullet missed 100th tiger
- bought wooden tiger for his son / a sliver of which infected and killed the king
- accept 'yes' or 'no' as answer provided proper justification is given

OR

- both Bama and Zitkala-Sa victims of discrimination
- Zitkala-Sa faced racial discrimination e.g. compulsory cutting of hair hurting her native culture / had to adopt alien way of dress, food, rules etc.
- Barna discriminated due to caste
- both rebel against discrimination by fighting for their rights / through education / presenting their viewpoints / earning a name for themselves

11 Short answer type questions

Questions are to be answered in 30-40 words

Distribution of marks:

Content :

1 mark

Expression :

1 mark

Value points :

(a) – Evans outwitted the governor

2 marks

- prison officer and driver of the van his accomplices
- directed the van to go to Newbury as planned
- escaped from prison once again
- superintendent very complacent and casual

(any two)

- (b) – by infusing optimism 2 marks
 - laying more stress on the inner self rather than external beauty
- (c) – the visit helps us grasp where we have come from and where we could possibly be going / knowledge of evolution and extinction / gives first hand experience of global warming 2 marks
- (d) – Skunk’s mother hit the wizard on his head and he agreed to restore the original foul smell of Roger Skunk 2 marks

FUNCTIONAL ENGLISH

Time allowed : 3 hours

Maximum Marks : 100

General Instructions:

- (i) *This paper is divided into four Sections: A, B, C and D. All the sections are compulsory.*
- (ii) *Separate instructions are given with each section and question, wherever necessary. Read these instructions very carefully and follow them faithfully.*
- (iii) *Do not exceed the prescribed word limit while answering the questions.*

QUESTION PAPER CODE 212/1

SECTION A : READING

(20 marks)

1. Read the following passage and answer the questions that follow:

12

THE SAMPHIRE GATHERER

1. At sunset, when the strong wind from the sea was beginning to feel cold, I stood on the top of the sand-hill looking down at an old woman hurrying about over the low damp ground beneath; I wondered at her, because her figure was that of a feeble old woman, yet she moved over that damp level ground in a surprisingly swift light manner, pausing at intervals to stoop and gather something from the surface. But I couldn't see her distinctly: the sun was sinking below the horizon, and that dimness in the air, when the year too was declining, made all objects look dim. Going down to her I found that she was old, with thin grey hair, a lean dark face and grey eyes that were not old and looked steadily at mine, affecting me with a sudden mysterious sadness. For they were unsmiling eyes or perhaps a shadowy something which sadness had left in them, when all pleasure and all interest in life forsook her, with all affections, and she no longer cherished either memories or hopes.
2. I asked her what she was doing there so late in the day, and she answered in a quiet even voice which had a shadow in it too, that she was gathering samphire of that kind which grows on the flat saltings and has a dull green, leek like, fleshy leaf. She carried a pail to put it in, and a table-knife in her hand to dig the plants up by the roots, and she also had an old sack in which she put every

dry stick and chip of wood she came across. She added that she had gathered samphire at this same spot every August end for very many years.

3. I prolonged the conversation, questioning her and listening with affected interest to her mechanical answers, while trying to fathom those unsmiling, unearthly eyes that looked so steadily at mine.
4. And presently, as we talked, a babble of human voices reached our ears, and half turning we saw the crowd, of golfers coming from the golf-house; remarkably good-looking lot with well-fed, happy faces, well dressed and in a merry mood. We suspended the conversation while they were passing us. I thought, some change will surely come into those unchanging eyes at the sight of all these merry, happy golfers.
5. But though I watched her face closely there was no change, no faintest trace of ill-feeling or feeling of any kind; only that same shadow which had been there was there still. And it was the same when they had all gone by and we finished our talk and I put money in her hand; she thanked me without a smile, in the same quiet even tone of voice in which she had replied to my question about the samphire.
6. Let me then take the case of the man who has trained his eyes, or rather whose vision has unconsciously trained itself, to look at every face he meets, to find in most cases something, however little of the person's inner life. But it does not haunt him long; another arresting face follows, and then another, and the impressions all fade and vanish from the memory in a little while. But from time to time, at long intervals once perhaps in a lustrum, he will encounter a face that will not cease to haunt him, whose vivid impression will not fade for years. It was a face and eyes of that kind which I met in the samphire gatherer on that cold evening; but the mystery of it is a mystery still.

W.H. HUDSON- *A Traveller in Little Things*. (599 words)

- (a) On the basis of your understanding of the passage, answer the following in your own words:

- | | |
|--|---|
| (i) What time of the day was it when the author met the old woman? | 1 |
| (ii) What aspect of the woman's movement surprised the narrator ? | 1 |
| (iii) Why couldn't he see her clearly? Give two reasons. | 1 |
| (iv) What was strange about the eyes of the old woman? | 1 |

- (v) What was the old woman doing? 1
- (vi) What is samphire ? 1
- (vii) Contrast the mood of the golfers and the old woman. 1
- (viii) Why do you think could the author never forget the old woman?
Give two reasons. 1
- (b) Pick out two words/phrases from the passage which are similar in
meaning to the following: 4
 - (i) lacking strength (para 1)
 - (ii) to get at the true meaning (para 3)
 - (iii) confused sound of many people talking (para 4)
 - (iv) something that keeps coming to your mind so that you cannot
forget it (para 6)
- 2. Read the passage given below and answer the questions that follows: 8

One of the fastest-growing areas of the UK economy is the so-called creative industries. In 1988 a study was published on the economic importance of the arts in Britain. This marked an important shift in public and political perceptions about the arts. Traditionally the visual and performing arts had been seen as interesting but not useful, as recreational or leisure activities. The arts received public money, but this was seen as subsidy, as a loss leader so to speak. The 1988 study made an important new argument: that the arts make a significant contribution to the national economy and are serious forms of employment for very many people. In 1988 this contribution was estimated at six billion pounds per year to GDP. In 1998, the Government set up a creative industries task-force. The following year it published an assessment of the economic significance of this sector. It defined the creative industries as including advertising, architecture, arts and antiques, crafts, design, fashion, film, leisure software, music, performing arts, publishing, software and computer services, television and radio.

In 1998 the government estimated that these creative industries had generated annual revenues of £60 billion, a tenfold increase in ten years. The communications revolution, increasing bandwidth and the advent of digital networks are creating new global markets, multiplying outlets and increasing consumer demand. These new forms of work are creating a demand for new sorts of skill and aptitude. Unlike many 'other industrial sectors, the creative industries continue to benefit from high growth rates,

in part because they build on and interact with innovations in science and technology. In Britain, employment in the creative industries has grown by 34% in a decade, against a background of almost no growth in employment in the economy as a whole.

This picture is comparable in the United States. There, the intellectual property sectors, whose value depends on their ability to generate new ideas rather than to manufacture commodities, are now the most powerful element in the US economy. The Intellectual Property Association in Washington has estimated these sectors to be worth currently \$360 billion a year, making them more valuable than automobiles, agriculture or aerospace. They are growing at twice the rate of the economy as a whole, and generating jobs at three times the underlying rate. The intellectual property sector is even more significant when patents from science and technology are included: in pharmaceuticals, electronics, biotechnology, and information systems among others. All of these technologies are based on fundamental advances in the sciences and in engineering. They are creative fields of huge significance. The creative industries are labour-intensive and need many different types of specialist skill. Television and film production for example, draws on a variety of specialist roles in performance, in script writing, in camera and sound operation, in lighting, makeup, design, editing and postproduction. As the financial significance of this sector grows, so does its employment base. This is not true of the financial services.

- (a) On the basis of your reading of the above passage, make notes on it using headings and sub-headings. Use recognisable abbreviations wherever necessary. 5
- (b) Using the notes write a summary of the above passage in 80 words. 3

SECTION B: WRITING

(25 marks)

3. The Eco-Club of 'High Hope School' is organising a panel discussion for teachers and students on 'Building Energy Awareness on Conservation.' Invite Professor Shirish Shukla, the well known environmentalist to chair the session. 5

Or

Read the following information provided and write a factual description of the place referred to. You are Manish/Meena, an executive working for a travel company. Do not use more than 80 words.

Visit Nagaland !

Capital - Kohima

Languages - English, Nagamese, Angami,

Places to visit - World War II Cemetery, Bara

Basti, Nagaland Museum, Zoo, Tribal Village.

4. You are Ankita/Ankur. You come across the following advertisement in a national daily. You consider yourself suitable for the post. Write an application in response to the advertisement along with your detailed resume.

10

Applications are invited for a Physical Education Instructor in a reputed Health Club of Mumbai. The applicant must have 3 years of previous experience, appropriate qualifications, pleasant personality, excellent communicative abilities and motivation. Interested candidates may apply to Box No. 2563, Daily News, VS Marg, Mumbai within ten days.

Or

You see beggar children on the streets and wonder about their lack of nutrition, education, medical attention and living in abject poverty in unhygienic conditions. As Editor of your school magazine write to the editor of the local newspaper highlighting their plight and suggest suitable remedies.

5. You are Nivedita/Nikunj. Based on following input, write an article on 'Securing Children for the Future' for the literary supplement of the local newspaper.

10

Critical Concerns

- Every fifth child in the world lives in India
- Every third malnourished child in the world lives in India
- Every second Indian child is underweight
- Three out of four children in India are anaemic
- Decline in female/male ratio is maximum in 0-6 years, 927 females per 1000 males
- Traditional practices - child marriage, discrimination against the girl child; child labour

WCD Report 2007

Or

On the basis of the input given below prepare a speech to be delivered in the morning assembly on 'Shifting Values of Young Teenagers.'

<p style="text-align: center;">Teenagers Today</p> <ul style="list-style-type: none">● Self Esteem - Identity crisis● Rebellion - Breaking the rules● Impact of popular culture● Inappropriate behaviour● Experimentation● Peer pressure

SECTION-C GRAMMAR

(20 marks)

6. Rearrange the following sentences sequentially to make complete sense.

5

Vegetable Biryani

- (a) Next take a pan, heat oil, add sliced onions, cumin seeds, salt, pepper corns, ginger-garlic paste and tomato puree;- Add vegetables and cook covered for 2-5 minutes.
- (b) First wash and soak rice for half an hour.
- (c) Finally garnish with fried nuts, raisins, saffron and spread few leaves of chopped coriander before serving.
- (d) Now add boiled and cooled rice to it and cook for another 5-6 minutes.
- (e) Then boil rice in a pan with salt and one tablespoon oil at 100% power for 5 minutes, remove and let cool.

7. You have checked into Hotel Sunrise in Mount Abu, Rajasthan after a tiring bus journey. You need some tea and wish to find out other details regarding your stay in the hotel. Based on the input given below make a set of five dialogues to complete the telephone conversation. You are Namrata/Naveen. The first one has been done for you.

5

Receptionist: Good Morning

You: Good Morning. I am calling from Room No. 203

- { • Help
- { • Tea - sandwiches

- { • Yes - Anything else
- { • Hot water - bath

- { • Right Away
- { • Telephone number - railway station

- { • Need to know if Mr. Akash Goyal is waiting at reception for me
- { • Will find out - get back

8. The following passage has ten errors. Identify the errors in each line and write them along with the corrections as shown in the example. 5

	Incorrect	Correct
Globalization and population growth <u>on</u>	on	In
(a) rural and urban areas will making		
(b) urban growth inevitable during come		
(c) decades. Migrants keep to coming		
(d) to a cities because they perceive		
(e) correctly that despite all the drawback		
(f) urban habitats offering more choices.		
(g) The policy makers need into improve		
(h) the social and economy status of the		
(i) poor, ensure that quality health service is		
(j) afford and empowers women.		

9. The Director of a popular film, based on women's hockey, Shimit Amin is visiting your school. You are Annie/Aryan, the editor of your school magazine. You have decided to interview him. Based on the input given below, frame ten questions. 5

Inspiration - film; reality - fiction; major theme; happy - acting skills of girls; insecure - choosing hockey not cricket; most memorable moment; success - expect; any other innovative projects; consider sports again; favourite film.

SECTION-D LITERATURE

(35 marks)

10. Choose anyone of the following extracts and answer the questions that follow:

7

Then in a wailful choir the small **gnats** mourn
Among the river **sallows**, borne aloft
Or sinking as the light wind lives or dies;
And full-grown lambs loud bleat from hilly **bound**;
Hedge-cricket sing; and now with treble soft
The red-breast whistles from a garden-**croft**;
And gathering swallows twitter in the skies.

- (a) Name the poem and the poet. 1
- (b) What are the sounds of autumn depicted in these lines? 1
- (c) Pick out the word image about the river sallows and the gnats and describe them in your own words. 2
- (d) Mention two birds named in the extract. 1
- (e) What do you mean by the following: 2
 - (i) 'wailful choir'
 - (ii) 'Whistles from a garden croft'

Or

I know why the caged bird sings, ah me,
When his wing is bruised and his bosom sore-
When he beats his bars and would be free;
It is not a **carol** of joy or glee;
But a prayer that he sends from his heart's deep core,
But a plea, that upward to Heaven, he flings-
I know why the caged bird sings!

- (a) Name the poem and the poet. 1
- (b) What is the state of the bird? 1
- (c) What kind of a song is the bird singing and why? 2
- (d) Why is the first and last line repeated in the stanza? 1

(e) What do you mean by the following: 2

(i) ... 'he beats his bars'

(ii) 'But a plea, that upward to
Heaven, he flings-

11. Answer any two of the following: 4x2=8

(a) 'Curtains' is a symbol. Explain in the context of the poem.

(b) What are the exceptional characteristics of a good poem as brought out in 'Ars Poetica' ?

(c) Who are the 'Survivors' ? Why are they 'broken' ?

12. Answer anyone of the following in about 80-100 words.

The play 'The Monkey's Paw' is about values, beliefs and superstition as epitomised in the Whites. Comment.

5

Or

Compare and contrast the greatness of Alexander and Asoka from the point of view of both strengths and weaknesses.

13. Answer any two of the following: 4x2=8

(a) The author says 'you'll find your freedom, a room of your own.' What does he mean and what is the care one has to take not to lose it ?

(b) Which words kept ringing in Mrs Malik's ears again and again and why?

(c) What are the reminiscences that the hum of the insects brings into the mind of the author?

14. Answer anyone of the following in 100-125 words. 7

'While Robichon had duped an audience, Quinquart had duped Robichon himself.'
How was this achieved?

Or

Bring out the poignance in the situation that the cab-driver Iona Potapov finds himself in. How does he find relief?

QUESTION PAPER CODE 212

SECTION A - READING

(20 marks)

1. Read the following passage and answer the questions that follow:

12

WORDS

- 1 Worry about words, Bobby. Your grandmother is right. For, whatever else you may do, you will be using words always. All day and every day, words matter. For words are the tools of thought, and you will find often that you are thinking badly because you are using the wrong tools, trying to bore a hole with a screw-driver, or draw a cork with a coal-hammer.
- 2 Excited persons will tell you - and are telling you now - that you must be “air-minded”. No doubt, at the moment, they are right. But flying is only the last, and, I suspect, the least interesting, of numerous methods of locomotion. The birds have had it for a long time and it is not important. We catch and keep the birds in cages, not because they fly but because they sing. Before you die the aeroplane may be as out of date as the rickshaw is today. But words will still matter; and your capacity for thought and speech will still be the only quality that keeps you out of the zoo.
- 3 Every trade and every profession is conducted with words. The English language, like the right of criticism, belongs to every subject. And so we might expect that the same authorities which urge you to get “air-mindedness” and “road sense” and “hygiene-awareness” and “civic spirit” would beg you sometimes to think about your words, to respect and treasure the language which you are using, changing, enriching or damaging every hour of every day. Such exhortations are seldom heard; and it is not surprising that most of us choose and use our words with no more thought than we give to respiration, fondly supposing that it is as easy and natural to speak the English language as it is to breathe air. But I, though I have no particular title nor aptitude for the affair and am in error as frequently as you, exhort you boldly in the nation’s name to worry about words, to have an affection and a respect and a curiosity for words, to keep a dictionary in the home and ask yourself often: “Now why do I say that?”. I am not urging you to be always right: for few can hope to be that.
- 4 We poor professional writers receive by every other post, advice and criticism from strangers, not only about what we say but about our manner of saying it - hyphens, split infinitives, relative clauses, “if and when” etc. Sometimes the

strangers are very wrong, but often they are right and helpful. In either case they show a healthy interest in the use of language and encourage care in the writer.

- 5 Then there is the advertiser, who has much less excuse; for he has quiet and time, and his mischief is done deliberately. Write to him and tell him that his language offends you so much that you will not buy his goods. Tell the “stockist” who offers to “service” you that you prefer to deal with a simple fellow who is content to serve you. And be a nuisance in the home. Interrupt them! Badger them! Write to them! Ask them what they mean! Let none of the wicked words escape without a challenge. And do not be afraid of being called a snob or a pedant. We are not attacking ignorance but inefficiency. Words are the tools of every trade, and there is nothing snobbish or pedantic in expecting everyone to know (or try to know) his job. It is not pedantic to bowl straight, nor is the umpire snobbish when he says “Out !” (595 words)

A.P. Herbert

- (a) On the basis of your understanding of the passage, answer the following in your own words:
- (i) What would happen if you were to use the wrong words? 1
 - (ii) What are the two examples that the author gives about using wrong words? 1
 - (iii) Why does the author talk about birds in relation to words? 1
 - (iv) Why does the author want you to use a dictionary ? 1
 - (v) What are the writer’s thoughts on getting advice from strangers? 1
 - (vi) Why does the writer not want to excuse the advertiser? 1
 - (vii) Do you agree with the author about using appropriate words? Why/ Why not? Justify your opinion. 2
- (b) Pick out words/phrases from the passage which are similar in meaning to the following: 4
- (i) to make a round hole (para 1)
 - (ii) to urge or advise strongly (para 3)
 - (iii) the activity of making judgement about somebody or something (para 4)
 - (iv) a person who pays too much attention to small details (para 5)

2. Read the passage given below and answer the questions that follow:

8

THE PAPERLESS OFFICE ‘?’

The development of the Internet, email and the word processor led to widespread, confident predictions about the paperless office. With these new electronic media, there would be no need for written communications to be sent on paper, or so it was said. In fact, the demand for office paper in total has grown on average by 8.1% each year since 1981. It is predicted to grow by at least 4 - 5 per cent until 2010 and even beyond. This overall increase conceals some intriguing underlying trends. There has been a relative decline in demand for copier paper. In Europe, between 1995 and 2000 the consumption of copier paper was reduced by 11%.

So what is driving the growth in office paper sales? There are two factors. The first is information. The amount of information available to the average office worker will, according to some reports, increase six-fold by the year 2010. This insatiable appetite for information is coupled with a quantum leap in ease of access. Although the percentage of information being printed is in sharp decline, this is more than compensated for by the fact that the amount of information available to us is doubling every two years. The net effect is growth in office paper of around 5% across Europe.

Many people don't like reading complicated emails, and print them off to look at them later. Email speeds communication but it encourages a more thoughtless process of writing - what has been called a stream of unconsciousness. Word processors encourage repeated drafting and new levels of perfectionism that are creating an exponential demand for paper.

Underlying these patterns is a profound change in the way documents are produced. The old way was print and distribution, a way of working that was dominated by the photocopier and small office printer. The new mode is distribution and print: 'This is the realm of the office printer and everyone has access to one of those. The world has gone from supporting 10,000 publishers to 100 million publishers and the figure rises every minute.' The paperless office is a clear fiction, although the products and applications and, most importantly, the customers for paper have changed radically. In 1997, the printer overtook the copier as the largest consumer of paper. By 2005 two-thirds of all paper in the office will go through the printer. The fate of the paperless office is just one example of the difficulty of predicting the effects of technological innovations on economic and social systems. So is the idea of the leisured society. (429 words)

- (a) On the basis of your reading of the above passage, make notes on it using headings and sub-headings. Use recognizable abbreviations wherever necessary. 5
- (b) Using the notes write a summary of the above passage in 80 words. 3

SECTION B - WRITING

(25 marks)

3. The Eco-Club of 'Green Happy School' is promoting a drive to encourage water conservation by making rain water harvesting a part of the action plan of school policy. Draft a poster to highlight and create awareness about conserving this rich natural resource. 5

OR

Read the following information provided and write a factual description of the place referred to. You are Vijay / Vibha, an executive working for a travel firm.

Visit Daman and Diu!
Capital - Daman
Languages - Gujarati, English
Places to Visit - Forts, Beaches, Church of our Lady of Rosary, Light House, Amusement Park

4. You are Devesh / Devina, a student of class XII of Vistas Public School, Madurai. Write a letter to the Registrar, National Institute of Physical Education, Chennai requesting for a prospectus for an integrated four year course in Bachelor of Physical Education (B.P.Ed.). Also enquire about the fee-structure, career options and placement opportunities. 10

OR

You are Rukmani / Ritesh, a class XII student. You recently attended a campaign against Child Labour where you met children who were ragpickers, labourers in stone quarries and open cast mines, domestic helps and workers in textile units. Write a letter to the editor of a local daily highlighting the need to give these children an ideal childhood that provides enough education and play opportunities. Give your own suggestions to uplift society and reach out to all children.

5. You are Kamla / Ketan, a student living in a city which faces acute water shortage. You recently read the following report about this urban phenomenon across the world. Write an article on 'Urbanisation and Natural Resources'. Give your own solutions to this global problem.

10

- Urbanisation changes land cover and causes habitat loss
- Inadequate water and sanitation
- Poor air quality
- Limited or no waste disposal
- Expansion of roads - reduce absorption of rain water
- Climate change
- Migration from rural areas to urban - urban poverty
- Slums - hygiene and sanitation

OR

The young people of the country are being employed in large numbers in jobs which involve working at night. This is leading to health problems. Based on the input given and your own views prepare a speech on 'Youth Employment - a Health Hazard' to be delivered in the morning assembly . You are Vineeta / Vishal.

- Immediate employment - short term benefits
- Good pay packet - perks
- Working in shifts - impact on biological clock - sleep
- Food intake - nutrition
- Health related problems - eyes, aches, digestive disorders - voice disorders
- Social maladjustments
- Is there any value addition to society that they live in ?

SECTION C - GRAMMAR

(20 marks)

6. Rearrange the following sentences sequentially to make complete sense.

5

Steamed Raisin Cake

- (a) Pour the mixture into a well greased dish and bake at high heat for 3 - 4 minutes.

- (b) First sift flour well.
- (c) Now mix the beaten egg whites and yolks; add flour and stir quickly.
- (d) Then beat egg whites in a bowl until soft peaks are formed, gradually add sugar and continue beating.
- (e) Just before pouring mixture into a baking dish, add raisins and stir.

7. You have to go to Chandigarh for a Student Exchange Program. Based on the input given below write out a complete conversation. The first one has been done as an example. You are Renu / Ravi, talking to your friend Ahmed.

5

Example:

{ You: I have to go to Chandigarh.
Ahmed: When?

{ • tenth of April
• propose to go - how

{ • car or train
• program - begin - when

{ • 9.00 a.m.
• previous night by train

{ • early morning - road
• possible

{ • come along
• together - difficult - busy with theatre workshop here

8. The following passage has ten errors. Identify the errors in each line and write them along with the corrections as shown in the example.

5

	<u>Incorrect</u>	<u>correct</u>
Poor people lack power to <u>made</u> their	made	make
(a) voices heard by policymakers. Many is		
(b) effective invisible to urban policymakers.		
(c) Invisibility mean less investment,		
(d) inaccessibility schools and health posts,		
(e) high absentee rates from doctors and		

- (f) teachers assign to poor districts and a
- (g) significance social distance between
- (h) service providers and they clients.
- (i) Gender based constraints, as well as opportunity
- (j) influence access into income and assets, housing, transport and basic services.

9. P.T. Usha is a role model for the youth of the country. You are on the Editorial Board of your school magazine and have been asked to interview her. Frame ten questions that you would like to ask her, based on the items given below: 5

Age - started running; competitive athletics - when; first competition- when and where; studies; her perception - turning point; her role-model; strengths - success; weaknesses-areas of concern; leisure and recreation; big dream.

SECTION D - LITERATURE

(35 marks)

10. Choose anyone of the following extracts and answer the questions that follow: 7

From her ear-rings three diamonds
 splash a handful of needles,
 and I see my mother run back
 from rain to the crying cradles
 The rains **tack** and sew
 with broken thread the rags
 of the tree-tasselled light.

- (a) Name the poem and the poet. 1
- (b) Is the 'mother' depicted here, old or young'? Pick out words from the extract to substantiate your answer. 2
- (c) Pick out and name the figure of speech being used in line 4. Explain. 2
- (d) What qualities of mother are brought out in these lines? 1
- (e) Rain is a symbol. What does it signify? 1

OR

Is it so easy, then? Goodbye no more than this
 Quiet disaster? And is there cause for sorrow

That in the small white murder of one kiss
 Are born two ghosts, two **Hamlets**, two **soliloquies**,
 Two worlds apart, tomorrow?

- | | |
|--|---|
| (a) Name the poem and the poet. | 1 |
| (b) Saying Goodbye is always difficult. Why is it more so in this poem? | 1 |
| (c) What does 'quiet' imply here? | 1 |
| (d) The poet uses 'two' four times in the last two lines. Which symbols are being invoked and why? | 2 |
| (e) Justify the title of the poem. | 2 |

11. Answer any two of the following in about 50 words each: 4x2=8

- (a) Bring out the senses and sounds invoked by the poet, John Keats in 'Ode to Autumn',
- (b) What qualities of a good poem are brought out in 'Ars Poetica' ?
- (c) Do you agree with the poet that war can make men 'broken and mad' ? Why/ why not?

12. Answer anyone of the following in about 80 - 100 words:

The play, 'The Monkey's -Paw' is a comment on the greed instinct of human nature.' Comment.

5

OR

Compare and contrast the character of Alexander with Asoka from the point of view of both strengths and weaknesses.

13. Answer any two of the following in about 50 words each: 4x2=8

- (a) 'Perhaps play-acting is my destiny, after all.' Who says these words and why does she feel like this?
- (b) 'I remained in the litchi tree, pondering over his wisdom and wondering how a man so wise could be so poor.' Who is 'I'? Whose wisdom is he pondering over? What was the wisdom about?
- (c) What was the change in Mrs. Malik's situation and how was her status affected when she finally shifted into the new house?

14. Answer any *one* of the following in 100 - 125 words:

7

‘Iona’s feelings are too much for him and he tells the little horse the whole story.’

What led Iona to do this and what is sad about this state?

OR

‘Therefore the school and the teacher must guard against employing the easy method of creating individual ambition in order to induce the pupils to diligent work.’ Do you agree with Einstein’s views expressed here? Justify your answer.

Marking Scheme — Functional English

General Instructions :

1. Answer scripts should not be given to the evaluators for evaluation until and unless the given Marking Scheme has been thoroughly discussed with them in a group or individually on the first day of evaluation.
2. The Head Examiner must go through the first five answer scripts evaluated by each evaluator to ensure that the evaluation has been carried out as per the Marking Scheme. The remaining answer scripts meant for evaluation should be given only after ensuring that there is no significant variation in the marking of individual evaluators.
3. Evaluation is to be done as per instructions provided in the Marking Scheme. However the Marking Scheme carries only suggested value points and does not constitute the complete answer.
4. If a question has parts please award marks on the right hand side for each part. Marks awarded for different parts of the question should then be totalled up and written in the left hand margin and circled.
5. If a question does not have any parts, marks must be awarded in the left-hand margin.
6. Where marks are allotted separately for content and expression as per the Marking Scheme they have to be reflected separately and then totalled. **This is a mandatory requirement.**
7. A slash (/) in the Marking Scheme indicates alternative answers. If a student writes an answer **which is not given in the Marking Scheme but which is equally acceptable, marks should be awarded.**
8. If a candidate has attempted an extra question, marks obtained in the question attempted first should be retained and the other answer should be scored out.
9. Under Section A, Reading (Q1) and Section D, Literature (Q 10) questions have been designed to test a students' understanding of the passage and his ability to interpret, evaluate and respond to the given passage. In other words only the reading skills are to be tested. As such, content assumes more importance than expression in the answers to these questions. Therefore students should not be unduly penalized for poor expression and incorrect spellings as long as the answer clearly reveals understanding of the passage.

10. However where questions have been designed to test the writing skills of the students, expression (grammatical accuracy, appropriate vocabulary and style, spellings, organization and presentation of relevant matter in a coherent and logical way) is important.
11. Section C is on grammar. Care should be taken not to award marks to any inaccurate answer carrying errors in grammar.
12. If a student writes a single word in response to a short answer type question and it constitutes the core of the answer it should be accepted and awarded full marks.
13. If a student literally lifts a portion of the given passage as an answer to a question no marks should be deducted for this so long as it is relevant and indicative of the desired understanding on the part of the student especially in Q.1 (Section A) and Q.10 (Section D).
14. Please do not hesitate to award full marks if the answer deserves it especially in the long answers i.e. Section B 4 and 5; Section D 12 and 14
15. In all the sections there are higher order open ended questions that test the students ability to think creatively vely and respond critically. Therefore marks should be awarded for individual

QUESTION PAPER CODE 212/1

EXPECTED ANSWERS/VALUE POINTS

SECTION A: (READING) 20 Marks

Q1. READING

THE SAMPHIRE GATHERER

TOTAL MARKS: 12

Objective : To identify and understand main parts of the text.

Marking : As marked in the question paper. No penalty for spelling and grammar.

- Answers :**
- | | |
|---|--------------------------------------|
| a) i. sunset | 1 mark |
| ii. feeble yet swift and light | 1 mark |
| iii - sun sinking below horizon | |
| - objects looked dim | $\frac{1}{2} + \frac{1}{2} = 1$ mark |
| iv. unsmiling, sad, no interest in life (any 2) | 1 mark |
| v. gathering samphire | |
| vi. samphire - a plant / a plant that grows on flat saltings/
a plant with leek like fleshy leaf | 1 mark |

- vii. golfers – good looking, well – fed, happy faces /
 well dressed in merry mood ½ + ½ marks
 Old woman – with unchanging / unearthly / unsmiling eyes
- viii. - her face never ceased to haunt him
 - vivid impression of her face that will not fade
 - a mysterious face with sadness left in it
 - unchanging / unearthly / unsmiling eyes (any 2) 1 mark

Q1.2 VOCABULARY

Objective : To deduce the meanings of unfamiliar lexical items.

Marking : 1 mark each (4 marks)

Answers : i) feeble
 ii) fathom
 iii) babble
 iv) haunt / vivid expression

Note: If a child picks out any word / words / phrases similar in meaning they should be awarded marks

Q 2. Note making and Summarizing

Total Marks: 8

Objective : To develop the skill of taking down notes

To develop the extracted ideas into a sustained piece of writing.

Marking : Note making

5 marks

Heading 1 mark

Abbreviations / Symbols 1 mark

(with or without key)

(minimum four)

Content 3 marks

(minimum three sub-headings)

Important instructions:

The notes provided below are only guidelines. Any other title, main points and sub-points should be accepted if they are indicative of the students understanding of the given passage and the notes include the main points with suitable and recognizable abbreviations.

Complete sentences should not be accepted as notes. Half a mark should be deducted from the total if the student writes complete sentences.

Numbering of points can be indicated in different ways and these should be accepted as long as it follows a consistent pattern.

Q 2. a) Note making

Note: If the student has attempted only the summary or only the notes, due credit should be given.

Suggested Notes

Title : Creative Industries

- I. Changing Perspectives / Outlook
 - a. traditional perception interesting not useful
 - b. new argument – defined creative industries such as advrt. arts, antiquets
 - c. contribution to nat. economy
 - d. increase in G.D.P. growth
 - e. generates employment
- II. Reasons for growth of U.K. Creative Industries
 - a. ten fold increase in anul. revenue
 - b. commn. revolution
 - c. advent of digital network
 - d. creating new glob. markets
 - e. multiplying outlets and consumer demands
- III. Intellectual Property Sectors
 - a. ability to generate new ideas rather than commodities
 - b. grows a twice at the rate of economy
 - c. tech. based on advances in science & engineering
 - d. increased employment generation
 - i. labour intensive
 - ii. specialist skills – e.g. T.V. and film production

Q2. b) SUMMARY

Objective: 1) To expand notes (heading and sub- headings) into a summary
2) To test ability of expression

Marking: Content
Expression

2 marks
1 mark

Note: Considering the numerous facts mentioned in the notes about the creative industries, due consideration should be given to the students if they do not cover all the points in the summary which is expected to be concise. The summary should cover the essential details only

SECTION B (WRITING)

TOTAL - 25 MARKS

Q.3.

OPTION 1 INVITATION - PANEL DISCUSSION TOTAL – 5 MARKS

Objective : To write in an appropriate style and format of an invitation letter

Marking : Format (date ,address and complimentary close) 1 mark
(heading, organizer)

Content 2 marks

- Name of event – panel discussion
- Time, Date , Venue
- Purpose of invitation – chair discussion
- Confirmation

Expression 2 marks
(Coherence and relevance of ideas and style)

OPTION 2 FACTUAL DESCRIPTION : VISIT NAGALAND TOTAL – 5 MARKS

Objectives: To write in an appropriate style and format a factual description.

Marking: Format (heading) ½ mark

Content 2½ mark

Suggested Value points

- capital
- main languages
- main attractions

Expression 2 marks

Q.4. OPTION (1) JOB APPLICATION TOTAL -10 MARKS

Objectives: To use an appropriate style to write a formal letter.

To plan, organize and present ideas coherently

Marking: Format 2 marks

1. Sender's address 2. date
3. address of the addressee
4. salutation 5. subject

- 6. complimentary close
- 7. sender's signature/name

Note: Any 4 of the above if included in the answer maybe awarded 2 marks

Content 4 marks

- covering letter
- bio-data (2+2)

Note: Marks may be awarded irrespective of whether the biodata is a part of the main letter or an enclosure

Suggested value points

- Reference to advertisement
- Suitability for the post of Physical Education Instructor in health club
- Qualification and experience – 3 years experience / excellent communication skills / motivated
- Bio data

Expression 4 marks

Grammatical accuracy, appropriate words and spellings 2 marks

Coherence and relevance of ideas and style 2 marks

Or

OPTION – 2 LETTER TO THE EDITOR TOTAL -10 MARKS

Objectives: To use an appropriate style to write a formal letter.
To plan, organize and present ideas coherently

Marking: Format 2 marks

- 1. Sender's address 2. date
- 3. address of the addressee
- 4. salutation 5. subject
- 6. complimentary close
- 7. sender's signature/name

Note: Any 4 of the above if included in the answer maybe awarded 2 marks

Content 4 marks

Suggested value points

- Introducing subject
 - Plight of beggar children
 - Suitable remedies / own suggestions
- 2 marks
2 marks

Expression 4 marks

• Grammatical accuracy, appropriate words and spellings 2 marks

• Coherence and relevance of ideas and style 2 marks

Q.5. ARTICLE – SECURING CHILDREN FOR THE FUTURE

Objective: To write in a style appropriate to the given situation.
To plan, organize and present ideas coherently.

Marking: Format 1 mark
(heading and writer's name)

Content 5 marks

Suggested value points

- Atleast four of the ideas from the given input to be included 3 marks

- Suggestions on how to deal with this problem 2 marks

Expression 4 marks

• Grammatical accuracy, appropriate words and spellings 2 marks

• Coherence and relevance of ideas and style 2 marks

Or

OPTION – 2 SPEECH - SHIFTING VALUES OF TEENAGERS TOTAL – 10 MARKS

Objective: To write in a style appropriate to the given situation.
To plan, organize and present ideas coherently.

Marking: Format 1 mark
Introduction of speech and appropriate ending

Content 5 marks

Suggested Value Points

- Atleast four of the ideas from the given input to be included 3 marks

- Possible solutions 2 marks

Expression 4 marks

• Grammatical accuracy, appropriate words and spellings 2 marks

• Coherence and relevance of ideas and style 2 marks

SECTION C (GRAMMAR)

20 MARKS

Q6. REARRANGING

TOTAL: 5 MARKS

Objectives: To be able to present ideas in grammatically logical sequence 5 marks

Marking: 1 mark for every correct answer

Note: Full marks should be awarded even if only the sentence sequence is indicated by the corresponding alphabets Answer

(b, a, \Leftrightarrow e, d, c)

OR

1. First wash and soak rice for half an hour
2. Then boil rice in a pan with salt and one tablespoon oil at 100% power
3. Next take a pan, heat oil, add sliced onions, cumin seeds, salt, peppercorns, ginger - garlic paste and tomato puree. Add vegetables and cook covered for 2 to 5 minutes.
(Either can come before the other)
4. Now add boiled and cooled rice to it and cook for another 5-6 minute
5. Finally garnish with fried nuts, raisins, saffron and spread few leaves of chopped coriander before serving.

Q7. DIALOGUE WRITING

TOTAL-5 MARKS

Objectives: To be able to extend a situation into a meaningful dialogue.

Marking: 1 mark each for every correct exchange of dialogue provided it is accurately and appropriately expressed.

5 marks

Sample Answers:

(Any other suitable exchanges to be accepted. Full marks to be awarded for 5 sets of exchanges even if it includes the first exchange given in the question paper)

1. Receptionist: Can / may I help you sir / madam?
You : Yes I would like to have some tea and sandwiches please
2. Receptionist: Yes definitely. Is there anything else I can do for you?
You: Can you also manage some hot water for my bath please?
3. Receptionist: Right away Sir / Ma'am
You: can you give me the telephone number of the railway station please?
4. You: I also need to know if Mr. Akash Goyal is waiting for me at the reception
Receptionist: I will find out and get back to you.

Q.8. EDITING

TOTAL: 5 MARKS

Objectives: To use grammatical items appropriately

Marking: ½ mark each

If the candidate copies the sentence and replaces the incorrect word with the correct word marks should be awarded. No marks are to be deducted if the candidate has only the correct words

	<u>Incorrect</u>		<u>Correct</u>
a)	making	-	make
b)	come	-	coming
c)	to	-	on
d)	a / cities	-	the / city
e)	drawback	-	drawbacks
f)	offering	-	offer
g)	into	-	to
h)	economy	-	economic
i)	ensure	-	ensuring
j)	afford	-	affordable

Q9. FRAMING QUESTIONS

TOTAL-5 MARKS

Objectives: To understand the context and frame relevant and appropriate questions

Marking: ½ mark each for every accurate question framed

Marks may be awarded for any other relevant questions.

Suggested questions:

- Who / What inspired you to make this film?
- Is it based on reality or fiction?
- What is the major theme of the film?
- Are you happy with the acting skills of the girls?
- Why did you chose to make a film on hockey and not cricket?
- Which was the most memorable moment while making the film?
- Did you expect this film to be a success?
- Are you involved with any other innovative projects?
- Would you consider making any other film on sports?
- Which is your favourite film?

SECTION D : LITERATURE

TOTAL -35 MARKS

Q10. REFERENCE TO CONTEXT

TOTAL- 7 MARKS

Objective: To test students' comprehension of poetry at different levels and of different kinds- local, global, interpretative, inferential, evaluative and extrapolatory

Marking:

7 marks

Answers:

OPTION (1) ODE TO AUTUMN

- a) Ode to Autumn ; John Keats - $\frac{1}{2} + \frac{1}{2}$
- b) wailful choir of small gnats; loud bleating of lambs; singing of hedge – crickets; whistling of red breasts; twittering of swallows - 1 mark
(any 2)
- c) Then in a wailful choir the small gnats mourn among the river
sallows, borne aloft or sinking as the light wind lives or dies - 1 mark
It refers to the rise and fall of gnats / sound of gnats with the wind - 1 mark
- d) red breast and swallows
- e) i) sad sound of insects / gnats - 1+1 mark
ii) sounds of a bird - ‘red breast’

OPTION (2)

- a) Sympathy – Paul Laurence Dunbar - $\frac{1}{2} + \frac{1}{2}$
- b) imprisoned / caged / behind bars, bruised due to the pain of wanting to be free - 1 mark
- c) carol / prayer to the Almighty / Heaven to grant freedom from its imprisonment - 1+1 marks
- d) reinforcement to convey the message that freedom is the ultimate joy and the narrator empathizes with the pain and longing of the bird - 1 mark
- e) i. the bird beats wings against the bars of the cage - 1 mark
ii. the bird sends a prayer to heaven to set it free from bondage - 1 mark

Q11. POETRY

TOTAL 4X2=8 MARKS

Objectives: To test students’ comprehension of poetry – local and global

Marking:

Content:

3 marks

Expression:

1 mark

- a) Curtain
- a symbol of separation / division / end of a relationship
 - two worlds get separated
 - a curtain drawn between two lovers and their relationship

b) Ars – Poetica

A good poem is symbolic , expressive , full of word images, suggestive, timeless, eternal, universal. palpable, sensory experience, open to varied interpretation - any 4

c) Survivors of the war - soldiers who were once happy and care free – after effect of war – ‘broken and mad’

Q12. PLAY

TOTAL-5 MARKS

Objectives: To test the students’ ability to comprehend plays, understand character etc.

Marking: Content: 3 marks

Expression: 2 marks

OPTION (1)

MONKEY’S PAW

- a. Mr. White – disbelief , curiosity, after Herbert’s death belief in the power of the paw
- b. Mrs. White – fearful, superstitious, apprehensive
- c. Son – disbelief, ridicules

OR

OPTION (2) ALEXANDER

- Alexander – conqueror died early ; adventurer, ambitious
- change only at the time of death - $\frac{1}{2} + \frac{1}{2}$
- Asoka – king – concerned about welfare of subjects
- established kingdom, administrator / missionary character, transformation after Kalinga war / acknowledged guilt publicly – Asoka conquered hearts, Alexander conquered bodies
- Similarities – excellent generals ; great leaders ‘ led by example
- any other relevant ideas to be accepted

Q13. SHORT ANSWERS (FICTION)

TOTAL 4X2=8 MARKS

Objective: To test student’s ability to comprehend, interpret and evaluate prose texts

Marking: Content: 3 marks

Expression: 1 mark

- a) - what you want most – freedom / space / your own place in the sun
- not to be careless, not take it for granted, not be greedy
- b) - ‘ I thought it could be my mother-in-law’s room and after her it might be converted into a store’

- guilt
- now a mother-in-law, the room that she had proposed to give to her mother in-law was now to be hers
- c) - memory of being a child
 - Peace/innocence of childhood
 - Grandfather's song / garden
 - present that overflowed with kindness – no past or future
 - nature, the chief toy

Q14. LONG ANSWERS (FICTION)

Total 7 marks

Objectives: To test students' ability to comprehend prose texts globally, interpret and evaluate them.

Marking: Content	-	4 marks
Expression	-	3 marks

OPTION (1) JUDGEMENT OF PARIS

Suggested Value Points:

- both suitors
- Suzanne's challenge
- Robichon impersonates Jaques Roux and dupes audience
- Quinquart disguised as Marquis, invites Robichon
- accuses him of murdering his son
- climax – Robichon paralysed with fear
- Quinquart reveals identity and thus duped Robichon himself

OPTION (2) GRIEF

Note: Marks should be awarded for the student's creativity and personal response

- only son died
- no one to share grief
- felt heart would burst
- passengers and fellow cab driver indifferent to his plight
- unburdens to his horse
- symbolic of callousness and selfishness of man and his inhumanity

QUESTION PAPER CODE 212
EXPECTED ANSWERS/VALUE POINTS
SECTION A: (READING) 20 Marks

Q1.1 READING

WORDS

TOTAL MARKS: 12

Objective : To identify and understand main parts of the text.

Marking : As marked in the question paper. No penalty for spelling and grammar.

Answers :

- | | | |
|-------|--|---------|
| a) i) | Find that you are thinking badly / reflects one's thoughts | 1 Mark |
| ii) | Boring a hole with a screwdriver | ½ Mark |
| | draw a cork with a coal hammer | ½ Mark |
| iii) | Both are "air minded" / shows relation between birds and song and humans and words | 1 Mark |
| iv) | To use appropriate words | 1 Mark |
| v) | Useful for writers | ½ Mark |
| | Showing care / interest | ½ Mark |
| vi) | Deliberate mischief; has adequate time and quiet | 1 Mark |
| vii) | Any appropriate answer with justification | 2 Marks |

b) VOCABULARY

Objective : To deduce the meanings of unfamiliar lexical items.

Marking : 1 mark each (4 marks)

Answers : i) bore

ii) exhortations

iii) criticism

iv) pedant

Q 2. Note making and Summarizing

Total Marks: 8

Objective : To develop the skill of taking down notes

To develop the extracted ideas into a sustained piece of writing.

Marking : Note making

5 marks

Heading and indentation

½ + ½ mark

Abbreviations / Symbols

1 mark

(with or without key)

(minimum four)

Content
(atleast two- three sub headings)

3 marks

Important instructions:

The notes provided below are only guidelines. Any other title, main points and sub points should be accepted if they are indicative of the students understanding of the given passage and the notes include the main points with suitable and recognizable abbreviations.

Complete sentences should not be accepted as notes. Half a mark should be deducted from the total if the student writes complete sentences.

Numbering of points can be indicated in different ways and these should be accepted as long as it follows a consistent pattern.

Q 2. a) Note making

Note: If the student has attempted only the summary or only the notes, due credit should be given.

Suggested Notes

Title : The Paperless Office or any other relevant heading

- I. Predictions
 - i. Drop in use of off. Paper
 - a. Due to dev electronic media
 - ii. No need for paper communication
- II. Reality
 - i. Incr. Demand for off. Paper
 - ii. Decline in demand for copied paper
- III. Reasons
 - i. Incr information
 - ii. Easy access
 - iii. Encouragement of thoughtless writing
 - iv. Repeated drafting
 - v. Perfectionism
 - vi. Preference for reading later
 - vii. Old mthd – print → distribute
 - viii. Today – distribute → print

Q2. b) SUMMARY

Objective: 1) To expand notes into a summary

2) To test ability of expression

Marking: Content

2 marks

Expression

1 mark

Note: Considering the numerous facts mentioned in the notes about the paperless office, due consideration should be given to the students if they do not cover all the points in the summary which is expected to be concise. The summary should cover the essential details only.

SECTION B (WRITING)

TOTAL - 25 MARKS

Q.3. OPTION-1

POSTER – RAIN WATER HARVESTING

TOTAL – 5 MARKS

Objective : To write in an appropriate style of a poster (blurbs, bullets, different font size etc. may be considered)

Marking :

Format -

1 mark

(Heading, issuing authority)

Content -

3 marks

Expression -

1 marks

(Coherence and relevance of ideas and style)

Suggested Value Points

Purpose / Objective - What?

Reason - Why?

Method - How?

Note : Credit should be given for creativity, slogans, ideas coherently and clearly presented

Option-2

FACTUAL DESCRIPTION

DAMAN

TOTAL – 5 MARKS

Objectives: To write in an appropriate style and format

Marking: Format (heading)

½ mark

Content

2½ mark

Expression (Fluency, Accuracy)

2 marks

Suggested Value points

- Name of place, capital
 - Places to visit
 - main languages
 - special attractions
- Can include other relevant details

Q.4. Option -1**LETTER OF ENQUIRY****TOTAL -10 MARKS**

Objectives: To use an appropriate style to write a formal letter.
To plan, organize and present ideas coherently

Marking: Format 2 marks

1. Sender's address
2. date
3. address of the addressee
4. salutation
5. subject
6. complimentary close
7. sender's signature/name

Note: Any 4 of the above if included in the answer maybe awarded 2 marks

Content 4 marks

Suggested value points

- request for prospectus
- enquire about :
- fee structure
- career options
- placement opportunities

Expression: 4 marks

- Grammatical accuracy,
appropriate words and spellings 2 marks
- Coherence and relevance of ideas and style 2 marks

Or

Option 2**LETTER TO THE EDITOR****TOTAL -10 MARKS**

Objectives: To use an appropriate style to write a formal letter
To plan, organize and present ideas coherently

Marking: Format 2 marks

- (1. Sender's address 2. date 3. address of the addressee
4. salutation 5. subject 6. complimentary close
7. sender's signature/name)

Note: Any 4 of the above if included in the answer maybe awarded 2 marks

Content 4 marks

Suggested value points

- plight of deprived children – child labourers
- need to provide ideal childhood
- education / play opportunities
- suggestions for uplifting such children
- or any other relevant ideas

Expression 4 marks

- Grammatical accuracy
- appropriate words and spellings 2 marks
- Coherence and relevance of ideas and style 2 marks

Q.5. Option -1

ARTICLE – URBANISATION AND NATURAL RESOURCES

Objective: To write in a style appropriate to the given situation
To plan, organize and present ideas coherently

Marking: Format 1 mark
(heading and writer's name)

Content 5 marks

Suggested value points

- use inputs given (atleast 4) }
- any other relevant ideas }
- solutions to the problem 2 marks

Expression 4 marks

- Grammatical accuracy,
- appropriate words and spellings 2 marks
- Coherence and relevance of ideas and style 2 marks

Or

Option 2 SPEECH – YOUTH EMPLOYMENT – A HEALTH HAZARD

TOTAL – 10 MARKS

Objective: To write in a style appropriate to the given situation.

To plan, organize and present ideas coherently.

Marking: Format 1 mark

Introduction of speech and appropriate ending

Content 5 marks

Suggested Value Points

- | | | |
|----------------------------|---|---------|
| - use given inputs(any 4) | } | 3 marks |
| - any other relevant ideas | | |
| - solutions to the problem | | 2 marks |

Expression 4 marks

- | | |
|---------------------------------|---------|
| - Grammatical accuracy, | |
| appropriate words and spellings | 2 marks |

- | | |
|--|---------|
| - Coherence and relevance of ideas and style | 2 marks |
|--|---------|

SECTION C (GRAMMAR)

20 MARKS

Q6. REARRANGING

TOTAL: 5 MARKS

Objectives: To be able to present ideas in grammatically logical sequence 5 marks

Marking: 1 mark for every correct answer

Note: The last two sentences can be interchanged. Full marks may be awarded even if the sentence sequence is indicated only by the corresponding alphabets

Answers:

(b, d, c, a, e) OR

- b. First sift flour well
- d. Then beat egg whites in a bowl until soft peaks are formed
- c. Now mix the beaten egg whites and yolks
- a. Just before pouring mixture into a baking dish, add raisins and stir
- e. Pour the mixture into a well greased dish

Q7. DIALOGUE WRITING

TOTAL-5 MARKS

Objectives: To be able to extend a situation into a meaningful dialogue.

Marking: 1 mark each for every correct exchange provided it is accurately and appropriately expressed.

5 marks

Sample Answers:

(Any other suitable exchange to be accepted)

1. You: On the tenth of April / I am going on the tenth of April / tenth of April
Ahmed: How do you propose to go?
2. You: I will go either by car or train / by car or train
Ahmed: When does the program begin?
When will the program begin?
3. You: 9:00 a.m. / at 9:00 a.m. / The programme begins at 9:00 a.m.
Ahmed: Then you should / must leave the previous night
4. You: Can I go by road if I leave early in the morning?
Ahmed: Yes, it is possible
5. You: Why don't you come along with me?
Ahmed: No, it is difficult to go together as I am busy with the Theatre Workshop here.

Q.8. EDITING

TOTAL: 5 MARKS

Objectives: To use grammatical items appropriately

Marking: ½ mark each [10 × ½]

If the candidate copies the sentence and replaces the incorrect word with the correct answer marks should be awarded. No marks are to be deducted if the candidate has given only the correct words.

<u>Incorrect</u>		<u>Correct</u>
a) is	-	are
b) effective	-	effectively
c) mean	-	means
d) inaccessibility	-	inaccessible
e) from	-	of / among
f) assign	-	assigned
g) significance	-	significant
h) they	-	their
i) opportunity	-	opportunities
j) into	-	to

Q9. FRAMING QUESTIONS**TOTAL-5 MARKS****Objectives:** To understand the context and frame relevant and appropriate questions.**Marking:** ½ mark each for every accurate question framed based on the given inputs**Note:** Marks may be awarded for any other relevant questions.**Sample questions:**

- a) At what age did you start running? How old were you?
- b) When did you get into competitive athletics?
- c) When and where was the first competition held?
- d) Where did you study? / How did you cope with your studies?
- e) What do you perceive as the turning point in your career?
- f) Who has been / was / your role model?
- g) What are your strengths? / What made you successful?
- h) What are your areas of weakness and concern?
- i) What do you do in your leisure time?
- j) What is your big dream?

SECTION D: LITERATURE**TOTAL -35 MARKS****Q10. REFERENCE TO CONTEXT****TOTAL- 7 MARKS****Objective:** To test students' comprehension of poetry- local, global, interpretative, inferential and evaluative**Marking:**

6 marks

Answers:**OPTION (1) OF MOTHER'S AMONG OTHER THINGS**

- a) Of Mothers, Among Other Things ; A.K. Ramanujan ½ + ½
- b) as a young woman e.g.
 - e.g. run back
 - crying cradles
 - three diamond earrings (any 2) 1 mark
- c)
 - Transferred epithet 1 mark
 - Alliteration /
'Crying cradles' symbolize a baby crying in the cradle /
explanation of the use of the figure of speech 1 mark

Caring, active, busy, energetic, protective (Any 2)

½ + ½

- d) rain symbol of mother / tailor / continuity / hard work of mother /
continuous care of mother / protective nature of mother (any one)

1 mark

OPTION (2) CURTAIN

- a) Curtain ; Helen Spalding

- b) It is the separation between two lovers.

- c) Only known to the two lovers

- d) Symbols – ghosts, Hamlets, soliloquies, two worlds
(Any 2) to convey ghostly / pale, lifeless appearance / indecision /
loneliness / separation (any 2 corresponding to the 2 symbols used
above)

1+1 mark

- e) Curtain - symbol of separation

1 mark

Theme of the poem - separation of two lovers

1 mark

Q11. POETRY

TOTAL 4X2=8 MARKS

Objectives: To test students' comprehension of poetry – local and global

Marking: Content:

3 marks

Expression:

1 mark

- a) e.g. of visual images / sound images / activities / poses
[atleast 2 sense images and 2 sound images]
- b) good poem – symbolic and suggestive ; eternal ; universal ; palpable ;
sensory; open to varied interpretations / an experience (atleast 4)
Or any other relevant points from the poem
- c) If the answer is 'Yes' – shock + strain / stammering / neurasthesia /
traumatic experience or any other relevant point from the poem. If the
answer is 'No' – any suitable answer with justification

Q12. DRAMA

TOTAL-5 MARKS

Objectives: To test the students' ability to comprehend plays, understand
characters etc.

Marking: Content:

3 marks

Expression:

2 marks

OPTION (1) MONKEY'S PAW

- In spite of warning / caution / mystery / he decides to wish
Greed - could be for money / for 3 wishes

OR

OPTION (2) ALEXANDER

Contrast:

- Alexander – conqueror, adventurer, ambitious, died early
- Change only at the time of death
- Asoka – king – concerned about welfare of subjects
- established kingdom / administrator / missionary / character - early transformation – (Kalinga war)
- Alexander sent Generals to conquer men's bodies, Asoka sent monks to conquer minds
- Similarity – excellent generals ; great leaders ; led by example
- Any two points of comparison and contrast should be included
- Any other relevant ideas to be accepted

Q13. FICTION

TOTAL 4X2=8 MARKS

Objective: To test students' ability to comprehend, interpret and evaluate prose texts

Marking:	Content:	3 marks
	Expression:	1 mark
a)	<ul style="list-style-type: none">● Lisa● Wanted to leave play acting for Doronin● Doronin's death, no where to go● Returned to play acting	<ul style="list-style-type: none">- ½ mark- 1 mark- 1 mark- ½ mark
b)	<ul style="list-style-type: none">● Narrator / Ruskin Bond / boy● Beggar's / old man's● Follow one's dream / nurture dream / don't expect too much too soon / not to stand in any other's way	<ul style="list-style-type: none">- ½ mark- ½ mark(Any 2 points) - 2 marks
c)	<ul style="list-style-type: none">● became a mother-in-law● lost husband and mother-in-law● both children married● moving into own house at last – as a mother-in-law● daughter –in- law allots her the store room / the room she had wanted to give to her mother-in-law	<ul style="list-style-type: none">(Any three points) - 3 marks

Q14. LONG ANSWERS (FICTION)**Total 7 marks**

Objectives: To test students' ability to comprehend prose texts globally, interpret and evaluate them.

Marking: Content -

4 marks

Expression -

3 marks

Option -1 GRIEF

Note: Marks should be awarded for the students' creativity

Suggested Value Points:

- Iona Potapov – lost his son Barin – wants to share his grief
- fails in his attempts to find a sympathetic listener
- finally shares his unbearable grief with his old horse

Option- 2 ON EDUCATION**Suggested Value Points:**

If the answer is 'Yes' – desire for recognition leads to unhealthy competition, creates egoistic individuals, harmful to society

If the answer is 'No' – any suitable argument with justification to be accepted

MATHEMATICS

Time allowed : 3 hours

Maximum Marks : 100

General Instructions:

1. All questions are compulsory.
2. The question paper consists of 29 questions divided into three sections, A, B and C. Section A comprises of 10 questions of one mark each, Section B comprises of 12 questions of four marks each and Section C comprises of 7 questions of six marks each.
3. All questions in Section A are to be answered in one word, one sentence or as per the exact requirement of the question.
4. There is no overall choice. However, internal choice has been provided in 4 questions of four marks each and 2 questions of six marks each. You have to attempt only one of the alternatives in all such questions.
5. Use of calculators is not permitted.

QUESTION PAPER CODE 65/1/1

SECTION A

1. If $f(x) = x + 7$ and $g(x) = x - 7$, $x \in \mathbb{R}$, find $(f \circ g)(7)$
2. Evaluate: $\sin \left[\frac{\pi}{3} - \sin^{-1} \left(-\frac{1}{2} \right) \right]$
3. Find the value of x and y if: $2 \begin{bmatrix} 1 & 3 \\ 0 & x \end{bmatrix} + \begin{bmatrix} y & 0 \\ 1 & 2 \end{bmatrix} = \begin{bmatrix} 5 & 6 \\ 1 & 8 \end{bmatrix}$
4. Evaluate: $\begin{vmatrix} a + ib & c + id \\ -c + id & a - ib \end{vmatrix}$
5. Find the co-factor of a_{12} in the following: $\begin{vmatrix} 2 & -3 & 5 \\ 6 & 0 & 4 \\ 1 & 5 & -7 \end{vmatrix}$

6. Evaluate: $\int \frac{x^2}{1+x^3} dx$
7. Evaluate: $\int_0^1 \frac{dx}{1+x^2}$
8. Find a unit vector in the direction of $\vec{a} = 3\hat{i} - 2\hat{j} + 6\hat{k}$
9. Find the angle between the vectors $\vec{a} = \hat{i} - \hat{j} + \hat{k}$ and $\vec{b} = \hat{i} + \hat{j} - \hat{k}$
10. For what value of λ are the vectors $\vec{a} = 2\hat{i} + \lambda\hat{j} + \hat{k}$ and $\vec{b} = \hat{i} - 2\hat{j} + 3\hat{k}$ perpendicular to each other?

Section B

11. (i) Is the binary operation $*$, defined on set N , given by $a * b = \frac{a+b}{2}$ for all $a, b \in N$, commutative?
- (ii) Is the above binary operation $*$ associative?
12. Prove the following: $\tan^{-1} \frac{1}{3} + \tan^{-1} \frac{1}{5} + \tan^{-1} \frac{1}{7} + \tan^{-1} \frac{1}{8} = \frac{\pi}{4}$
13. Let $A = \begin{bmatrix} 3 & 2 & 5 \\ 4 & 1 & 3 \\ 0 & 6 & 7 \end{bmatrix}$. Express A as sum of two matrices such that one is symmetric and the other is skew symmetric.

OR

If $A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix}$, verify that $A^2 - 4A - 5I = 0$

14. For what value of k is the following function continuous at $x = 2$?

$$f(x) = \begin{cases} 2x+1 & ; \quad x < 2 \\ k & ; \quad x = 2 \\ 3x-1 & ; \quad x > 2 \end{cases}$$

15. Differentiate the following with respect to x : $\tan^{-1}\left(\frac{\sqrt{1+x}-\sqrt{1-x}}{\sqrt{1+x}+\sqrt{1-x}}\right)$

16. Find the equation of tangent to the curve $x = \sin 3t$, $y = \cos 2t$, at $t = \pi/4$

17. Evaluate: $\int_0^{\pi} \frac{x \sin x}{1 + \cos^2 x} dx$

18. Solve the following differential equation:

$$(x^2 - y^2) dx + 2xy dy = 0$$

given that $y = 1$ when $x = 1$

OR

Solve the following differential equation:

$$\frac{dy}{dx} = \frac{x(2y-x)}{x(2y+x)}, \text{ if } y = 1 \text{ when } x = 1$$

19. Solve the following differential equation:

$$\cos^2 x \frac{dy}{dx} + y = \tan x$$

20. If $\vec{a} = \hat{i} + \hat{j} + \hat{k}$ and $\vec{b} = \hat{j} - \hat{k}$, find a vector \vec{c} such that $\vec{a} \times \vec{c} = \vec{b}$
and $\vec{a} \cdot \vec{c} = 3$

OR

If $\vec{a} + \vec{b} + \vec{c} = 0$ and $|\vec{a}| = 3$, $|\vec{b}| = 5$ and $|\vec{c}| = 7$, show that the angle between \vec{a} and \vec{b} is 60° .

21. Find the shortest distance between the following lines:

$$\frac{x-3}{1} = \frac{y-5}{-2} = \frac{z-7}{1} \text{ and } \frac{x+1}{7} = \frac{y+1}{-6} = \frac{z+1}{1}$$

Or

Find the point on the line $\frac{x+2}{3} = \frac{y+1}{2} = \frac{z-3}{2}$ at a distance $3\sqrt{2}$ from the point $(1, 2, 3)$

22. A pair of dice is thrown 4 times. If getting a doublet is considered a success, find the probability distribution of number of successes.

Section C

23. Using properties of determinants, prove the following:

$$\begin{vmatrix} \alpha & \beta & \gamma \\ \alpha^2 & \beta^2 & \gamma^2 \\ \beta + \gamma & \gamma + \alpha & \alpha + \beta \end{vmatrix} = (\alpha - \beta)(\beta - \gamma)(\gamma - \alpha)(\alpha + \beta + \gamma)$$

24. Show that the rectangle of maximum area that can be inscribed in a circle is a square.

OR

Show that the height of the cylinder of maximum volume that can be inscribed in a cone of height h is $\frac{1}{3} h$.

25. Using integration find the area of the region bounded by the parabola $y^2 = 4x$ and the circle $4x^2 + 4y^2 = 9$.

26. Evaluate: $\int_{-a}^a \sqrt{\frac{a-x}{a+x}} dx$

27. Find the equation of the plane passing through the point $(-1, -1, 2)$ and perpendicular to each of the following planes:

$$2x + 3y - 3z = 2 \text{ and } 5x - 4y + z = 6$$

OR

Find the equation of the plane passing through the points $(3, 4, 1)$ and $(0, 1, 0)$

and parallel to the line $\frac{x+3}{2} = \frac{y-3}{7} = \frac{z-2}{5}$

28. A factory owner purchases two types of machines, A and B for his factory. The requirements and the limitations for the machines are- as follows:

Machine	Area occupied	Labour force	Daily output (in units)
A	1000 m ²	12 men	60
B	1200 m ²	8 men	40

He has maximum area of 9000 m^2 available, and 72 skilled labourers who can operate both the machines. How many machines of each type should he buy to maximise the daily output?

29. An insurance company insured 2000 scooter drivers, 4000 car drivers and 6000 truck drivers. The probability of an accident involving a scooter, a car and a truck are 0.01, 0.03 and 0.15 respectively. One of the insured persons meets with an accident. What is the probability that he is a scooter driver.

QUESTION PAPER CODE 65/1

SECTION A

1. Let $*$ be a binary operation defined by $a * b = 2a + b - 3$. Find $3 * 4$.

2. Using principal value, evaluate the following:

$$\cos^{-1} \left(\cos \frac{2\pi}{3} \right) + \sin^{-1} \left(\sin \frac{2\pi}{3} \right)$$

3. For what value of x , is the following matrix singular?

$$\begin{bmatrix} 3 - 2x & x + 1 \\ 2 & 4 \end{bmatrix}$$

4. Evaluate:

$$\begin{vmatrix} \sin 30^\circ & \cos 30^\circ \\ -\sin 60^\circ & \cos 60^\circ \end{vmatrix}$$

5. A matrix A , of order 3×3 , has determinant 4. Find the value of $|3A|$.

6. Evaluate:

$$\int \frac{2 \cos x}{3 \sin^2 x} dx$$

7. Evaluate:

$$\int_0^1 \frac{2x}{1+x^2} dx$$

8. If $\vec{P} (1, 5, 4)$ and $\vec{Q} (4, 1, -2)$, find the direction ratios of \vec{PQ} .

9. If $\vec{a} = \hat{i} + 2\hat{j} - \hat{k}$ and $\vec{b} = 3\hat{i} + \hat{j} - 5\hat{k}$ find a unit vector in the direction of $\vec{a} - \vec{b}$

10. If $|\vec{a}| = \sqrt{3}$, $|\vec{b}| = 2$ and $\vec{a} \cdot \vec{b} = 3$, find the angle between \vec{a} and \vec{b} .

SECTION B

11. Show that the relation R defined by $(a, b) R (c, d) \Rightarrow a + d = b + c$ on the set $N \times N$ is an equivalence relation.

12. Prove the following:

$$\tan^{-1} \left(\frac{1}{3} \right) + \tan^{-1} \left(\frac{1}{5} \right) + \tan^{-1} \left(\frac{1}{7} \right) + \tan^{-1} \left(\frac{1}{8} \right) = \frac{\pi}{4}$$

OR

Solve for x :

$$\tan^{-1} \left(\frac{x-1}{x-2} \right) + \tan^{-1} \left(\frac{x+1}{x+2} \right) = \frac{\pi}{4}$$

13. If $f(x)$, defined by the following, is continuous at $x = 0$, find the values of a, b and c.

$$f(x) = \begin{cases} \frac{\sin(a+1)x + \sin x}{x}, & \text{if } x < 0 \\ c, & \text{if } x = 0 \\ \frac{\sqrt{x+bx^2} - \sqrt{x}}{bx^{3/2}}, & \text{if } x > 0 \end{cases}$$

14. If $y = \sin^{-1} \left[\frac{5x + 12\sqrt{1-x^2}}{13} \right]$, find $\frac{dy}{dx}$.

OR

If $x = a \left(\cos \theta + \log \tan \frac{\theta}{2} \right)$ and $y = a \sin \theta$, find the value of $\frac{dy}{dx}$ at $\theta = \frac{\pi}{4}$.

15. Find the intervals in which the function $f(x) = 2x^3 - 9x^2 + 12x + 15$ is (i) increasing and (ii) decreasing,

OR

At what points will the tangent to the curve $y = 2x^3 - 15x^2 + 36x - 21$ be parallel to x-axis? Also, find the equations of tangents to the curve at those points.

16. Evaluate:

$$\int_0^{\pi} \frac{x \tan x}{\sec x + \tan x} dx$$

OR

Evaluate:

$$\int_0^{\frac{\pi}{2}} \log \sin x dx$$

17. Solve the following differential equation:

$$(x^2 + 1) \frac{dy}{dx} + 2xy = \sqrt{x^2 + 4}$$

18. Solve the following differential equation:

$$x^2 \frac{dy}{dx} = y^2 + 2xy$$

Given that $y = 1$, when $x = 1$.

19. If vectors \vec{a} , \vec{b} and \vec{c} are such that $\vec{a} + \vec{b} + \vec{c} = 0$ and $|\vec{a}| = 3$, $|\vec{b}| = 5$ and $|\vec{c}| = 7$, find the angle between \vec{a} and \vec{b} .

20. Find the length and the foot of the perpendicular drawn from the point $(2, -1, 5)$

to the line $\frac{x-11}{10} = \frac{y+2}{-4} = \frac{z+8}{-11}$.

21. 12 cards, numbered 1 to 12, are placed in a box, mixed up thoroughly and then a card is drawn at random from the box. If it is known that the number on the drawn card is more than 3, find the probability that it is an even number.

22. If x, y, z are different and
$$\begin{vmatrix} x & x^2 & 1+x^3 \\ y & y^2 & 1+y^3 \\ z & z^2 & 1+z^3 \end{vmatrix} = 0$$
, show that $xyz = -1$.

SECTION C

23. Using matrices, solve the following system of linear equations;

$$x + 2y - 3z = -4$$

$$2x + 3y + 2z = 2$$

$$3x - 3y - 4z = 11$$

OR

Using elementary transformations, find the inverse of the following matrix:

$$\begin{bmatrix} 1 & 2 & 3 \\ 2 & 5 & 7 \\ -2 & -4 & -5 \end{bmatrix}$$

24. Show that the semi-vertical angle of the cone of maximum volume and of given slant height is $\tan^{-1}\sqrt{2}$.

OR

Show that the volume of the greatest cylinder that can be inscribed in a cone of height h and semi-vertical angle α is $\frac{4}{27} \pi h^3 \tan^2 \alpha$.

25. Evaluate:

$$\int_0^1 2 (\tan^{-1} x)^2 dx$$

26. Find the area of the region bounded by the parabolas $y^2 = 4ax$ and $x^2 = 4ay$.
27. From the point $P(1, 2, 4)$, a perpendicular is drawn on the plane $2x + y - 2z + 3 = 0$. Find the equation, the length and the coordinates of the foot of the perpendicular.
28. In a bulb factory, machines A, B and C manufacture 60%, 30% and 10% bulbs respectively. 1%, 2% and 3% of the bulbs produced respectively by A, B and C are found to be defective. A bulb is picked up at random from the total production and found to be defective. Find the probability that this bulb was produced by the machine A.

- 29.** A diet for a sick person must contain at least 4000 units of vitamins, 50 units of minerals and 1400 units of calories. Two foods A and B are available at a cost of Rs. 5 and Rs. 4 per unit respectively. One unit of the food A contains 200 units of vitamins, 1 unit of minerals and 40 units of calories, while one unit of the food B contains 100 units of vitamins, 2 units of minerals and 40 units of calories. Find what combination of the foods A and B should be used to have least cost, but it must satisfy the requirements of the sick person. Form the question as LPP and solve it graphically.

Marking Scheme --- Mathematics

General Instructions :

1. The Marking Scheme provides general guidelines to reduce subjectivity in the marking. The answers given in the Marking Scheme are suggested answers. The content is thus indicative. If a student has given any other answer which is different from the one given in the Marking Scheme, but conveys the meaning, such answers should be given full weightage.
2. Evaluation is to be done as per instructions provided in the marking scheme. It should not be done according to one's own interpretation or any other consideration — Marking Scheme should be strictly adhered to and religiously followed.
3. Alternative methods are accepted. Proportional marks are to be awarded.
4. In question(s) on differential equations, constant of integration has to be written.
5. If a candidate has attempted an extra question, marks obtained in the question attempted first should be retained and the other answer should be scored out.
6. A full scale of marks 0 to 100 has to be used. Please do not hesitate to award full marks if the answer deserves it.

QUESTION PAPER CODE 65/1/1

EXPECTED ANSWERS/VALUE POINTS

SECTION 'A'

- | | | |
|-----|---|-----|
| 1. | 7 | 1 m |
| 2. | 1 | 1 m |
| 3. | $x = 3, y = 3$ | 1 m |
| 4. | $a^2 + b^2 + c^2 + d^2$ | 1 m |
| 5. | 46 | 1 m |
| 6. | $\frac{1}{3} \log (1+x^3) + c$ | 1 m |
| 7. | $\frac{\pi}{4}$ | 1 m |
| 8. | $\frac{3}{7} \hat{i} - \frac{2}{7} \hat{j} + \frac{6}{7} \hat{k}$ | 1 m |
| 9. | $\theta = \cos^{-1} \left(-\frac{1}{3} \right)$ | 1 m |
| 10. | $\lambda = \frac{5}{2}$ | 1 m |

SECTION 'B'

11. (i) If a candidate writes that the given operation is not a binary operation, give full credit

OR

- (ii) If the candidate verifies that the * operation is commutative but not associative, full credit may be given

$$\begin{aligned}
12. \quad \text{LHS} &= \left(\tan^{-1} \frac{1}{3} + \tan^{-1} \frac{1}{5} \right) + \left(\tan^{-1} \frac{1}{7} + \tan^{-1} \frac{1}{8} \right) \\
&= \tan^{-1} \frac{8/15}{14/15} = + \tan^{-1} \frac{15/56}{55/56} \quad (1\frac{1}{2} + 1\frac{1}{2}) \text{ m} \\
&= \tan^{-1} \frac{4}{7} + \tan^{-1} \frac{3}{11} = \tan^{-1} \frac{65/77}{65/77} = \tan^{-1} 1 = \pi/4 = \text{RHS} \quad 1 \text{ m}
\end{aligned}$$

$$13. \quad A = \begin{bmatrix} 3 & 2 & 5 \\ 4 & 1 & 3 \\ 0 & 6 & 7 \end{bmatrix}, \quad A' = \begin{bmatrix} 3 & 4 & 0 \\ 2 & 1 & 6 \\ 5 & 3 & 7 \end{bmatrix} \quad 1 \text{ m}$$

$$\therefore \frac{A+A'}{2} = \frac{1}{2} \begin{bmatrix} 6 & 6 & 5 \\ 6 & 2 & 9 \\ 5 & 9 & 14 \end{bmatrix} = \begin{bmatrix} 3 & 3 & \frac{5}{2} \\ 3 & 1 & \frac{9}{2} \\ \frac{5}{2} & \frac{9}{2} & 7 \end{bmatrix} \Rightarrow \text{Symmetric} \quad 1 \text{ m}$$

$$\frac{A-A'}{2} = \frac{1}{2} \begin{bmatrix} 0 & -2 & 5 \\ 2 & 0 & -3 \\ -5 & 3 & 0 \end{bmatrix} = \begin{bmatrix} 0 & -1 & \frac{5}{2} \\ 1 & 0 & \frac{-3}{2} \\ \frac{-5}{2} & \frac{3}{2} & 0 \end{bmatrix} \Rightarrow \text{Skew symmetric} \quad 1 \text{ m}$$

$$\therefore \begin{bmatrix} 3 & 2 & 5 \\ 4 & 1 & 3 \\ 0 & 6 & 7 \end{bmatrix} = \begin{bmatrix} 3 & 3 & \frac{5}{2} \\ 3 & 1 & \frac{9}{2} \\ \frac{5}{2} & \frac{9}{2} & 7 \end{bmatrix} + \begin{bmatrix} 0 & -1 & \frac{5}{2} \\ 1 & 0 & \frac{-3}{2} \\ \frac{-5}{2} & \frac{3}{2} & 0 \end{bmatrix} \quad 1 \text{ m}$$

OR

$$A^2 = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix} \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix} = \begin{bmatrix} 9 & 8 & 8 \\ 8 & 9 & 8 \\ 8 & 8 & 9 \end{bmatrix} \quad 2 \text{ m}$$

$$4A = \begin{bmatrix} 4 & 8 & 8 \\ 8 & 4 & 8 \\ 8 & 8 & 4 \end{bmatrix}, \quad 5I = \begin{bmatrix} 5 & 0 & 0 \\ 0 & 5 & 0 \\ 0 & 0 & 5 \end{bmatrix} \quad 1 \text{ m}$$

$$\therefore A^2 - 4A - 5I = \begin{bmatrix} 9-4-5 & 8-8-0 & 8-8-0 \\ 8-8-0 & 9-4-5 & 8-8-0 \\ 8-8-0 & 8-8-0 & 9-4-5 \end{bmatrix} = \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix} = 0 \quad 1 \text{ m}$$

14. Getting LHL = 5 1½ m

RHL = 5 1½ m

$\Rightarrow k = 5$ 1 m

15. Let $x = \cos 2\theta$, $\sqrt{1+x} = \sqrt{2} \cos \theta$, $\sqrt{1-x} = \sqrt{2} \sin \theta$ 1 m

$$\text{Let } y = \left[\frac{\sqrt{1+x} - \sqrt{1-x}}{\sqrt{1+x} + \sqrt{1-x}} \right] = \tan^{-1} \left[\frac{1 - \tan \theta}{1 + \tan \theta} \right] = \tan^{-1} \tan \left(\frac{\pi}{4} - \theta \right) \quad 1\frac{1}{2} \text{ m}$$

$$= \frac{\pi}{4} - \theta = \frac{\pi}{4} - \frac{1}{2} \cos^{-1} x \quad \frac{1}{2} \text{ m}$$

$$\therefore \frac{dy}{dx} = \frac{-1}{2} \left(\frac{-1}{\sqrt{1-x^2}} \right) = \frac{1}{2\sqrt{1-x^2}} \quad 1 \text{ m}$$

$$16. \quad x = \sin 3t \Rightarrow \frac{dx}{dt} = 3 \cos 3t, (x)_{t=\frac{\pi}{4}} = \frac{1}{\sqrt{2}}, (y)_{t=\frac{\pi}{4}} = 0 \quad \left. \vphantom{\frac{dx}{dt}} \right\} \quad \frac{1}{2} + \frac{1}{2} \text{ m}$$

$$y = \cos 2t \Rightarrow \frac{dy}{dt} = -2 \sin 2t \quad \frac{1}{2} \text{ m}$$

$$\therefore \frac{dy}{dx} = \frac{-2}{3} \frac{\sin 2t}{\cos 3t} \quad 1 \text{ m}$$

$$\left(\frac{dy}{dx} \right)_{t=\frac{\pi}{4}} = \frac{-2}{3} \frac{\sin \frac{\pi}{2}}{\cos \frac{3\pi}{4}} \quad \frac{1}{2} \text{ m}$$

$$= \frac{2\sqrt{2}}{3}$$

$$\therefore \text{Equation of tangent is } y - 0 = \frac{2\sqrt{2}}{3} \left(x - \frac{1}{\sqrt{2}} \right) \quad \left. \vphantom{\frac{2\sqrt{2}}{3}} \right\} \quad 1 \text{ m}$$

$$3y = 2\sqrt{2} x - 2$$

$$\text{or } 3y - 2\sqrt{2} x + 2 = 0$$

$$17. \quad I = \int_0^{\pi} \frac{x \sin x}{1 + \cos^2 x} dx$$

$$= \int_0^{\pi} \frac{(\pi - x) \sin (\pi - x)}{1 + \cos^2 (\pi - x)} dx = \int_0^{\pi} \frac{(\pi - x) \sin x}{1 + \cos^2 x} dx \quad 1 \text{ m}$$

$$\Rightarrow 2I = \pi \int_0^{\pi} \frac{\sin x}{1 + \cos^2 x} dx \quad 1 \text{ m}$$

$$I = \frac{\pi}{2} \cdot 2 \int_0^{\pi/2} \frac{\sin x dx}{1 + \cos^2 x} = -\pi \left[\tan^{-1} (\cos x) \right]_0^{\pi/2} \quad 1 \text{ m}$$

$$= -\pi \left[-\frac{\pi}{4} \right] = \frac{\pi^2}{4} \quad \left(\frac{1}{2} + \frac{1}{2} \right) \text{ m}$$

$$18. \quad (x^2 - y^2) dx + 2xy dy = 0$$

$$\frac{dy}{dx} = \frac{y^2 - x^2}{2xy} \quad \frac{1}{2} \text{ m}$$

This is a homogeneous differential equation

$$\text{Let } y = vx \Rightarrow \frac{dy}{dx} = v + x \frac{dv}{dx} \quad \frac{1}{2} \text{ m}$$

$$v + x \frac{dv}{dx} = \frac{x^2(v^2 - 1)}{2vx^2} = \frac{v^2 - 1}{2v}$$

$$x \frac{dv}{dx} = \frac{v^2 - 1 - 2v^2}{2v} = -\frac{1 + v^2}{2v}$$

$$\Rightarrow \frac{2v}{1 + v^2} dv = -\frac{dx}{x} \quad 1 \text{ m}$$

$$\log |1 + v^2| = -\log |x| + \log c = \log \frac{c}{x} \quad 1 \text{ m}$$

$$1 + v^2 = \frac{c}{x} \Rightarrow 1 + \frac{y^2}{x^2} = \frac{c}{x}$$

$$\Rightarrow x^2 + y^2 = cx$$

$$\text{when } x = 1, y = 1, \Rightarrow c = 2 \quad 1 \text{ m}$$

$$\therefore x^2 + y^2 = 2x$$

OR

$$\frac{dy}{dx} = \frac{2y - x}{2y + x} \quad \frac{1}{2} \text{ m}$$

$$y = vx \Rightarrow \frac{dy}{dx} = v + x \frac{dv}{dx} \quad \frac{1}{2} \text{ m}$$

$$\therefore v + x \frac{dv}{dx} = \frac{x[2v - 1]}{x[2v + 1]}$$

$$\Rightarrow x \frac{dv}{dx} = \frac{2v - 1}{2v + 1} - v = \frac{2v - 1 - 2v^2 - v}{2v + 1}$$

$$= -\frac{2v^2 - v + 1}{2v + 1}$$

$$\frac{2v + 1}{2v^2 - v + 1} dv = -\frac{dx}{x} \quad 1 \text{ m}$$

$$\frac{1}{2} \frac{4v - 1 + 3}{2v^2 - v + 1} dv = -\frac{dx}{x}$$

$$\frac{1}{2} \frac{4v-1}{2v^2-v+1} dv + \frac{3}{4} \frac{dv}{v^2 - \frac{1}{2}v + \frac{1}{2}} = -\frac{dx}{x} \quad 1 \text{ m}$$

$$\left. \begin{aligned} \frac{1}{2} \log |2v^2-v+1| + \frac{3}{4} \times \frac{4}{\sqrt{7}} \tan^{-1} \frac{v-\frac{1}{2}}{\frac{\sqrt{7}}{4}} &= -\log x + c \\ \frac{1}{2} \log \left| \frac{2y^2-xy+x^2}{x^2} \right| + \frac{3}{\sqrt{7}} \tan^{-1} \frac{4y-x}{\sqrt{7}x} &= -\log x + c \end{aligned} \right\} \quad 1 \text{ m}$$

when $x=1, y=1 \Rightarrow c = \frac{1}{2} \log 2 + \frac{3}{\sqrt{7}} \tan^{-1} \frac{3}{\sqrt{7}}$

19. The given differential equation can be written as

$$\frac{dy}{dx} + \sec^2 x y = \tan x \cdot \sec^2 x \quad \frac{1}{2} \text{ m}$$

$$\text{I.F} = e^{\tan x} \quad 1 \text{ m}$$

\therefore The solution is

$$y \cdot e^{\tan x} = \int e^{\tan x} \cdot \tan x \cdot \sec^2 x dx + c \quad \frac{1}{2} \text{ m}$$

$$\text{Let } \tan x = z \Rightarrow \sec^2 x dx = dz$$

$$\therefore \int e^{\tan x} \tan x \sec^2 x dx = \int z e^z dz + c$$

$$= z \cdot e^z - e^z + c = e^z (z-1) + c \quad 1 \text{ m}$$

$$y e^{\tan x} = e^{\tan x} (\tan x - 1) + c \quad 1 \text{ m}$$

$$\text{or } y = (\tan x - 1) + ce^{-\tan x}$$

20. Let $\vec{c} = x\hat{i} + y\hat{j} + z\hat{k}$

It is given that $\vec{a} \times \vec{c} = \vec{b}$

$$\vec{a} \times \vec{c} = \begin{bmatrix} \hat{i} & \hat{j} & \hat{k} \\ 1 & 1 & 1 \\ x & y & z \end{bmatrix} = \hat{i}(z-y) - \hat{j}(z-x) + \hat{k}(y-x) = 0\hat{i} + \hat{j} - \hat{k}$$

$$\Rightarrow z-y=0 \Rightarrow y=z, -z+x=1, x-y=1$$

$$\Rightarrow z=x-1, y=x-1$$

(1+1)m

Also, $\vec{a} \cdot \vec{c} = 3 \Rightarrow x+y+z=3$ 1/2 m

$$\therefore x+x-1+x-1=3 \Rightarrow x=\frac{5}{3}$$

$$\Rightarrow z=y=\frac{2}{3} \Rightarrow \vec{c} = \frac{5}{3}\hat{i} + \frac{2}{3}\hat{j} + \frac{2}{3}\hat{k}$$

(1+1/2)m

OR

$$\vec{a} + \vec{b} + \vec{c} = 0 \Rightarrow \vec{a} + \vec{b} = -\vec{c}$$

1 m

$$\Rightarrow |\vec{a}|^2 + |\vec{b}|^2 + 2\vec{a} \cdot \vec{b} = |\vec{c}|^2$$

1 m

$$9+25+2|\vec{a}||\vec{b}|\cos\theta = 49$$

1 m

$$2 \cdot 3 \cdot 5 \cos\theta = 49 - 34 = 15$$

$$\Rightarrow \cos\theta = \frac{1}{2} \Rightarrow \theta = \frac{\pi}{3}$$

1 m

21. Here $\vec{a}_1 = 3\hat{i} + 5\hat{j} + 7\hat{k}$, $\vec{b}_1 = \hat{i} - 2\hat{j} + \hat{k}$

$$\vec{a}_2 = -\hat{i} - \hat{j} - \hat{k}, \vec{b}_2 = 7\hat{i} - 6\hat{j} + \hat{k}$$

1 m

$$\text{Shortest distance (SD)} = \frac{\left| \left(\vec{a}_2 - \vec{a}_1 \right) \cdot \left(\vec{b}_1 \times \vec{b}_2 \right) \right|}{\left| \vec{b}_1 \times \vec{b}_2 \right|}$$

1 m

$$\vec{a}_2 - \vec{a}_1 = -4\hat{i} - 6\hat{j} - 8\hat{k}$$

1/2 m

Finding $\vec{b}_1 \times \vec{b}_2 = 4\hat{i} + 6\hat{j} + 8\hat{k}$ 1 m

$$\therefore SD = \frac{|-16-36-64|}{\sqrt{116}} = \frac{116}{\sqrt{116}} = \sqrt{116} \quad \frac{1}{2} \text{ m}$$

OR

A general point on the line

$$\frac{x+2}{3} = \frac{y+1}{2} = \frac{z-3}{2} = \lambda \text{ is}$$

$$x = 3\lambda - 2, y = 2\lambda - 1, z = 2\lambda + 3 \quad 1 \text{ m}$$

Its distance D from $(1, 2, 3) = 3\sqrt{2}$

$$\therefore (3\sqrt{2})^2 = (3\lambda - 3)^2 + (2\lambda - 3)^2 + (2\lambda)^2 \quad 1 \text{ m}$$

$$\Rightarrow \lambda = 0 \text{ or } \lambda = \frac{30}{17} \quad 1 \text{ m}$$

$$\therefore \text{ The points are } \left(\frac{56}{17}, \frac{43}{17}, \frac{111}{17} \right) \text{ or } (-2, -1, 3) \quad (\frac{1}{2} + \frac{1}{2}) \text{ m}$$

22. $P(\text{a doublet}) = \frac{1}{6} \Rightarrow p = \frac{1}{6}, q = \frac{5}{6}$ 1 m

Probability distribution is given by $\left(\frac{1}{6} + \frac{5}{6} \right)^4$ }

Let X be the number of successes and P(X), the corresponding probability, where X takes values from 0 to 4 } 1/2 m

\therefore The distribution is

X	0	1	2	3	4
P(X)	$\frac{625}{1296}$	$\frac{500}{1296}$	$\frac{150}{1296}$	$\frac{20}{1296}$	$\frac{1}{1296}$

2 1/2 m

SECTION 'C'

23. LHS : $\Delta = \begin{vmatrix} \alpha & \beta & \gamma \\ \alpha^2 & \beta^2 & \gamma^2 \\ \beta+\gamma & \gamma+\alpha & \alpha+\beta \end{vmatrix}$

r

$$R_3 \rightarrow R_3 + R_1 \Rightarrow \Delta = \begin{vmatrix} \alpha & \beta & \gamma \\ \alpha^2 & \beta^2 & \gamma^2 \\ \alpha+\beta+\gamma & \alpha+\beta+\gamma & \alpha+\beta+\gamma \end{vmatrix} \quad 1\frac{1}{2} \text{ m}$$

$$= (\alpha+\beta+\gamma) \begin{vmatrix} \alpha & \beta & \gamma \\ \alpha^2 & \beta^2 & \gamma^2 \\ 1 & 1 & 1 \end{vmatrix} \quad \frac{1}{2} \text{ m}$$

Applying $C_1 \rightarrow C_1 - C_2$ and $C_2 \rightarrow C_2 - C_3$

$$\Delta = (\alpha+\beta+\gamma) \begin{vmatrix} \alpha-\beta & \beta-\gamma & \gamma \\ \alpha^2-\beta^2 & \beta^2-\gamma^2 & \gamma^2 \\ 0 & 0 & 1 \end{vmatrix} \quad 1+1 \text{ m}$$

$$= (\alpha+\beta+\gamma)(\alpha-\beta)(\beta-\gamma) \begin{vmatrix} 1 & 1 & \gamma \\ \alpha+\beta & \beta+\gamma & \gamma^2 \\ 0 & 0 & 1 \end{vmatrix} \quad 1 \text{ m}$$

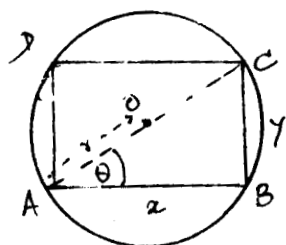
Expanding by last row to get

$$\Delta = (\alpha-\beta)(\beta-\gamma)(\gamma-\alpha) (\alpha+\beta+\gamma) = \text{RHS} \quad 1 \text{ m}$$

24.

Correct figure

1 m



Let $\angle CAB = \theta$

$$\Rightarrow x = 2r \cos \theta, y = 2r \sin \theta \quad 1 \text{ m}$$

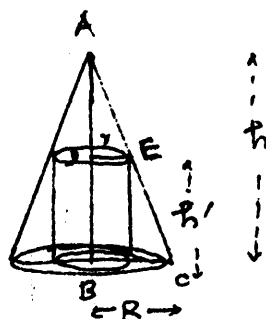
$$\text{Area } A = x \cdot y = 4r^2 \sin \theta \cos \theta = 2r^2 \sin 2\theta \quad 1 \text{ m}$$

$$\frac{dA}{d\theta} = 4r^2 \cos 2\theta; \frac{dA}{d\theta} = 0 \Rightarrow \theta = \frac{\pi}{4} \quad 1 \text{ m}$$

$$\left(\frac{d^2 A}{d\theta^2}\right)_{\theta=\pi/4} = (-8r^2 \sin 2\theta)_{\theta=\pi/4} = -8r^2 < 0 \quad 1 \text{ m}$$

$\therefore A$ is maximum, at $\theta = \pi/4$
 $\Rightarrow x = y \Rightarrow$ Rectangle is a square

OR



Correct figure 1 m

$$\Delta ADE \sim \Delta ABC \Rightarrow \frac{h-h'}{h} = \frac{r}{R}$$

$$\Rightarrow r = \frac{R}{h} (h-h')$$

Volume V of cylinder is given by

$$V = \pi r^2 h' = \pi \frac{R^2}{h^2} [h^2 + h'^2 - 2hh'] h' \quad 2 \text{ m}$$

$$\frac{dV}{dh'} = \pi \frac{R^2}{h^2} [h^2 + 3h'^2 - 4hh']; \frac{dV}{dh'} = 0 \Rightarrow h' = \frac{h}{3} \quad 1 \text{ m}$$

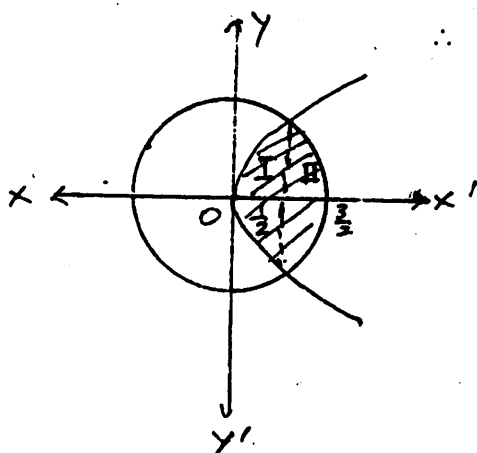
$$\frac{d^2 V}{dh'^2} = \frac{\pi R^2}{h^2} [-4h + 6h'] = \frac{\pi R^2}{h^2} [-4h + 2h] = -ve \quad 1 \text{ m}$$

$\therefore V$ is maximum at $h' = \frac{1}{3} h$

\therefore Height of cylinder is $\frac{1}{3} h$ 1 m

Correct figure 1 m

25.



Point of intersection, $x = \frac{1}{2}$ 1 m

The required area = I + II

$$= 2 \int_0^{\frac{1}{2}} 2\sqrt{x} dx + 2 \int_{\frac{1}{2}}^{\frac{3}{2}} \sqrt{\frac{9}{4} - x^2} dx \quad 2 \text{ m}$$

$$= 2 \left| 2 \cdot \frac{2}{3} x^{3/2} \right|_0^{1/2} + 2 \left| \frac{x \sqrt{\frac{9}{4} - x^2}}{2} + \frac{9}{8} \sin^{-1} \frac{x}{\frac{3}{2}} \right|_{1/2}^{3/2}$$

$$= \frac{2\sqrt{2}}{3} - \frac{\sqrt{2}}{2} + \frac{9\pi}{8} - \frac{9}{4} \sin^{-1} \frac{1}{3}$$

2 m

[Note : If the candidate finds the other area and gets the

answer as $\frac{9\pi}{8} - \frac{\sqrt{2}}{6} + \frac{9}{4} - \sin^{-1} \frac{1}{3}$, full credit may be given]

26.
$$I = \int_{-a}^a \sqrt{\frac{a-x}{a+x}} dx = \int_{-a}^a \frac{a-x}{\sqrt{a^2-x^2}} dx = \int_{-a}^a \frac{a dx}{\sqrt{a^2-x^2}} - \int_{-a}^a \frac{x dx}{\sqrt{a^2-x^2}}$$

$I_1 \qquad I_2$

(1+1) m

I_1 is even function and I_2 is odd function 1 m

$\therefore I_2 = 0$ 1 m

$$I = 2a \int_0^a \frac{dx}{\sqrt{a^2-x^2}} = 2a \cdot \frac{\pi}{2} = \pi a$$
 1 m

$\therefore I = \pi a$ 1 m

27. The equation of plane passing through $(-1, -1, 2)$ is

$a(x+1) + b(y+1) + c(z-2) = 0$ where a, b, c 1 m

are d.r's of normal to the plane (i)

(i) is \perp to $2x + 3y - 3z = 2$ and $5x - 4y + z = 6$

$\therefore 2a + 3b - 3c = 0$ 2 m

and $5a - 4b + c = 0$

$$\therefore \frac{a}{-9} = \frac{b}{-17} = \frac{c}{-23} \quad 2 \text{ m}$$

The d.r's of normal to the plane are 9, 17, 23

\therefore Equation of plane is

$$\left. \begin{aligned} 9(x+1) + 17(y+1) + 23(z-2) &= 0 \\ \Rightarrow 9x + 17y + 23z &= 20 \end{aligned} \right\} \quad 1 \text{ m}$$

OR

The equation of plane passing through (3, 4, 1) is

$$a(x-3) + b(y-4) + c(z-1) = 0 \quad 1 \text{ m}$$

It passes through (0, 1, 0) $\Rightarrow -3a - 3b - c = 0$

$$\Rightarrow 3a + 3b + c = 0 \dots\dots\dots (i) \quad 1 \text{ m}$$

The plane is parallel to the line $\frac{x+3}{2} = \frac{y-3}{7} = \frac{z-2}{5}$

\Rightarrow line is \perp to normal of the plane

$$\therefore 2a + 7b + 5c = 0 \dots\dots\dots (ii) \quad 1 \text{ m}$$

$$\text{From (i) and (ii) : } \frac{a}{8} = \frac{b}{-13} = \frac{c}{15}$$

$$\Rightarrow \text{The d.r's are } 8, -13, 15 \quad 2 \text{ m}$$

\therefore Equation of plane is

$$\left. \begin{aligned} 8(x-3) - 13(y-4) + 15(z-1) &= 0 \\ 8x - 13y + 15z + 13 &= 0 \end{aligned} \right\} \quad 1 \text{ m}$$

28.	Machine A	Machine B	Max available
Area needed	1000 m ²	1200 m ²	9000 m ²
Labour Force	12	8	72
Daily Output	60 units	40 units	

Let x and y be the number of machines A and B respectively

Getting the constraints

$$1000x + 1200y \leq 9000 \Rightarrow 5x + 6y \leq 45$$

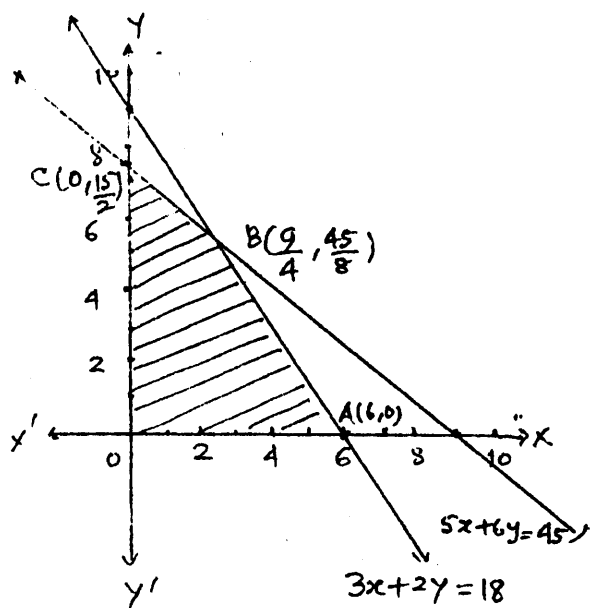
$$12x + 8y \leq 72 \Rightarrow 3x + 2y \leq 18$$

$$x \geq 0, y \geq 0$$

$$\text{Total output } P = 60x + 40y$$

The vertices of feasible region are

$$O(0,0), A(6,0), B\left(\frac{9}{4}, \frac{45}{8}\right), C\left(0, \frac{15}{2}\right)$$



Correct graph

$$P(0,0) = 0$$

$$P(6,0) = 360$$

$$P\left(0, \frac{15}{2}\right) = 300$$

$$P\left(\frac{9}{4}, \frac{45}{8}\right) = 60 \times \frac{9}{4} + \frac{45}{8} \times 40 = 135 + 225 = 360$$

$\therefore P$ is equal 360 at A and B

29. Let E_1, E_2, E_3 be the events of a person be a scooter driver, car driver and truck driver respectively.

Let A be the event of a vehicle meeting an accident.

$$\therefore P(E_1) = \frac{1}{6}, P(E_2) = \frac{1}{3}, P(E_3) = \frac{1}{2}$$

$$P\left(\frac{A}{E_1}\right) = \frac{1}{100}, \quad P\left(\frac{A}{E_2}\right) = \frac{3}{100}, \quad P\left(\frac{A}{E_3}\right) = \frac{15}{100} \quad (1+1/2) \text{ m}$$

$$P\left(\frac{E_i}{A}\right) = \frac{P(E_i) \times P\left(\frac{A}{E_i}\right)}{\sum_{i=1}^3 P(E_i) \times P\left(\frac{A}{E_i}\right)}, \quad i=1, 2, 3 \quad 1 \text{ m}$$

$$= \frac{\frac{1}{6} \times \frac{1}{100}}{\frac{1}{6} \times \frac{1}{100} + \frac{1}{3} \times \frac{3}{100} + \frac{1}{2} \times \frac{15}{100}} = \frac{\frac{1}{6}}{\frac{1}{6} + 1 + \frac{15}{2}} = \frac{1}{6} \times \frac{6}{52} = \frac{1}{52} \quad 2 \text{ m}$$

QUESTION PAPER CODE 65/1

EXPECTED ANSWERS/VALUE POINTS

SECTION - A

$$1. \quad 3 * 4 = 2 \times 3 + 4 - 3 = 7 \quad 1 \text{ m}$$

$$2. \quad \cos^{-1}\left(\cos \frac{2\pi}{3}\right) + \sin^{-1}\left(\sin\left(\pi - \frac{\pi}{3}\right)\right) \\ = \frac{2\pi}{3} + \frac{\pi}{3} = \pi \quad 1 \text{ m}$$

$$3. \quad \begin{vmatrix} 3-2x & x+1 \\ 2 & 4 \end{vmatrix} = 0 \\ \Rightarrow 12 - 8x - 2x - 2 = 0 \\ \Rightarrow x = 1 \quad 1 \text{ m}$$

$$4. \quad I \quad 1 \text{ m}$$

$$5. \quad |3A| = 3^3 \times 4 = 108 \quad 1 \text{ m}$$

$$6. \quad = -\frac{2}{3 \sin x} + c \quad \text{or} \quad -\frac{2}{3} \operatorname{cosec} x + c \quad 1 \text{ m}$$

$$7. \quad \left[\log |1+x^2| \right]_0^1 = \log 2 \quad 1 \text{ m}$$

$$8. \quad 3, -4, -6 \quad \text{or} \quad -3, 4, 6 \quad 1 \text{ m}$$

$$9. \quad \vec{a} - \vec{b} = -2\hat{i} + \hat{j} + 4\hat{k}$$

$$\text{Unit vector in the direction of } (\vec{a} - \vec{b}) = \frac{1}{\sqrt{21}} \left[-2\hat{i} + \hat{j} + 4\hat{k} \right] \quad 1 \text{ m}$$

$$10. \quad \theta = \cos^{-1} \left(\frac{\sqrt{3}}{2} \right) = \frac{\pi}{6} \quad 1 \text{ m}$$

SECTION - B

$$11. \quad (i) \quad (a, b) R (c, d) \Rightarrow a+d = b+c$$

where $(a, b), (c, d) \in \mathbb{N} \times \mathbb{N}$

$$(a, b) R (a, b) \Rightarrow a+b = b+a \Rightarrow \text{True}$$

R is Reflexive 1 m

$$(ii) \quad (a, b) R (c, d) \Rightarrow a+d = b+c \Rightarrow b+c = a+d$$

$$= c+b = d+a$$

$$\Rightarrow (c, d) R (a, b)$$

Hence R is Symmetric 1 m

$$(iii) \quad \text{Let } (a, b) R (c, d) \text{ and } (c, d) R (e, f)$$

$$\Rightarrow a+d = b+c \quad \text{and} \quad c+f = d+e$$

Adding we get

$$a+d + c+f = b+c +d+e$$

$$\Rightarrow a+f = b+e \Rightarrow (a,b) R (e,f)$$

$\therefore R$ is transitive

1½ m

$\therefore R$ is an equivalence relation

½ m

$$12. \quad \text{LHS} = \left(\tan^{-1} \frac{1}{3} + \tan^{-1} \frac{1}{5} \right) + \left(\tan^{-1} \frac{1}{7} + \tan^{-1} \frac{1}{8} \right)$$

$$\tan^{-1} \frac{\frac{1}{3} + \frac{1}{5}}{1 - \frac{1}{15}} = \tan^{-1} \frac{8}{14} = \tan^{-1} \frac{4}{7} \text{ and}$$

1½ m

$$\tan^{-1} \frac{1}{7} + \tan^{-1} \frac{1}{8} = \tan^{-1} \frac{15}{55} = \tan^{-1} \frac{3}{11}$$

1½ m

$$\therefore \tan^{-1} \frac{4}{7} + \tan^{-1} \frac{3}{11} = \tan^{-1} \frac{65/77}{1 - \frac{12}{77}} = \tan^{-1} 1 = \pi/4$$

1 m

OR

$$\tan^{-1} \left(\frac{x-1}{x-2} \right) + \tan^{-1} \left(\frac{x+1}{x+2} \right) = \frac{\pi}{4}$$

$$\tan^{-1} \left(\frac{\frac{x-1}{x-2} + \frac{x+1}{x+2}}{1 - \frac{x-1}{x-2} \times \frac{x+1}{x+2}} \right) = \frac{\pi}{4}$$

2 m

$$\tan^{-1} \left(\frac{2x^2 - 4}{-3} \right) = \frac{\pi}{4}$$

$$\Rightarrow \frac{2x^2 - 4}{-3} = 1$$

$$\Rightarrow 2x^2 = 1$$

1½ m

$$\Rightarrow x = \pm \frac{1}{\sqrt{2}}$$

½ m

13. L.H.L. = $\lim_{x \rightarrow 0^-} \left(\frac{\sin(a+1)x}{(a+1)x} (a+1) + \frac{\sin x}{x} \right) = a+2$

2 m

$$R.H.L. = \lim_{x \rightarrow 0^+} \left(\frac{\sqrt{1+bx} - 1}{bx} \right) = \lim_{x \rightarrow 0^+} \frac{1}{\sqrt{1+bx} + 1} = \frac{1}{2}$$

1 m

$$f(0) = c$$

As $f(x)$ is continuous at $x = 0$,

$$\therefore c = \frac{1}{2}, a+2 = \frac{1}{2} \Rightarrow a = -\frac{3}{2}, b \text{ can take any arbitrary value}$$

1 m

14. Let $\frac{5}{13} = \cos \alpha$ and $x = \sin \theta$

1 m

$$\therefore \sin \alpha = \frac{12}{13}, \sqrt{1-x^2} = \cos \theta$$

1 m

$$\therefore y = \sin^{-1} (\sin \theta \cos \alpha + \cos \theta \sin \alpha) = \sin^{-1} [\sin(\theta + \alpha)]$$

$$= \theta + \alpha = \sin^{-1} x + \text{constant}$$

1½ m

$$\therefore \frac{dy}{dx} = \frac{1}{\sqrt{1-x^2}}$$

½ m

OR

$$x = a \left(\cos \theta + \log \tan \frac{\theta}{2} \right), y = a \sin \theta$$

$$\frac{dx}{d\theta} = a \left[-\sin \theta + \frac{\frac{1}{2} \sec^2 \theta/2}{\tan \frac{\theta}{2}} \right], \quad 1 \text{ m}$$

$$= a \left[-\sin \theta + \frac{1}{2} \frac{1}{\cos^2 \theta/2} \frac{\cos \theta/2}{\sin \theta/2} \right],$$

$$= a \left[\frac{1}{\sin \theta} - \sin \theta \right] = \frac{a \cos^2 \theta}{\sin \theta}, \quad \frac{dy}{d\theta} = a \cos \theta \quad (1+1) \text{ m}$$

$$\frac{dy}{dx} = \frac{a \cos \theta \times \sin \theta}{a \cos^2 \theta} = \tan \theta \quad \frac{1}{2} \text{ m}$$

$$\left(\frac{dy}{dx} \right)_{\text{at } \theta = \pi/4} = 1 \quad \frac{1}{2} \text{ m}$$

15. $f(x) = 2x^3 - 9x^2 + 12x + 15$

$$f'(x) = 6x^2 - 18x + 12 = 6(x^2 - 3x + 2) = 6(x-1)(x-2) \quad 1 \text{ m}$$

$f'(x) = 0$ gives the intervals

$$(-\infty, 1), (1, 2), (2, \infty) \quad 1\frac{1}{2} \text{ m}$$

$$\left. \begin{array}{l} \text{Increasing in } (-\infty, 1) \cup (2, \infty) \\ \text{Decreasing in } (1, 2) \end{array} \right\} \quad 1\frac{1}{2} \text{ m}$$

OR

$$y = 2x^3 - 15x^2 + 36x - 21$$

$$\frac{dy}{dx} = 6x^2 - 30x + 36 = 6(x^2 - 5x + 6) = 6(x-2)(x-3) \quad 1 \text{ m}$$

If the tangent is parallel to x-axis, $\frac{dy}{dx} = 0$

$$\therefore x = 2, x = 3 \quad 1 \text{ m}$$

$$\text{At } x = 2, y = 2 \times 8 - 15 \times 4 + 36 \times 2 - 21$$

$$= 16 - 60 + 72 - 21 = 7$$

$$\text{At } x = 3, y = 2 \times 27 - 15 \times 9 + 36 \times 3 - 21$$

$$= 54 - 135 + 108 - 21 = 6$$

$$\therefore \text{ The points are } (2,7), (3,6) \quad 1 \text{ m}$$

$$\therefore \text{ The equation of tangent at } (2,7) \text{ is } y = 7$$

$$\text{at } (3,6) \text{ is } y = 6$$

}

1 m

$$16. \quad I = \int_0^{\pi} \frac{x \tan x}{\sec x + \tan x} dx = \int_0^{\pi} \frac{x \sin x}{1 + \sin x} dx$$

$$\text{Also, } I = \int_0^{\pi} \frac{(\pi - x) \sin(\pi - x)}{1 + \sin(\pi - x)} dx = \int_0^{\pi} \frac{(\pi - x) \sin x}{1 + \sin x} dx \quad 1 \text{ m}$$

$$\therefore 2I = \pi \int_0^{\pi} \frac{\sin x}{1 + \sin x} dx = \pi \int_0^{\pi} \frac{1 + \sin x - 1}{1 + \sin x} dx \quad 1 \text{ m}$$

$$= \pi \left[\int_0^{\pi} dx - \int_0^{\pi} \frac{1 - \sin x}{\cos^2 x} dx \right] \quad \frac{1}{2} \text{ m}$$

$$= \pi \times \pi - \pi \left[\int_0^{\pi} \sec^2 x dx - \int_0^{\pi} \sec x \tan x dx \right]$$

$$= \pi^2 - \pi \left[\tan x - \sec x \right]_0^\pi \quad 1 \text{ m}$$

$$= \pi^2 - \pi [0 - (-1 - 1)] = \pi^2 - 2\pi$$

$$\therefore I = \pi \left(\frac{\pi}{2} - 1 \right) \quad \frac{1}{2} \text{ m}$$

OR

$$I = \int_0^{\pi/2} \log \sin x \, dx = \int_0^{\pi/2} \log \sin \left(\frac{\pi}{2} - x \right) dx = \int_0^{\pi/2} \log \cos x \, dx \quad 1 \text{ m}$$

$$\therefore 2I = \int_0^{\pi/2} \log (\sin x \cos x) dx = \int_0^{\pi/2} \log \frac{\sin 2x}{2} dx \quad 1 \text{ m}$$

$$= \int_0^{\pi/2} \log \sin 2x \, dx - \int_0^{\pi/2} \log 2 \, dx$$

$$= \frac{1}{2} \times 2 \int_0^{\pi/2} \log \sin t \, dt - \frac{\pi}{2} \log 2; \quad \left[t = 2x, \frac{dt}{2} = dx \right] \quad 1 \text{ m}$$

$$= I - \frac{\pi}{2} \log 2$$

$$I = -\frac{\pi}{2} \log 2 \quad 1 \text{ m}$$

17. $(x^2 + 1) \frac{dy}{dx} + 2xy = \sqrt{x^2 + 4}$

$$\frac{dy}{dx} + \frac{2x}{x^2 + 1} y = \frac{\sqrt{x^2 + 4}}{x^2 + 1} \quad 1 \text{ m}$$

$$\text{I.F.} = e^{\int \frac{2x}{x^2 + 1} dx} = (x^2 + 1) \quad 1 \text{ m}$$

$$\text{Solution is } y \cdot (x^2 + 1) = \int \sqrt{x^2 + 4} \, dx + c \quad 1 \text{ m}$$

$$y (x^2 + 1) = \frac{1}{2} x \sqrt{x^2 + 4} + 2 \log (x + \sqrt{x^2 + 4}) + c \quad 1 \text{ m}$$

18. $\frac{dy}{dx} = \frac{y^2 + 2xy}{x^2}$

Let $y = vx \Rightarrow \frac{dy}{dx} = v + x \frac{dv}{dx}$ ½ m

$v + x \frac{dv}{dx} = v^2 + 2v \Rightarrow x \frac{dv}{dx} = v^2 + v$ 1 m

$\Rightarrow \int \frac{dv}{v(v+1)} = \int \frac{dx}{x}$ ½ m

$\Rightarrow \int \left(\frac{1}{v} - \frac{1}{v+1} \right) dv = \int \frac{dx}{x}$

$\log \frac{v}{v+1} = \log cx$

$cx = \frac{\frac{y}{x}}{\frac{y}{x} + 1} = \frac{y}{x+y}$ 1 m

when $x=1, y=1, c = \frac{1}{2}$ ½ m

$\Rightarrow \frac{x}{2} = \frac{y}{x+y} \Rightarrow x^2 + xy - 2y = 0$ ½ m

19. $\vec{a} + \vec{b} = -\vec{c}$ 1 m

$|\vec{a}|^2 + |\vec{b}|^2 + 2\vec{a} \cdot \vec{b} = |\vec{c}|^2$ 1 m

$9 + 25 + 2|\vec{a}||\vec{b}|\cos\theta = 49$ 1 m

$30 \cos \theta = 15 \Rightarrow \cos \theta = \frac{1}{2} \Rightarrow \theta = 60^\circ = \frac{\pi}{3}$ 1 m

20. Any point P on the line is given by

$x = 10\lambda + 11, y = -4\lambda - 2, z = -11\lambda - 8$ 1 m

The given point is Q(2, -1, 5)

Direction Ratio's of PQ are $10\lambda + 9, -4\lambda - 1, -11\lambda - 13$

1 m

PQ \perp to the given line

$$\therefore 10(10\lambda + 9) - 4(-4\lambda - 1) - 11(-11\lambda - 13) = 0$$

$$100\lambda + 90 + 16\lambda + 4 + 121\lambda + 143 = 0$$

$$237\lambda + 237 = 0 \Rightarrow \lambda = -1$$

1 m

\therefore The point P is $(11 - 10, 4 - 2, 11 - 8)$

or $(1, 2, 3)$

$\frac{1}{2}$ m

$$\therefore PQ^2 = (2 - 1)^2 + (-1 - 2)^2 + (5 - 3)^2$$

$$= 1 + 9 + 4 = 14$$

$$\Rightarrow PQ = \sqrt{14}$$

$\frac{1}{2}$ m

21. Let A be the event that the card taken out has an even number and B is the event that the card taken out bears a number > 3

$$S = \{1, 2, 3, \dots, 12\}$$

$$A = \{2, 4, 6, 8, 10, 12\}$$

$$B = \{4, 5, 6, 7, 8, 9, 10, 11, 12\}$$

$$A \cap B = \{4, 6, 8, 10, 12\}$$

1 m

$$P(A) = \frac{6}{12} = \frac{1}{2}, P(B) = \frac{9}{12} = \frac{3}{4}, P(A \cap B) = \frac{5}{12}$$

$\frac{1}{2} \times 3 = 1\frac{1}{2}$ m

$$P(A/B) = \frac{P(A \cap B)}{P(B)} = \frac{5/12}{9/12} \quad 1 \text{ m}$$

$$= \frac{5}{9} \quad \frac{1}{2} \text{ m}$$

$$22. \quad \begin{vmatrix} x & x^2 & 1+x^3 \\ y & y^2 & 1+y^3 \\ z & z^2 & 1+z^3 \end{vmatrix} = 0$$

$$\Delta = \begin{vmatrix} x & x^2 & 1 \\ y & y^2 & 1 \\ z & z^2 & 1 \end{vmatrix} + \begin{vmatrix} x & x^2 & x^3 \\ y & y^2 & y^3 \\ z & z^2 & z^3 \end{vmatrix}$$

$$= \begin{vmatrix} x & x^2 & 1 \\ y & y^2 & 1 \\ z & z^2 & 1 \end{vmatrix} + xyz \begin{vmatrix} 1 & x & x^2 \\ 1 & y & y^2 \\ 1 & z & z^2 \end{vmatrix}$$

$$= (1 + xyz) \begin{vmatrix} 1 & x & x^2 \\ 1 & y & y^2 \\ 1 & z & z^2 \end{vmatrix}$$

$$R_2 \rightarrow R_2 - R_1, R_3 \rightarrow R_3 - R_1$$

$$\begin{vmatrix} 1 & x & x^2 \\ 1 & y & y^2 \\ 1 & z & z^2 \end{vmatrix} = \begin{vmatrix} 1 & x & x^2 \\ 0 & y-x & y^2-x^2 \\ 0 & z-x & z^2-x^2 \end{vmatrix} = (y-x)(z-x) \begin{vmatrix} 1 & x & x^2 \\ 0 & 1 & y+x \\ 0 & 1 & z+x \end{vmatrix} \quad 1\frac{1}{2} \text{ m}$$

$$= (y-x)(z-x)(z+x-y-x)$$

$$= (y-x)(z-x)(z-y)$$

$$= (x-y)(y-z)(z-x) \quad 1\frac{1}{2} \text{ m}$$

$$\therefore \Delta = (1 + xyz)(x-y)(y-z)(z-x) = 0 \text{ (given)}$$

$$\text{As } x-y \neq 0, y-z \neq 0, z-x \neq 0 \Rightarrow 1 + xyz = 0 \quad 1 \text{ m}$$

SECTION - C

23. The given system of equations can be written as

$$AX = B, \text{ where}$$

$$A = \begin{pmatrix} 1 & 2 & -3 \\ 2 & 3 & 2 \\ 3 & -3 & -4 \end{pmatrix}, \quad X = \begin{pmatrix} x \\ y \\ z \end{pmatrix} \quad B = \begin{pmatrix} -4 \\ 2 \\ 11 \end{pmatrix}$$

$$\therefore X = A^{-1} B, \text{ if } A^{-1} \text{ exists}$$

1 m

$$|A| = 1(-12 + 6) - 2(-8 - 6) - 3(-6 - 9)$$

$$= -6 + 28 + 45 = 67 \neq 0$$

1 m

$$\therefore A^{-1} \text{ exists}$$

$$A^{-1} = \frac{1}{|A|} \text{Adj. } A$$

$$\text{Adj. } A = \begin{pmatrix} -6 & 17 & 13 \\ 14 & 5 & -8 \\ -15 & 9 & -1 \end{pmatrix}$$

2 m

(Note : For any four correct enteries 1 m)

$$\Rightarrow A^{-1} = \frac{1}{67} \begin{pmatrix} -6 & 17 & 13 \\ 14 & 5 & -8 \\ -15 & 9 & -1 \end{pmatrix}$$

½ m

$$\therefore X = \begin{pmatrix} x \\ y \\ z \end{pmatrix} = \frac{1}{67} \begin{pmatrix} -6 & 17 & 13 \\ 14 & 5 & -8 \\ -15 & 9 & -1 \end{pmatrix} \begin{pmatrix} -4 \\ 2 \\ 11 \end{pmatrix} = \begin{pmatrix} 3 \\ -2 \\ 1 \end{pmatrix}$$

$$\therefore x = 3, y = -2, z = 1$$

1½ m

OR

$$A = \begin{pmatrix} 1 & 2 & 3 \\ 2 & 5 & 7 \\ -2 & -4 & -5 \end{pmatrix} = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix} A \quad 1 \text{ m}$$

Applying $R_2 \rightarrow R_2 - 2R_1$, $R_3 \rightarrow R_3 + 2R_1$, we get

$$\begin{pmatrix} 1 & 2 & 3 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ 2 & 0 & 1 \end{pmatrix} A \quad 1 \text{ m}$$

Applying $R_1 \rightarrow R_1 - 2R_2$, we get

$$\begin{pmatrix} 1 & 0 & 1 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} = \begin{pmatrix} 5 & -2 & 0 \\ -2 & 1 & 0 \\ 2 & 0 & 1 \end{pmatrix} A \quad 1 \text{ m}$$

Applying $R_1 \rightarrow R_1 - R_3$, we get

$$\begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} = \begin{pmatrix} 3 & -2 & -1 \\ -2 & 1 & 0 \\ 2 & 0 & 1 \end{pmatrix} A \quad 1 \text{ m}$$

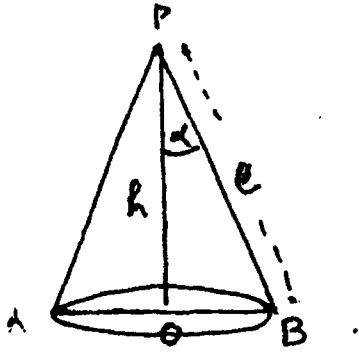
Applying $R_2 \rightarrow R_2 - R_3$, we get

$$\begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix} = \begin{pmatrix} 3 & -2 & -1 \\ -4 & 1 & -1 \\ 2 & 0 & 1 \end{pmatrix} A \quad 1 \text{ m}$$

$$\therefore A^{-1} = \begin{pmatrix} 3 & -2 & -1 \\ -4 & 1 & -1 \\ 2 & 0 & 1 \end{pmatrix} \quad 1 \text{ m}$$

Note : If the candidate writes $A = AI$, column operations should be done and not row operations.

24.



Correct Figure

1 m

Let ℓ be the slant height and α , the semi-vertical angle of the cone

$$\therefore h = PO = \ell \cos \alpha$$

$$BO = r = \ell \sin \alpha$$

The volume V of the cone is

$$V = \frac{1}{3} \pi (\ell \sin \alpha)^2 (\ell \cos \alpha)$$

$$= \frac{1}{3} \pi \ell^3 \sin^2 \alpha \cos \alpha$$

2 m

$$\therefore \frac{dV}{d\alpha} = \frac{1}{3} \pi \ell^3 [2 \sin \alpha \cos^2 \alpha - \sin^3 \alpha]$$

$$\frac{dV}{d\alpha} = 0 \Rightarrow \sin \alpha = 0 \text{ or } \tan \alpha = \sqrt{2}$$

$$\text{As } \alpha = 0 \text{ is not possible } \Rightarrow \alpha = \tan^{-1} \sqrt{2}$$

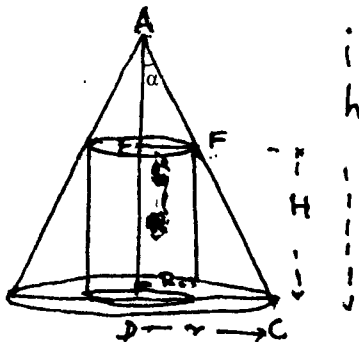
2 m

$$\text{Showing } \frac{d^2V}{d\alpha^2} \text{ to be negative at } \alpha = \tan^{-1} \sqrt{2} \Rightarrow \text{max.}$$

1 m

$$\therefore \text{Volume } V \text{ is maximum at } \alpha = \tan^{-1} \sqrt{2}$$

OR



Figure

1 m

Let r be the radius of cone and R that of cylinder

Let h and H be heights of cone and cylinder respectively

Let α be the semi-vertical angle

$$\Delta AEF \sim \Delta ADC$$

$$\Rightarrow \frac{h-H}{R} = \frac{h}{r}, \text{ Also } \frac{r}{h} = \tan \alpha \Rightarrow r = h \tan \alpha$$

$$\therefore R = (h-H) \tan \alpha$$

Volume V of cylinder is given by

$$V = \pi (h-H)^2 \tan^2 \alpha \times H$$

$$= \pi (h^2 H + H^3 - 2hH^2) \tan^2 \alpha$$

2 m

$$\therefore \frac{dV}{dH} = \pi \tan^2 \alpha [h^2 + 3H^2 - 4hH]$$

$$\frac{d^2V}{dH^2} = \pi \tan^2 \alpha [-4h + 6H]$$

$$\frac{dV}{dH} = 0 \Rightarrow 3H^2 - 4hH + h^2 = 0$$

$$\Rightarrow H = h, h/3$$

$$\Rightarrow H = \frac{h}{3} \quad (\text{As } h \neq H)$$

1 m

$$\left(\frac{d^2V}{dH^2} \right)_{\text{at } H = \frac{h}{3}} = \pi \tan^2 \alpha [-4h + 6 \cdot \frac{h}{3}]$$

$$= -2\pi h \tan^2 \alpha < 0$$

$$\Rightarrow \text{at } H = \frac{h}{3}, V \text{ is maximum}$$

1 m

$$\therefore \text{Max. volume} = \pi H (h - H)^2 \tan^2 \alpha$$

$$= \pi \times \frac{h}{3} \left(\frac{4h^2}{9} \right) \tan^2 \alpha = \frac{4}{27} \pi h^3 \tan^2 \alpha$$

1 m

25. Full marks for this question.

26.

Figure

1 m

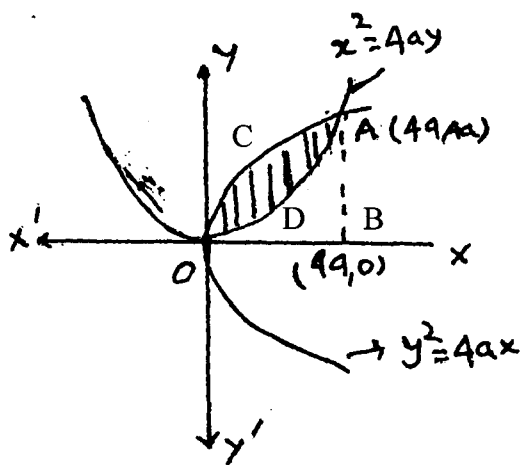
Point of intersection i.e. $x = 4a$

1 m

Area of shaded region

= Area of region OCABO

- Area of region ODABO



$$= \int_0^{4a} \sqrt{4ax} \, dx - \int_0^{4a} \frac{x^2}{4a} \, dx$$

1½ m

$$= \left[2\sqrt{a} \cdot \frac{2}{3} x^{3/2} \right]_0^{4a} - \frac{1}{4a} \left[\frac{x^3}{3} \right]_0^{4a}$$

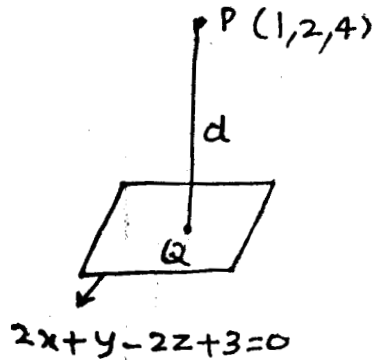
1½ m

$$= \frac{32}{3} a^2 - \frac{16}{3} a^2 = \frac{16}{3} a^2 \text{ square units}$$

1 m

27. The direction ratio's of a line \perp to the plane are the same as those of normal to the plane.

The \perp is drawn from $(1, 2, 4)$ to the plane. $2x + y - 2z + 3 = 0$



Equation of \perp is

$$\frac{x-1}{2} = \frac{y-2}{1} = \frac{z-4}{-2} = \lambda \text{ (say)} \quad 1 \text{ m}$$

$$x = 2\lambda + 1, y = \lambda + 2, z = -2\lambda + 4 \quad 1 \text{ m}$$

Since this point lies on the plane

$$2(2\lambda + 1) + (\lambda + 2) - 2(-2\lambda + 4) + 3 = 0 \quad 1 \text{ m}$$

$$9 + (2 + 2 - 8 + 3) = 0$$

$$\lambda = \frac{1}{9} \quad 1 \text{ m}$$

$$\therefore \text{ The foot of } \perp \text{ is } \left(2 \times \frac{1}{9} + 1, \frac{1}{9} + 2, -2 \times \frac{1}{9} + 4 \right)$$

$$\text{or } \left(\frac{11}{9}, \frac{19}{9}, \frac{34}{9} \right) \quad 1 \text{ m}$$

$$\therefore \text{ Length of PQ} = \sqrt{\left(\frac{11}{9} - 1 \right)^2 + \left(\frac{19}{9} - 2 \right)^2 + \left(\frac{34}{9} - 4 \right)^2}$$

$$\frac{1}{9} \sqrt{4 + 1 + 4} = \frac{3}{9} = \frac{1}{3} \quad 1 \text{ m}$$

28. Let E_1, E_2, E_3 be the events that the bulb has been manufactured on Machines

A, B and C respectively. Let A be the event that bulb is defective.

$$\therefore P(E_1) = \frac{6}{10}, P(E_2) = \frac{3}{10}, P(E_3) = \frac{1}{10} \quad 1\frac{1}{2} \text{ m}$$

$$P(A/E_1) = \frac{1}{100}, P(A/E_2) = \frac{2}{100}, P(A/E_3) = \frac{3}{100} \quad 1\frac{1}{2} \text{ m}$$

$$P(E_1/A) = \frac{P(E_1) \cdot P(A/E_1)}{\sum_{i=1}^3 P(E_i) \cdot P(A/E_i)} \quad 1 \text{ m}$$

$$= \frac{\frac{6}{10} \times \frac{1}{100}}{\frac{6}{10} \times \frac{1}{100} + \frac{3}{10} \times \frac{2}{100} + \frac{1}{10} \times \frac{3}{100}} = \frac{6}{6+6+3} = \frac{2}{5} \quad 2 \text{ m}$$

29.	Contents	Food		Requirement (in units)
	of food	A	B	
	Vitamins	200	100	4000
	Minerals	1	2	50
	Calories	40	40	1400
	Cost (per unit)	Rs 5	Rs 4	

Let x units of Food A and y units of Food B are taken

Getting the constraints

$$200x + 100y \geq 4000 \Rightarrow 2x + y \geq 40$$

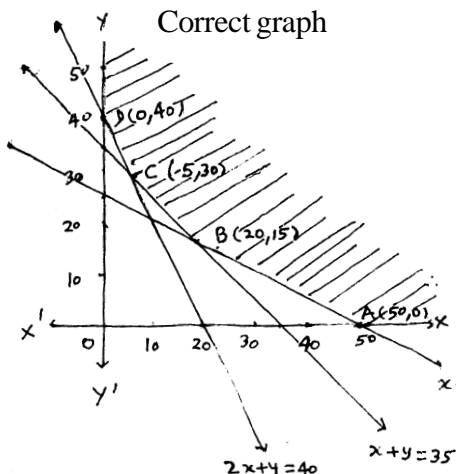
$$x + 2y \geq 50 \Rightarrow x + 2y \geq 50 \quad 1\frac{1}{2} \text{ m}$$

$$40(x + y) \geq 1400 \Rightarrow x + y \geq 35$$

$$x \geq 0, y \geq 0$$

$$\text{Cost } C = 5x + 4y \quad 1 \text{ m}$$

Correct graph 2 m



The vertices of feasible region are

A (50, 0), B (20, 15), C (5, 30), D (0, 40)

$$C_A = 250, C_B = 160, C_C = 145, C_D = 160$$

Cost is least at $x = 5, y = 30$ 1 m

\therefore 5 units of Food A and 30 units of Food B be

mixed for minimum cost meeting the requirements 1/2 m

ECONOMICS

Time allowed : 3 hours

Maximum Marks : 100

General Instructions:

- (i) All questions in both the sections are compulsory.
- (ii) Marks for questions are indicated against each.
- (iii) Question Nos. 1 to 5 and 17 to 21 are very short answer questions carrying one mark each. They are required to be answered in one sentence each.
- (iv) Question Nos. 6 to 10-and 22 to 26 are short answer questions carrying three marks each. Answer to them should not normally exceed 60 words each.
- (v) Question Nos. 11 to 13 and 27 to 29 are also short answer questions carrying four marks each. Answer to them should not normally exceed 70 words each.
- (vi) Question Nos. 14 to 16 and 30 to 32 are long answer questions carrying six marks each. Answer to them should not normally exceed 100 words each.
- (vii) Answer should be brief and to the point and the above word limit be adhered to as far as possible.

QUESTION PAPER CODE 58/1/1

SECTION A

- | | | |
|----|---|---|
| 1. | Give meaning of 'opportunity cost.' | 1 |
| 2. | Define market demand. | 1 |
| 3. | What does cost mean in economics? | 1 |
| 4. | Define revenue. | 1 |
| 5. | Define market for a good. | 1 |
| 6. | Explain the central problem "what to produce." | 3 |
| 7. | When price of a good rises from Rs. 5 per unit to Rs. 6 per unit, its demand falls from 20 units to 10 units. Compare expenditures on the good to determine whether demand is elastic or inelastic. | 3 |

8. What is the relation between good X and good Y in each case, if with fall in the price of X demand for good Y (i) rises and (ii) falls? Give reason. 3
9. Explain the effect of technical progress on the supply of a good. 3

OR

- Explain the effect of rise in input prices on the supply of a good. 3
10. State three features of monopoly. 3
11. Explain the conditions leading to maximization of profits by a producer. Use total cost and total revenue approach. 4
12. Complete the following table: 4

Output (Units)	Average Revenue (Rs.)	Marginal Revenue (Rs.)	Total Revenue (Rs.)
1	----	15	----
2	----	----	26
3	11	----	----
4	----	3	----

13. Complete the following table: 4

Output (Units)	Total variable cost (Rs.)	Average variable cost (Rs.)	Marginal cost (Rs.)
1	10	----	----
----	----	8	6
3	27	----	----
----	----	10	13

OR

Complete the following table:

Output (Units)	Total variable cost (Rs.)	Average variable cost (Rs.)	Marginal cost (Rs.)
1	----	12	----
2	20	----	----
----	----	10	10
4	40	----	----

14. A consumer consumes only two goods. Explain his equilibrium with the help of utility approach. 6
15. Explain the Law of Variable Proportions through the behaviour of both Total Product and Marginal Product. Give reasons. 6

OR

Explain “Returns to Scale” using numerical examples. Give reasons.

16. Market for a good is in equilibrium. What is the effect on equilibrium price and quantity if both market demand and market supply of the good **increase** in the same proportion? Use diagram. 6

For Blind Candidates only in lieu of Q. No. 16

Market for a good is in equilibrium. What is the effect on equilibrium price and quantity if both market demand and market supply of the good **increase** in the same proportion? Use schedule.

Section B

17. Give meaning of involuntary unemployment. 1
18. Define inflationary gap. 1
19. What is a central bank? 1
20. State **any one** objective of government budget. 1
21. Define flexible exchange rate system. 1
22. Calculate ‘value of output’ from the following data: 3

		(Rs. lakhs)
(i)	Net value added at factor cost	100
(ii)	Intermediate consumption	75
(iii)	Excise duty	20
(iv)	Subsidy	5
(v)	Depreciation	10

23. When exchange rate of foreign currency rises, its supply rises. How? Explain. 3
24. State components of the current account of balance of payments account. 3

25. What is bank rate policy? How does it work as a method of credit control? 3

OR

What are open market operations? How do these work as a method of credit control?

26. Give meanings of capital receipts and revenue receipts with an example of each. 3
27. As a result of increase in investment by Rs. 125 crores, national income increases by Rs. 500 crores. Calculate marginal propensity to consume. 4
28. Give **four** agency functions of commercial banks. 4

OR

Explain the acceptance of deposits function of commercial banks.

29. What is fiscal deficit? What are its implications? 4
30. Calculate 'Net Domestic Product at Factor Cost' and 'Gross National Disposable Income' from the following data: 3,3

	(Rs. crores)
(i) Net current transfers from abroad	(-) 5
(ii) Private final consumption expenditure	250
(iii) Net factor income from abroad	15
(iv) Government final consumption expenditure	50
(v) Consumption of fixed capital	25
(vi) Net exports	(-) 10
(vii) Subsidies	10
(viii) Net domestic capital formation	30
(ix) Indirect tax	20

31. Explain determination of equilibrium level of income using 'consumption plus investment' approach. Use diagram. 6

OR

Explain determination of equilibrium level of income using 'saving investment' approach. Use diagram.

For Blind Candidates only in lieu of Q. No. 31

Explain determination of equilibrium level of income using 'consumption plus investment' approach. Use schedule.

OR

Explain determination of equilibrium level of income using 'saving investment' approach. Use schedule.

- 32.** Giving reasons explain how the following are treated while estimating national income: 2,2,2
- (i) Payment of fees to a lawyer engaged by a firm.
 - (ii) Rent free house to an employee by an employer.
 - (iii) Purchases by foreign tourists.

QUESTION PAPER CODE 58/1

SECTION A

- | | | |
|------------|---|---|
| 1. | Define 'Marginal Rate of Transformation'. | 1 |
| 2. | What is a demand schedule? | 1 |
| 3. | Define 'production function'. | 1 |
| 4. | What is 'market supply' ? | 1 |
| 5. | Define 'equilibrium price'. | 1 |
| 6. | Explain the central problem of 'choice of technique'. | 3 |
| 7. | Price elasticity of demand of a good is (-)1. At a given price the consumer buys 60 units of the good. How many units will the consumer buy if the price falls by 10 percent? | 3 |
| 8. | Given the market price of a good, how does a consumer. decide as .to how many units' of that good to buy? Explain. | 3 |
| 9. | What is the likely effect on the supply of a good if the prices of the inputs used in production of that good fall? Explain. | 3 |
| 10. | Explain what happens to the profits in the long run if the firms are free to enter the industry. | 3 |

OR

Explain what happens to losses in the long run if the firms are free to leave the industry.

11. Explain producer's equilibrium using a schedule. Use total cost and total revenue approach. 4

OR

Distinguish between (i) fixed cost and variable cost, giving examples and (ii) average cost and marginal cost giving an example.

12. Draw supply curves with price elasticity of supply throughout equal to (i) zero, (ii) one, (iii) infinity and (iv) less than one. 4

Blind Candidates only in lieu of Q. No. 12

Distinguish between (i) elastic and inelastic supply and (ii) perfectly - elastic and perfectly inelastic supply.

13. Complete the following table:

Price (Rs.)	Output (Units)	Total Revenue eRs.)	Marginal Revenue (Rs.)
---	1	6	---
4	---	---	2
---	3	6	---
1	---	---	(-) 2

14. Explain the effect of the following on demand for a good:

- (i) Rise in income
(ii) Rise in prices of related goods 6

15. Explain, with the help of numerical examples, the effect on total output of a good when all the inputs used in production of that good are increased simultaneously and in the same proportion. 6

16. Given market equilibrium of a good, what are the effects of simultaneous increase in both demand and supply of that good on its equilibrium price and quantity? 6

OR

Explain the implications of the following:

- (i) The feature 'differentiated products' under monopolistic competition.
- (ii) The feature 'large number of sellers' under perfect competition.

SECTION B

17. Define 'aggregate supply', 1
18. Give meaning of deficient demand. 1
19. What is a commercial bank? 1
20. Define government budget. 1
21. What is fixed exchange rate system? 1
22. Calculate .Net Value Added at factor cost from the following data: 3

(Rs. lakhs)

(i)	Depreciation	20
(ii)	Intermediate cost	90
(iii)	Subsidy	5
(iv)	Sales	140
(v)	Exports	7
(vi)	Change in stock	(-) 10
(vii)	Imports of raw materials	3

23. When exchange rate of foreign currency falls, its demand rises. Explain, how. 3
24. Distinguish between balance of trade and balance on current account. 3
25. Explain the 'medium of exchange' function of money. 3

OR

Explain the evolution of money.

26. Give meaning of capital expenditure and revenue expenditure in a government budget and an example of each. 3
27. In an economy an increase in investment leads to increase in national income which is three times more than the increase in investment. Calculate marginal propensity to consume. 4

28. Explain the lending function of commercial banks. 4

OR

Explain 'banker to the government' function of central bank.

29. What is revenue deficit? What are its implications? 4

30. Calculate 'National Income' and 'Private Income' from the following data : 3,3

(Rs. crores)

(i)	Net current transfers to the rest of the world	10
(ii)	Private final consumption expenditure	600
(iii)	National debt interest	15
(iv)	Net exports	(-) 20
(v)	Current transfers from government	5
(vi)	Net domestic product at factor cost accruing to government	25
(vii)	Government final consumption expenditure	100
(viii)	Net indirect tax	30
(ix)	Net domestic capital formation Net factor income from abroad	70
(x)	Net factor income from abroad	10

6

31. Explain 'consumption function' with the help of a schedule and diagram.

OR

Explain 'saving function' with the help of a schedule and diagram.

For Blind Candidates only in lieu of Q. No. 31

Explain 'consumption function' with the help of a schedule. Also record marginal propensity to consume in the schedule. 6

OR

Explain 'saving function' with the help of a schedule. Also record marginal propensity to save in the schedule.

2, 2, 2

32. Giving reasons, explain how the following are treated in estimating national income:

- Wheat grown by a farmer but used entirely for family's consumption.
- Earnings of the shareholders from the sale of shares.
- Expenditure by government on providing free education.

Marking Scheme — Economics

General Instructions

1. Please examine each part of a question carefully and allocate the marks allotted for the part as given in the marking scheme below. TOTAL MARKS FOR ANY ANSWER MAY BE PUT IN A CIRCLE ON THE LEFT SIDE WHERE THE ANSWER ENDS.
2. The answers given in the marking scheme below are suggested answers. The content is thus indicative. The candidates may express the content in various forms. But, for standardization of evaluation it is necessary to follow the marking scheme suggested here on the basis of expected content.
3. For mere arithmetical errors, there should be minimal deduction. Only $\frac{1}{2}$ mark be deducted for such an error.
4. Wherever only two/three or a “given” number of examples/factors/points are expected only the first two/three or expected number should be read. The rest are irrelevant and must not be examined.
5. There should be no effort at “moderation” of the marks by the evaluating teachers. The actual total marks obtained by the candidate may be of no concern to the evaluators.
6. Higher order thinking ability questions are assessing student’s understanding/analytical ability.

General Note : In case of numerical question no mark is to be given if only the final answer is given.

QUESTION PAPER CODE 58/1/1

EXPECTED ANSWERS/VALUE POINTS

Section – A

- | | | |
|-----|---|---|
| 1. | The value of the next best alternative foregone while making a choice. | 1 |
| 2. | Market demand is the sum of demands by all the consumers of a good. | 1 |
| *3. | Cost in economics includes actual expenditure on inputs and the imputed value of the inputs supplied by the owners. | 1 |
| 4. | Revenue refers to receipts from sale of the output or refers to the value of output. | 1 |

5. Market is any area in which buyers and sellers are in contact with one another. 1
6. (i) Meaning of the problem 1
(ii) Explanation of the problem 2
- *7. Price Demand Total Expenditure
- | | | | |
|---|----|-----|---|
| 5 | 20 | 100 | |
| 6 | 10 | 60 | 1 |
- Since with rise in price total expenditure falls, demand for the good is elastic. 2
- (No marks if reason is not given)
- *8. (i) X and Y are complementary. As X and Y are used together when P_x falls demand for X rises, so demand for Y will also rise. $\frac{1}{2}$
- (ii) X and Y are substitutes. With fall in P_x , X becomes relatively cheaper than Y which induces the consumer to transfer expenditure from Y to X leading to fall in demand for Y. $\frac{1}{2}$
- (No marks be given in each case if reason is not given)
9. Technological progress raises productivity, reduces cost, raises profits and thus induces the producers to supply more. 3
- OR**
- Rise in input prices raises cost, reduces profits resulting in less supply by producers. 3
10. (1) A single seller market.
(2) No close substitutes of the product.
(3) Barriers to the entry of new firms.
(Or any other relevant feature)
- (any three) 1x3
11. The two conditions are
- | | | |
|--|-------------|---|
| (i) TR-TC is maximum | Statement | 1 |
| | Explanation | 1 |
| (ii) Profits fall as more output is produced | Statement | 1 |
| | Explanation | 1 |

12.	Output (Units)	AR (Rs.)	MR (Rs.)	TR (Rs.)	
	1	<u>15</u>	15	<u>15</u>	
	2	<u>13</u>	<u>11</u>	26	$\frac{1}{2} \times 8 = 4$
	3	11	<u>7</u>	<u>33</u>	
	4	<u>9</u>	3	<u>36</u>	

13.	Output (Units)	TVC (Rs.)	AVC (Rs.)	M.C. (Rs.)	
	1	10	<u>10</u>	<u>10</u>	
	<u>2</u>	<u>16</u>	8	6	$\frac{1}{2} \times 8 = 4$
	3	27	<u>9</u>	<u>11</u>	
	<u>4</u>	<u>40</u>	10	12	

OR

	Output (Units)	TVC (Rs.)	AVC (Rs.)	M.C. (Rs.)	
	1	<u>12</u>	12	<u>12</u>	
	2	20	<u>10</u>	<u>8</u>	$\frac{1}{2} \times 8 = 4$
	<u>3</u>	<u>30</u>	10	10	
	4	40	<u>10</u>	<u>10</u>	

14.	Equilibrium Condition: Ratio of MU to price is same in case of both goods	1
	$\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$	1

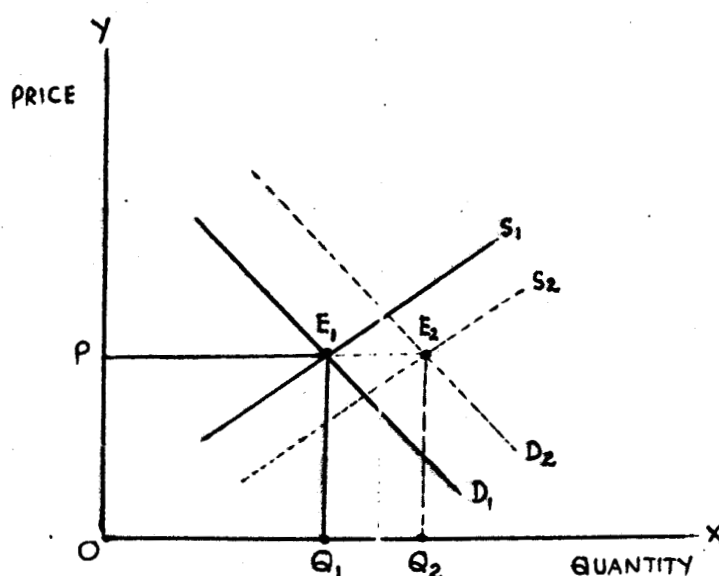
Explanation : Explain what happens if this condition is not satisfied and how the equilibrium is restored. 4

15.	Statement of law through TP	2
	Statement of law through MP	2
	Reasons behind the law	2

OR

Three different situations of returns to scale with numerical examples 1x3=3
Reasons behind increasing and diminishing returns to scale. 1½x2

16.



Since both demand and supply increase both demand curve and supply curve shift to the right. Since both increase in the same proportion, price remains unchanged at OP but equilibrium quantity increases from OQ_1 to OQ_2 .

For blind candidates:

Schedule

Explanation with schedule.

Section – B

17. Involuntary unemployment means that part of the labour force which is both able and willing to work at the prevailing wage rate but do not get work. 1
18. It is the excess of AD over AS at full employment. 1
19. The Central bank is the apex institution of a country's monetary system. 1
20.
 1. To provide public goods.
 2. To reduce inequalities in distribution of income.
 3. To bring economic stability in the country
 Any other (Any one) 1
21. A system in which foreign exchange rate is determined by the forces of demand supply of foreign exchange. 1
22. Value of output = $i + iii - iv + v + ii$ 1
 = $100 + 20 - 5 + 10 + 75$ 1½
 = Rs. 200 Lakhs ½

23. When exchange rate rises, exports become cheaper, i.e. more exports per unit of foreign currency. This raises demand for exports. More exports mean more supply of foreign exchange. (Or explanation with any other relevant example). 3
24. 1. Exports and imports of goods.
2. Exports and imports of Services.
3. Transfer receipts and payments.
4. Income receipts and payments. (Any three) 1x3
25. Changing of **bank rate** (the interest rate at which the central bank lends to the commercial banks) to influence credit availability is called bank rate policy. 1
- When bank rate is raised, it forces the commercial banks to raise the interest rate at which they lend. This reduces demand for credit. Similarly a lowering of bank rate will increase demand for credit. 2
- OR**
- Open market** operations refer to the sale and purchase of government securities by the central bank. 1
- When the central bank sells securities, people make payments by withdrawing money from the commercial banks. This reduces deposits with commercial banks. This in turn reduces supply of credit by commercial banks. Similarly, buying of securities by central bank increases supply of credit. 2
26. Government receipts that either create liabilities or reduce assets are called capital receipts. 1
- Example: Borrowing, disinvestment etc. (any one) ½
- Government receipts that neither create any liability nor reduce any asset are called revenue receipts. 1
- Example: Tax, dividend, etc. (any one) ½
27. $\Delta Y = \Delta I \frac{1}{1-mpc}$ 1½
- $500 = 125 \frac{1}{1-mpc}$
- $500 - 500MPC=125$
- $- 500MPC= 125 - 500= - 375$
- $MPC=0.75$ 2
- (If the calculations are done in other forms, it be treated as correct) ½

28. (1) Transfer of funds of customers.
 (2) Collection of funds of customers.
 (3) Purchase and sale of securities on behalf of customers.
 (4) Collection of interest and dividends on behalf of customers.
 (5) Payments of bills, insurance premium, etc. as per customer's direction.
 (6) Acting as executor and trustee of wills, etc.

(Any four)

1x4

OR

Explanation of deposits in the form of demand deposits and time deposits OR in the form of current account, fixed /term deposits and savings account.

4

(To be marked as whole)

29. Fiscal deficit means the excess of total expenditure over the total receipts by the government excluding borrowings.

1

A large fiscal deficit mean large amount of borrowings. This in turn creates burden of interest and loan repayment in the future. It may also be inflationary.

3

30. $NDP_{fc} = ii + iv + viii + vi - ix + vii$
 $= 250 + 50 + 30 + (-10) - 20 + 10$
 $= \text{Rs. 310 Crores}$

1

1½

½

$$GNDI = NDP_{fc} + v + iii + ix - vii + i$$

$$= 310 + 25 + 15 + 20 - 10 + (-5)$$

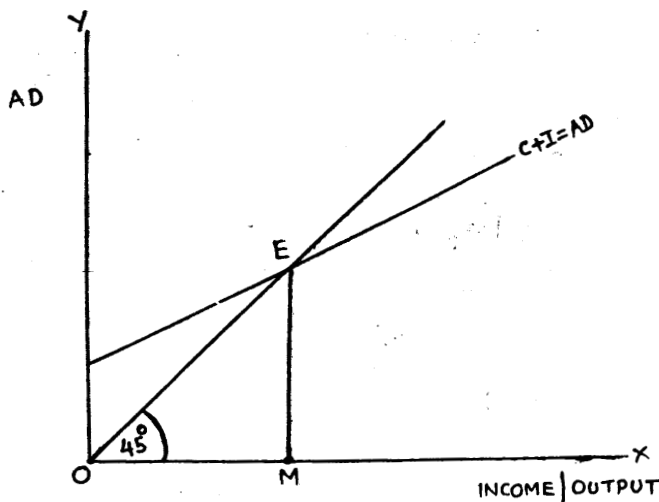
$$= \text{Rs. 355 Crores}$$

1

1½

½

31.



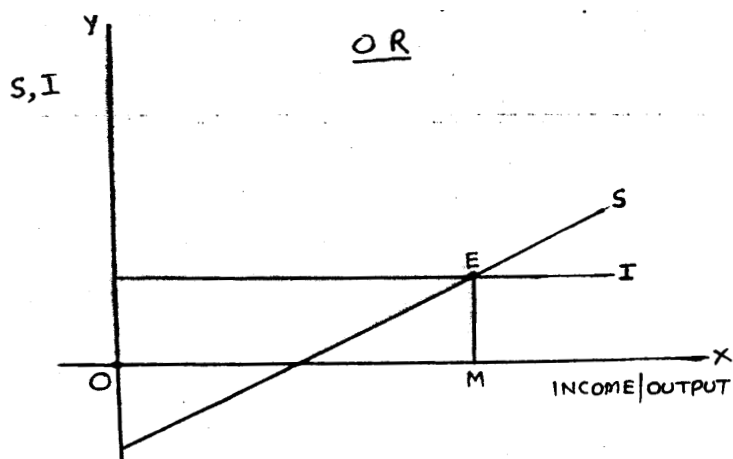
2

Equilibrium is determined where $AD=AS$, and $AD=C+I$ and AS is national income. The equilibrium is at E and equilibrium level of income is OM .

2

If $AD < AS$, inventories increase, output falls and so AS falls. These changes continue till $AD=AS$. (Or if $AD > AS$; inventories fall, output rises, and so AS rises till $AD=AS$)

2



2

Equilibrium is determined where $S=I$. The equilibrium is at E and equilibrium level of income is OM .

2

If $S > I$, inventories increase, output falls, income falls and so saving falls till $S=I$ again, (or if $S < I$, inventories fall, output rises; income rises, and so savings rise till $S=I$ again)

2

For blind candidates

Same as above but based on schedule only.

Schedule

2

Explanation of schedule

2

Explanation of equilibrium

2

- *32 (i) It is intermediate expenditure to the firm because it is a purchase of services by one production unit (firm) from another production unit. So it is deducted from the value of output of the firm to arrive at value added. (national income) 2
- (ii) It is Included in national income by income method as wages in kind paid to employees. 2
- (iii) Purchase by foreign tourists is exports and included in national income through the expenditure method. 2
- (No marks if reasons are not given)

QUESTION PAPER CODE 58/1
EXPECTED ANSWERS/VALUE POINTS

Section – A

- | | | |
|---|---|--------|
| 1 | MRT is the ratio of units of one good sacrificed to produce one more unit of the other good. | 1 |
| 2 | Demand schedule is a table showing prices and the quantities demanded at each price. | 1 |
| 3 | A production function is an expression of quantitative relation between change in inputs and the resulting change in output. | 1 |
| 4 | Market supply refers to the sum of outputs of all the producers of a good at a price during a given period of time. | 1 |
| 5 | Equilibrium price is the price at which market demand equals market supply. | 1 |
| 6 | Meaning of the problem
Explanation of the problem | 1
2 |
| 7 | $E = \frac{\text{Percentage change in demand}}{\text{Percentage change in price}}$ | 1 |
| | $-1 = \frac{\text{Percentage change in demand}}{-10\%}$ | 1 |
| | change in demand = 10% | |
| | New demand = Q + 10% of Q | ½ |
| | = 60 + 10% of 60 | |
| | = 66 | ½ |
| 8 | Consumer compares price with marginal utility (MU). He continues to buy so long as MU is greater than price. As he buys more MU falls and becomes equal to price at a certain quantity. He stops buying when MU=P. This maximizes utility. Buying more will make MU less than price, and reduces utility. (To be marked as whole) | 3 |
| 9 | Fall in price of inputs reduces cost. This raises profits which induces the producers to supply more (Explanation) | 3 |

- *10 When existing firms are earning profit, freedom of entry induces new firms to enter the industry. This raises market supply which in turn leads to fall in market price. Profits fall and continue to fall till each firm is earning zero economic profit / normal profit / Zero profit. 3

OR

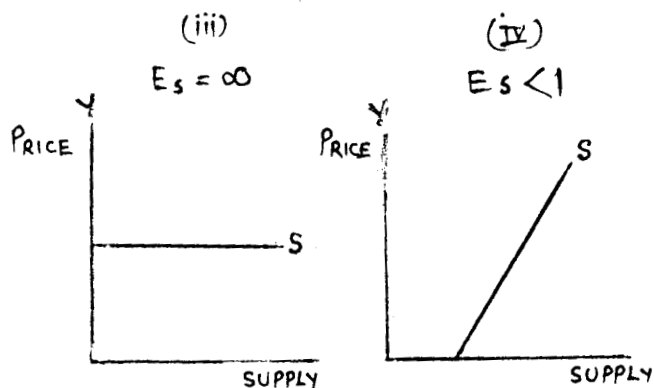
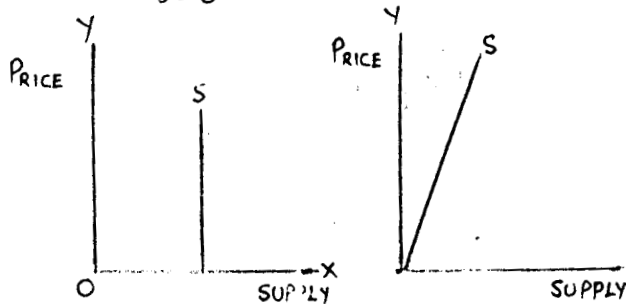
When existing firms are incurring losses, the firms start leaving the industry. This reduces the number of firms. The market supply is reduced which in turn leads to rise in market price. Losses fall and continue to fall till they are wiped out and each firm left in the industry is earning zero economic profit / normal profit / Zero profit.

- 11 Schedule 2
Explanation in terms conditions of equilibrium based on TR/TC approach. 2

OR

- (i) FC vs VC Distinction 1
Examples $\frac{1}{2} \times 2$ 1
(ii) AC vs MC Distinction 1
Numerical example $\frac{1}{2} \times 2$ 1

- 12 (i) $E_s = 0$ (ii) $E_s = 1$ 1x4



(No explanation required)

For blind candidates

- (i) Distinction in terms of numerical value 2
- (ii) Distinction in terms of numerical value 2
- 13
- | Price
(Rs) | Output
(unit) | TR
(Rs) | MR
(Rs) |
|---------------|------------------|------------|------------|
| 6 | 1 | 6 | 6 |
| 4 | 2 | 8 | 2 |
| 2 | 3 | 6 | -2 |
| 1 | 4 | 4 | -2 |
- 1/2x8
- 14
- (i) Normal good case 1½
- Inferior good case 1½
- (ii) Substitute goods 1½
- Complementary goods 1½
- 15
- C. R. S. Meaning 1
- Numerical Example 1
- I. R. S. Meaning 1
- Numerical Example 1
- D. R. S. Meaning 1
- Numerical Example 1
- *16 **3 possibilities :** Price may rise, remain same, may fall 2x3=6
- (with explanation)
- (Diagram not required)
- OR**
- (i) **Meaning** 1
- Implication :** in terms of power to influence price by a firm. 2
- (ii) **Meaning** 1
- Implication :** in terms of one individual firm having no influence over the market price. 2

Section – B

- 17 Aggregate supply refers to the value of final products planned to be produced in an economy during a given year. 1
- 18 Deficient demand refers to the aggregate demand falling short of aggregate supply at full employment level. 1

- 19 A commercial bank is a financial institution which accepts checkable deposits and lends money to public. 1
- 20 Government budget is a statement of expected receipts and expenditures during a given year. 2
- 21 A system in which exchange rate is fixed by the government/ monetary authorities and not determined by the market. 1
- 22
$$\begin{aligned} \text{NVA}_{fc} &= iv + vi - ii - i + ii \\ &= 140 + (-10) - 90 - 20 + 5 \\ &= 25 \text{ (Rs. lakhs)} \end{aligned}$$
 1
1½
½
- 23 When exchange rate falls imports become cheaper. Demand for imports rises and so rises the demand for foreign exchange to purchase more imports. 3
- 24 **Balance of trade** = Exports of goods – Imports of goods 1
Balance on current account is the difference between receipts and payments of foreign exchange on account of goods, services, incomes and transfers. 2
- 25 Medium of exchange function including how it solves the problem of double coincidence of wants. 3
- OR**
- Evaluation of money in terms of commodity money, metallic money paper money, bank money. 3
- 26 **Capital expenditure** is the expenditure by government that either creates an asset or reduces a liability. 1
Example : construction, repayment of loan, etc. ½
- any one
- Revenue expenditure** is the expenditure by government that neither creates an asset nor reduces a liability 1
Example: interest payment, subsidy, etc. ½
- any one
- 27 Since increase in Y is 3 times more than increase in I, total increase in Y is 4 times. Therefore, the value of multiplier is 4. 1
- Multiplier = $\frac{1}{1 - \text{MPC}}$ 1
- $$4 = \frac{1}{1 - \text{MPC}}$$
 1

$$4 - 4 \text{ MPC} = 1$$

$$4 \text{ MPC} = 3$$

$$\text{MPC} = 0.75$$

1

- 28 Explanation in terms of direct loans, cash credit, overdrafts, discounting bills of exchange.

2x2=4

(Explanation of any two forms is sufficient to attract full credit).

OR

Explanation in terms of undertaking banking transactions of government, managing public debt, advising on financial matters.

4

- 29 Revenue deficit is the excess of government's total revenue expenditure over the total revenue receipts.

1

The deficit is to be covered through borrowings, disinvestment, etc. The borrowing in turn leads to the payment of interest and repayment of loans in future which may mean more deficit in future.

3

- 30 N.I = ii + vii + ix + iv - viii + x
 $= 600 + 100 + 70 + (-20) - 30 + 10$
 $= \text{Rs } 730 \text{ crores}$

1

1½

½

$$\begin{aligned} \text{Pvt. Income} &= \text{N.I} - \text{vi} - \text{i} + \text{iii} + \text{v} \\ &= 730 - 25 - 10 + 15 + 5 \\ &= \text{Rs } 715 \text{ crores} \end{aligned}$$

1

1½

½

- 31 Schedule

2

Explanation based on schedule

2

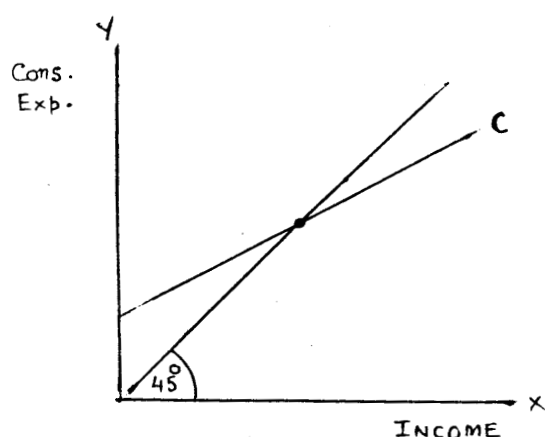


Diagram (need not necessarily be according to schedule)

2

OR

Schedule	2
Explanation based on schedule	2

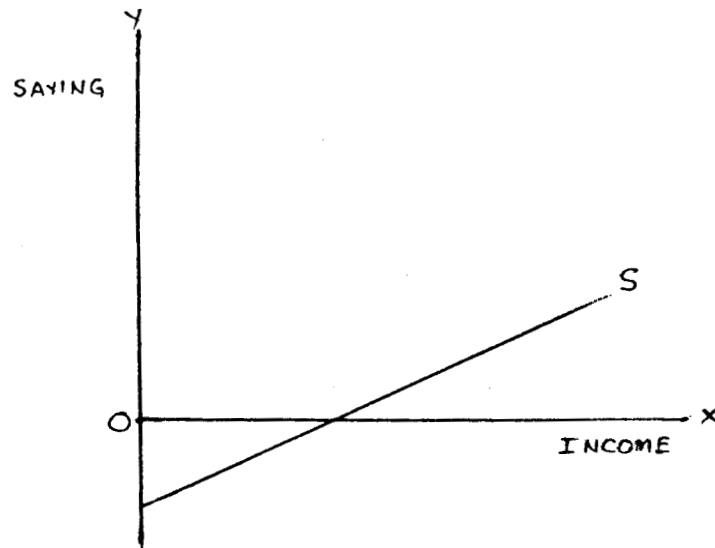


Diagram (need not necessarily be according to schedule)	2
---	---

For blind candidate

Schedule	2
Explanation based on schedule	2
MPC in schedule	2

OR

Schedule	2
Explanation based on schedule	2
MPS in schedule	2

- | | |
|----|--|
| 32 | <div style="display: flex; justify-content: space-between;"><div>(i) Self consumed output is a part of total output and therefore, accounted for through the production method.</div><div>2</div></div> <div style="display: flex; justify-content: space-between;"><div>(ii) Earning from the sale and purchase of financial assets is not accounted in national income estimation because it is not production.</div><div>2</div></div> <div style="display: flex; justify-content: space-between;"><div>(iii) It is a final consumption expenditure of the government and therefore, accounted for in national income through the expenditure method.
(No marks if reasons not given)</div><div>2</div></div> |
|----|--|

BUSINESS STUDIES

Time allowed : 3 hours

Maximum Marks : 100

General Instructions:

1. Answer to questions carrying 1 mark may be from one word to one sentence.
2. Answer to questions carrying 3 marks may be from 50 to 75 words.
3. Answer to questions carrying 4-5 marks may be about 150 words.
4. Answer to questions carrying 6 marks may be about 200 words.
5. Attempt all parts of question together.

QUESTION PAPER CODE 66/1/1

- | | | |
|----|---|---|
| 1. | 'The management principles can be applied to all types of activities.' Which characteristic of management is highlighted by this statement? | 1 |
| 2. | Name the process of designing and maintaining an environment in which individuals working together in groups, efficiently accomplish selected aims. | 1 |
| 3. | What is the main objective of fatigue study? | 1 |
| 4. | Name the function of management which co-ordinates the physical, financial and human resources and establishes productive relations among them for achievement of specific goals. | 1 |
| 5. | State how the management principles are flexible? | 1 |
| 6. | Which function of management ensures that actual activities confirm to planned activities? | 1 |
| 7. | A company wants to establish a new unit in which a machinery of worth Rs. 10 lakhs is involved. Identify the type of decision involved in financial management. | 1 |
| 8. | Name the concept which increases the return on equity shares with a change in the capital structure of a company. | 1 |
| 9. | Ahmed wants to buy an iron. As an aware customer how can he be sure about the quality of iron? | 1 |

10.	Mohit filed a case against ‘Domestic Coolings Ltd.’ in the ‘District Forum,’ but he was not satisfied with the orders of the District Forum. Where can he appeal further against the decisions of District Forum?	1
11.	Explain how ‘planning’ provides direction to action?	3
12.	What is meant by ‘formal organisation’ ? List any two advantages of formal organisation.	3
13.	To be a successful leader, one must-possess some qualities. State any three such qualities of a leader.	3
14.	Explain any three advantages of ‘labelling.	3
15.	Nature of money market can be well explained with the help of its features. State any three such features of money market.	3
16.	Explain ‘objective’ and ‘policy’ as types of plan using suitable examples.	4
17.	What is required to tackle the uncertainty in respect of availability and timings of funds? Name the concept involved and explain any three points of its importance.	4
18.	Explain the following rights of a consumer:	4
	(i) Right to safety	
	(ii) Right to consumer education	
19.	State any four reasons why training is needed in any organisation?	4
20.	‘Supervision is not at all required in an organisation.’ Do you agree? Give two reasons in support of your answer.	4
21.	Raman is working as ‘Plant Superintendent’ in Tifco Ltd. Name the managerial level at which he is working? State any four functions he will perform as ‘Plant Superintendent’ in this company.	5
22.	Explain the following principles of management :	5
	(a) Scalar chain	
	(b) Science not Rule of Thumb	
23.	Maslow’s need-hierarchy is considered fundamental to understanding of motivation. Explain the role of need-hierarchy in motivation.	5

24. Distinguish between 'Capital Market' and 'Money Market' on the following bases: 5
- (i) Participants
 - (ii) Instruments traded
 - (iii) Duration of securities traded (iv) Expected return
 - (v) Safety

25. Some products have certain unique features. They attract a significant groups of buyers. Identify the kind of product and list its features. 5

26. What is meant by 'functional structure' of organisation ? Explain any two advantages and any two limitations of this structure. 6

OR

What is meant by 'decentralisation' ? Explain any four points which highlight the importance of decentralisation in an organisation.

27. 'Filling vacancies from within the organisation has some advantages as well as limitations.' Explain any three such advantages and any three limitations. 6

OR

Which function of management helps in obtaining right people and putting them on the right jobs ? Explain any five points of importance of this function.

28. What is meant by 'Budgetary Control' ? State its four advantages. 6

OR

'Controlling is an indispensable function of management.' Do you agree? Give four reasons in support of your answer.

29. Explain any four factors which affect the working capital requirements of a business. 6

OR

Explain any four factors which affect the capital structure of a Company.

30. Explain four important elements of marketing mix. 6

OR

Explain the following functions of marketing:

- (i) Gathering and analysing market information;
- (ii) Market Planning;
- (iii) Product designing and development;
- (iv) Customer support services.

QUESTION PAPER CODE 66/1

1. 'In an organisation employees are happy and satisfied, there is no chaos and the effect of management is noticeable.' Which characteristic of management is highlighted by this statement? 1
2. Name the process of working with and through others to effectively achieve organisational objectives by efficiently using its limited resources in the changing environment. 1
3. What is the main objective of 'Method-Study' ? 1
4. 'Identifying and dividing the work' is the first step in the process of one of the functions of management. Identify the function. 1
5. How have the management principles been derived? 1
6. Name the function which reviews the operations in a business unit. 1
7. Identify the decision taken in financial management which affects the liquidity as well as the profitability of business. 1
8. State why the working capital needs for a 'Service-industry' are different from that of a Manufacturing industry. 1
9. Rita wants to buy a packet of juice. As an aware customer how can she be sure about the quality of juice she plans to buy? 1
10. Amrit filed a case against 'Volvo Ltd.' in the 'State Commission'. But he was not satisfied with the orders of the 'State Commission'. Name the authority to which he can appeal against the decisions of 'State Commission', 1
11. Explain how planning reduces the risk of uncertainty. 3
12. What is meant by 'informal organisation' ? List any two limitations of informal organisation. 3
13. There are some barriers in communication which are concerned with encoding and decoding of message. State any three such barriers. 3
14. Explain any three merits of 'packaging'. 3
15. Nature of 'capital-market' can be well explained with the help of its features. State any three such features of capital-market. 3
16. Explain 'Procedure' and 'Programme' as types of plans, with a suitable example. 4

17. To avoid the problem of shortage and surplus of funds what is required in financial management? Name the concept and explain its any three points of importance. 4
18. Explain the following rights of a consumer: 4
- (i) Right to choose
 - (ii) Right to be informed
19. State any four reasons why staffing is needed in an organisation. 4
20. 'It is only motivation through which the managers can inspire their subordinates to give their best to the organisation.' In the light of this statement explain any four points of importance of motivation. 4
21. Dheeraj is working as 'Operations Manager' in Tifco Ltd. Name the managerial level at which he is working. State any four functions he will perform as 'Operations Manager' in this company. 5
22. Explain the following principles in management: 5
- (a) Discipline
 - (b) Harmony, not discord
23. To satisfy the social and psychological needs which type of incentives are needed? Explain any four types of such incentives. 5
24. Distinguish between National Stock Exchange of India (NSEI) and Over The Counter Exchange of India (OTCEI) on the following bases: 5
- (i) Year of establishment
 - (ii) Paid-up capital
 - (iii) Securities traded
 - (iv) Duration of settlement
 - (v) Objective
25. Price of a product is influenced by many factors.' Explain any five factors influencing pricing. 5
26. What is meant by 'Divisional-Structure' of an organisation? Explain any two advantages and any two limitations of this structure. 6

OR

What is meant by 'Delegation' ? Explain any four points which highlight the importance of delegation in an organisation.

27. Which source of recruitment is needed to bring new blood in the organisation? Explain any three advantages and any two limitations of this source. 6

OR

'Training is beneficial both for the organisation as well as for the employees.' Explain any three benefits of training towards the organisation and any three towards the employees.

28. What is meant by 'Budgetary control'? State its four advantages. 6

OR

'Controlling is a systematic process involving a series of steps.' Explain.

29. Explain any four factors which affect the fixed capital requirements of a business. 6

OR

Explain any four factors which affect the capital structure of a company.

30. 'Advertising' and 'Personal Selling' both are communication tools used by the marketers to promote their products. Yet they differ in their approach. Differentiate between the two by giving any six differences. 6

OR

The aim of 'Marketing' and 'Selling' is to maximise profit. Yet they differ in their approach. Differentiate between the two by giving any six differences.

Marking Scheme — Business Studies

General Instructions

1. The Marking Scheme carries only suggested value points for the answer. These are only guidelines and do not constitute the complete answer. The students can have their own expression and if the expression is correct, the marks be awarded accordingly.
2. Some of the questions may relate to higher order thinking ability. These questions will be indicated to you separately by a star mark. These questions are to be evaluated carefully and the students' understanding / analytical ability may be judged.
3. Evaluation is to be done as per instructions provided in the Marking Scheme.
4. The Head-Examiners have to go through the first five answer-scripts evaluated by each evaluator to ensure that the evaluation has been carried out as per the instruction given in the marking scheme. The remaining answer scripts meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.
5. If a question has parts, please award marks on the right hand side for each part. Marks awarded for different parts of the question should then be totalled up and written in the left hand margin.
6. If a question does not have any parts, marks be awarded in the left hand margin.
7. If a candidate has attempted a question twice, marks obtained in the question attempted first should be retained and the other answer should be scored out.
8. There are few questions of distinction between two concepts. In such questions, sometimes some students give one aspect of the difference correctly and the other is either wrong or not given at all no marks should be given for such distinction.
9. If a child has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out.
10. In a question, if two features/ characteristics/ points are asked but an examinee writes more than two features/ characteristics/ points, say, five, of which first is correct, second is incorrect, the first two should be assessed and the remaining should be ignored.

11. It is expected that the Marking Scheme is followed objectively to avoid arbitrary tendency in marking. For instance, if an examinee scores 30 marks, his/ her marks should not be inflated to 33 simply to pass him/ her.
12. Marks should be awarded keeping in view the total marks of that particular question and not the total marks of the question paper. For example, if one mark is given to a question of 3 marks even if nothing is correct, that one mark constitutes 33% of the total marks for this answer.
13. A full scale of marks (1-100) has to be used. Please do not hesitate to award full marks if the answer deserves it. Similarly, wherever an examinee writes an answer upto the mark, his/ her marks should not be deducted unnecessarily.

QUESTION PAPER CODE 66/1/1

EXPECTED ANSWERS/VALUE POINTS

1. Q. 'The management principles can be applied to all types of activities'. Which characteristic of management is highlighted by this statement?
Ans. Management is all pervasive/ universal. **1 mark**
2. Q. Name the process of designing and maintaining an environment in which individuals working in groups, efficiently accomplish selected aims.
Ans. Management **1 mark**
3. Q. What is the main objective of fatigue study?
Ans. The main objective of fatigue study is to determine the amount and frequency of rest intervals in completing a task. **1 mark**
4. Q. Name the function of management which co-ordinates the physical, financial and human resources and establishes productive relations among them for achievement of specific goals.
Ans. Organising function of management **1 mark**
5. Q. State how management principles are flexible.
Ans. Management principles are flexible because these can be modified according to the demand/ needs of the situation. **1 mark**

6. Q. Which function of management ensures that actual activities confirm to planned activities?

Ans. Controlling function of management

1 mark

7. Q. A company wants to establish a new unit in which machinery worth Rs.10 lakhs is involved. Identify the type of decision involved in financial management.

Ans. Investment decision/ Capital budgeting decision

1 mark

8. Q. Name the concept which increases the return on equity shares with a change in the capital structure of the company.

Ans. Trading on equity or financial leverage

1 mark

9. Q. Ahmed wants to buy an iron. As an aware customer, how can he be sure about the quality of iron?

Ans. ISI mark/ Standardisation mark

1 mark

10. Mohit filed a case against 'Domestic Coolings Ltd.' in the District Forum but he was not satisfied with the orders of the District Forum. Where can he appeal further against the decisions of the District Forum?

Ans. State Commission

1 mark

11. Q. Explain how planning provides direction to action.

Ans. Planning provides direction to action –

3 marks

- By clearly defining objectives/ goals
- By stating the action to be taken
- By making the employees aware of how they have to work by giving them the necessary directions for achieving the objectives

(If the student has given the answer in a paragraph form covering the above points, full credit is to be given)

12. Q. What is meant by 'formal organisation'? List any two advantages of formal organisation.

Ans. Formal organisation refers to the organisation structure which is designed by the management to accomplish a particular task.

Advantages: (Any two- No explanation required)

- (a) Easy to fix responsibility
- (b) Avoids duplication of effort

1 mark + 1x2 = 2marks (1+2 = 3marks)

- (c) Unity of command is maintained
- (d) Leads to effective accomplishment of goals
- (e) Provides stability to the organisation

13. Q. To be a successful leader, one must possess some qualities. State any three such qualities of a leader.

Ans. Qualities of a successful leader: (Any three)

- (a) A leader must have required knowledge and competence.
- (b) A leader must possess high level of integrity and honesty.
- (c) A leader must have courage and initiative.
- (d) A leader must be a good communicator.
- (e) A leader must be an effective motivator.
- (f) A leader must have high level of self confidence
- (g) A leader must be decisive in managing the work.
- (h) A leader must be sociable and friendly.
- (i) A leader should be able to empathise i.e. see things from the perspective of the subordinates.
- (j) A leader must have pleasing personality.
- (k) A leader must have vision and foresight.

1 mark for each statement (1x3 = 3marks)

14. Q. Explain any three advantages of labelling.

Ans. Advantages of labelling: (Any three)

1. Describes the product and specifies its contents
2. Identifies the product or brand
3. Helps in grading of products
4. Helps in promotion of products
5. Provides information required by law

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

½ mark for heading + ½ mark for explanation of each (1x3 = 3 marks)

15. Q. Nature of money market can be well explained with the help of its features. State any three such features of money market.

Ans. Features of money market: (Any three):

- (a) The money market is a market for short term securities with a maturity period upto one year.
- (b) It is a market where low risk, unsecured and short term debt instruments are traded.

- (c) It has no physical location, but is an activity conducted over the telephone and through the internet.
- (d) It enables the raising of short-term funds for meeting the temporary shortages of cash as well as the temporary deployment of excess funds for earning returns.
- (e) The major participants in the market are the Reserve Bank of India (RBI), Commercial Banks, Non-Banking Finance Companies, State Governments, Large Corporate Houses, Mutual Funds and financial institutions.
- (f) The main instruments traded in the money market are Treasury-bills, trade bills, commercial paper and certificates of deposit.
- (g) Investment in money market entails huge sums of money as the instruments are quite expensive.
- (h) Money market instruments enjoy a high degree of liquidity.
- (i) The expected rate of return of the money market is generally low as money is invested for a short duration

1 mark for each statement (1x3 = 3 marks)

- 16.** Q. Explain 'objective' and 'policy' as types of plans using suitable examples.

Ans. Objectives: Objectives are the end results which the organisation seeks to achieve.

For example, an organisation may have an objective of increasing sales by 10%. or any other correct example.

Policy: Policies are general guidelines which facilitate achievement of predetermined objectives.

For example, the company may have a policy of recruitment through internal sources. or any other correct example.

1mark for meaning + 1 mark for example= (2+2 = 4 marks)

- 17.** Q. What is required to tackle the uncertainty in respect of availability and timings of funds? Name the concept involved and explain any three points of its importance.

Ans. The concept involved is Financial planning.

Importance of financial planning (any three):

- (i) It aids the company to prepare for the future.
- (ii) It helps in avoiding business shocks and surprises.
- (iii) It serves as a guide in developing a sound capital structure so as to maximise returns to the shareholders.
- (iv) It helps in co-ordinating various business functions.
- (v) Reduces waste, duplication of efforts, gaps in planning and avoids confusion.

- (vi) Financial plan serves as a control technique.
- (vii) It links the present with the future.
- (viii) It provides a link between investment and financing decisions.

1 mark for naming the concept + 1 mark for each point 1x3 = 3 marks (1+3 = 4 marks)

18. Q. Explain the following rights of a consumer:

- (a) Right to safety
- (b) Right to consumer education

Ans. (a) Right to safety:

Right to be protected against goods and services which are hazardous to life and health

Right to get protection against the risks caused due to the use of substandard products or products that do not conform to the safety norms

(b) Right to consumer education:

Right to acquire knowledge and to be a well informed consumer

Be aware about the rights and the reliefs available to him in case of a product or service falling short of his expectations.

2 marks + 2 marks (2+2 = 4 marks)

19. Q. State any four reasons why training is needed in any organisation.

Ans. Reasons why training is needed in any organisation (Any four):

- (a) It leads to systematic imparting of skills.
- (b) It leads to greater productivity.
- (c) It leads to economy in operations.
- (d) It reduces employees' turnover.
- (e) Helps the employees to adopt the new/latest technology
- (f) It reduces accidents and hence ensures safety.

1 mark for each statement 1x4 = 4 marks

20. Q. 'Supervision is not at all required in an organisation'. Do you agree? Give two reasons in support of your answer.

Ans. No, I do not agree with the above statement.

The reasons are: (Any two)

- (a) It involves issuing instructions.
- (b) It helps in facilitating control.
- (c) It helps in optimal utilisation of resources.
- (d) It helps in maintenance of discipline.

- (e) It helps in timely feedback.
- (f) It helps in improving communication.
- (g) It helps in improving motivation.

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

1 mark + ½ mark for naming + 1 ½ mark for explanation (1+3 = 4 marks)

- 21.** Q. Raman is working as a 'Plant Superintendent' in Tifco Ltd. Name the managerial level at which he is working. State any four functions he will perform as the 'Plant Superintendent' in this company.

Ans. He is working at the Middle level. Functions that he will perform as the Plant Superintendent (Any four):

1. Linking the top level and the lower level of management by transmitting orders and instructions downwards and problems and suggestions upwards
2. Implementing the plans and strategies developed by top management
3. Preparing the organisational set up in their departments
4. Co-ordinating the activities of various divisions or units within the same department
5. Ensuring that their department has the necessary personnel
6. Assigning necessary duties and responsibilities to subordinates in their department
7. Motivating the subordinates to achieve desired objectives
8. Co-operating with other departments for smooth functioning of the organisation
9. Issuing detailed instructions to lower level of management

Alternate answer:

Depending upon the nature and size of the organisation, he may be considered as Lower Level Manager. Functions that he would perform as a lower level manager would be: (Any four)

1. To get the work done by the operatives or the workers
2. To pass on instructions of the middle management to the workers
3. To supervise and ensure that the work done is of the required quality and is completed on time
4. To report problems faced and suggestions made by the workers to the middle level management
5. Maintaining proper discipline in the factory
6. To minimise wastage of materials and to maintain safety standards

1 mark for naming the level + 1 mark for each function 1x4 = 4marks (1+4 = 5 marks)

22 Q. Explain the following principles of management

- (a) Scalar chain
- (b) Science not rule of thumb

Ans.

(a) Scalar chain

- Scalar chain may be defined as the chain of superiors and subordinates ranging from the top levels of management down to the lowest level of management.
- This principle suggests that there should be a clear line of authority from the top level to the bottom linking all the managers at all the levels.
- It is regarded as a chain of communication since orders and instructions issued at high levels flow through the intermediate managers before reaching the lower levels.
- In case of emergency or urgent matters, direct communication can be established between two people working at the same level but in different departments with the help of gang plank.

(b) Science, not rule of thumb

- Taylor believed that there was only one best method to maximise efficiency.
- This method can be developed through scientific study and analysis of each element of a job and should substitute 'Rule of Thumb'. This standard method then should be followed throughout the organisation.

2½ marks + 2½ marks (2½ + 2½ = 5marks)

23. Q. Maslow's need (-) hierarchy is considered fundamental to understanding of motivation. Explain the role of need-hierarchy in motivation.

Ans. Maslow's need hierarchy is considered fundamental to understanding of motivation.

People have wide range of needs like physiological needs, safety and security needs, social needs, esteem needs and self actualisation needs which motivate them.

So, the manager must understand the needs & wants of people in order to motivate them to work. A satisfied need can no longer persuade/ motivate a person. Only the next higher level need can motivate a person.

For satisfaction of these needs, managers must offer different incentives (monetary and non-monetary) like: for Physiological Needs: they offer monetary incentives e.g. good salary/ wages and comfortable working conditions.

Safety & security needs: they offer job security, pension, insurance etc.

Social Needs(affiliation/ belonging needs): they encourage team building & permit workers the opportunity to interact socially.

Esteem Needs/ Ego needs: they recognize good performance, provide opportunities for employee to feel a sense of accomplishment, provide important job titles etc.

Self actualization needs: they offer the freedom to take decisions, providing them opportunity to learn things, encouraging creativity etc.

1x5=5 marks

Needs keep on changing, therefore incentives should be tailored according to the changing needs.

(NOTE: DUE CREDIT SHOULD BE GIVEN TO THE EXAMINEES WHO HAVE DEVELOPED THEIR ANSWERS ON THE ABOVE LINES)

Alternate answer

Maslow's need hierarchy is considered fundamental to understanding of motivation and plays an important role in motivation.

- People have wide range of needs like physiological needs, safety and security needs, social needs, esteem needs and self actualisation needs which motivate them to work.
- The manager must understand the needs & wants of people in order to motivate them and improve performance levels.
- For satisfaction of these needs, managers must offer different incentives (monetary and non-monetary).
- Needs keep on changing, therefore incentives should be tailored according to the changing needs.

(NOTE: DUE CREDIT SHOULD BE GIVEN TO THE EXAMINEES WHO HAVE DEVELOPED THEIR ANSWERS ON THE ABOVE LINES)

1x5 = 5 marks

24. Q. Distinguish between 'Capital Market' and 'Money Market' on the following bases:

- (i) Participants
- (ii) Instruments traded
- (iii) Duration of securities traded
- (iv) Expected return
- (v) Safety

Ans. Difference between 'Capital Market' and 'Money Market':

Basis	CAPITAL MARKET	MONEY MARKET
(i) Participants	The participants in the capital market are — financial institutions, banks, public and private companies, foreign investors and ordinary retail investors from the public.	Participation in the money market are financial institutions, RBI, banks, public and private companies. Individual investors although permitted to transact in the secondary money market, do not normally do so.
(ii) Instruments traded	Equity shares, debentures, preference shares, bonds etc.	Treasury-bills, trade bills, commercial paper and certificates of deposit.
(iii) Duration of securities traded	The capital market deals in medium and long term securities which are for more than one year.	Money market deals in short term securities having a maximum tenure of one year.
(iv) Expected return	Higher return	Lower return.
(v) Safety	Riskier both with respect to returns and principal repayment.	Much safer with a minimum risk of default.

**1x5 =
5 marks**

25. Q. Some products have certain unique features. They attract a significant group of buyers. Identify the kind of product and list its features.

Ans. Speciality products are the products which have certain unique features. Features are: (any four- no explanation required)

- The demand for speciality products is limited.
- These products are generally expensive.
- Number of customers is limited.
- Special promotional efforts are required for the sale of such products;
- After sales services are very important for many of these products.

1 mark for the type of product + 1x4 = 4 marks (1+4= 5 marks)

26. Q. What is meant by 'functional structure' of an organisation? Explain any two advantages and any two limitations of this structure.

Ans. Functional structure is an organisational structure formed by grouping of jobs of similar nature under various functional departments.

Advantages are: (any two)

- (a) Leads to occupational specialisation
- (b) Promotes control and coordination
- (c) Increases efficiency
- (d) Low cost
- (e) Makes training easier
- (f) Due attention to different functions

Limitations are: (any two)

- (a) Creation of functional empires
- (b) Problems in coordination
- (c) Inter-departmental conflicts
- (d) Lack of accountability
- (e) Inflexibility
- (f) Restriction in managerial development.

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

2 marks + ½ mark for heading + ½ mark for explanation 1x2 = 2 marks + ½ mark for heading + ½ mark for explanation 1x2 = 2 marks (2+2+2 = 6 marks)

OR

Q. What is meant by 'decentralisation'? Explain any four points which highlight the importance of decentralisation in an organisation.

Ans. Decentralisation refers to systematic delegation of authority through all the levels of management and in all the departments except that which can be exercised only at central points.

Importance of decentralisation: (Any four)

- (i) Develops initiative among subordinates
- (ii) Develops managerial talent for the future
- (iii) Relief to top management
- (iv) Quick decision making
- (v) Facilitates growth
- (vi) Better control

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

2 marks + ½ mark for heading + ½ mark for explanation 1x4 = 4 marks (2+4= 6 marks)

27. Q. 'Filling vacancies from within the organisation has some advantages as well as limitations'. Explain any three such advantages and any three limitations.

Ans. Advantages of internal sources of recruitment: (any three)

- (i) Motivational value
- (ii) Easy selection and placement.
- (iii) No need for induction.
- (iv) Adjustment of surplus employees.
- (v) Economical.
- (vi) Better employer-employee relationship.
- (vii) Training ground
- (viii) Industrial peace due to promotional avenues.

Limitations of internal sources of recruitment: (any three)

- (i) Limited choice
- (ii) Inbreeding/ limited scope for fresh talent
- (iii) Incomplete source
- (iv) Lack of competition
- (v) Lethargy among the employees due to assured promotions.
- (vi) Favouritism and nepotism
- (vii) Chances of conflict
- (viii) Not suitable for a new enterprise.
- (ix) Frequent transfers hit productivity negatively

(If an examinee has not given the headings but has given the correct reasons, full credit should be given)

$\frac{1}{2}$ mark for heading + $\frac{1}{2}$ mark for explanation $1 \times 3 = 3$ marks

$\frac{1}{2}$ mark for heading + $\frac{1}{2}$ mark for explanation $1 \times 3 = 3$ marks (3+3 = 6 marks)

OR

Q. Which function of management helps in obtaining the right people and putting them on right jobs? Explain any five points of importance of this function.

Ans. Staffing function

Importance of Staffing: (any five):

- (i) Obtaining competent personnel
- (ii) Higher performance
- (iii) Continuous survival and growth
- (iv) Optimum utilisation of the human resources
- (v) Improves job satisfaction and morale of employees

(vi) Key to effectiveness of other functions

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

1 mark + ½ mark for heading + ½ mark for explanation 1x5 = 5 marks (1+5 = 6 marks)

28. Q. What is meant by 'Budgetary Control'? State its four advantages.

Ans. Budgetary control is a technique of managerial control in which all operations are planned in advance in the form of budgets and actual results are compared with budgetary standards and the necessary actions taken to ensure attainment of organisational objectives.

Advantages of budgetary control: (any four)

1. Helps in attainment of organisational objectives
2. Source of motivation
3. Helps in optimum utilisation of resources
4. Useful in achieving co-ordination
5. Facilitates management by exception
6. Fixation of responsibility

2 marks + 1 mark for each statement = 1x4 = 4 marks (2+4= 6 marks)

OR

Q. 'Controlling is an indispensable function of management'. Do you agree? Give four reasons in support of your answer.

Ans. Yes, Controlling is an indispensable function of management because it : (any four)

- (i) helps in accomplishing organisational goals.
- (ii) helps in judging accuracy of standards.
- (iii) makes efficient use of resources.
- (iv) improves employee motivation.
- (v) ensures order and discipline.
- (vi) facilitates coordination in action.

(If an examinee has not given the headings but has given the correct reasons, full credit should be given)

½ mark for heading + 1 marks for explanation (1 ½ x 4= 6 marks)

29. Q. Explain any four factors which affect the working capital requirements of a business.

Ans. Factors which affect the working capital requirements of a business are: (any four)

1. Nature of Business.

2. Scale of Operations.
3. Business Cycle.
4. Seasonal Factors.
5. Production Cycle.
6. Credit Allowed.
7. Credit Availed.
8. Operating Efficiency.
9. Availability of Raw Material.
10. Growth Prospects.
11. Level of Competition.
12. Inflation.

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

$\frac{1}{2}$ mark for heading + 1 mark for explanation ($1\frac{1}{2} \times 4 = 6$ marks)

OR

Q. Explain any four factors which affect the capital structure of a company.

Ans. Factors which affect the capital structure of a company are: (any four)

1. Cash Flow Position.
2. Control.
3. Flexibility.
4. Stock Market Conditions.
5. Regulatory Framework.
6. Risk Consideration.
7. Floatation Costs.
8. Interest Coverage Ratio (ICR).
9. Debt Service Coverage Ratio (DSCR).
10. Return on Investment (ROI).
11. Cost of debt.
12. Cost of Equity.
13. Tax Rate.
14. Capital Structure of other Companies.

15. Financial Leverage.

16. Legal Framework

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

$\frac{1}{2}$ mark for heading + 1 mark for explanation ($1\frac{1}{2} \times 4 = 6$ marks)

30. Q. Explain four important elements of marketing mix.

Ans. The marketing mix consists of: (i) Product Mix (ii) Price Mix, (iii) Place Mix, and (iv) Promotion Mix.

1. Product Mix:

Product mix relates to decisions regarding planning, developing and producing the right type of products and services for the consumers.

It includes branding, labelling, trademark and packaging.

2. Price Mix:

Price Mix involves different Pricing Methods, Pricing strategies, Pricing Policies and Price Changes.

3. Place Mix:

Place or Distribution mix includes activities that make firm's products available to the target customers. It consists of all the activities involved in transferring ownership and physical possession of the product to the consumers.

4. Promotion Mix:

Promotion mix consists of all the activities aimed at persuading customers to buy the product through advertising, personal selling, sales promotion and publicity.

**$\frac{1}{2}$ mark for naming + 1 mark for explanation
($1\frac{1}{2} \times 4 = 6$ marks)**

OR

Q. Explain the following functions of marketing:

- (i) Gathering and analysing market information
- (ii) Market planning
- (iii) Product designing and development
- (iv) Customer support services.

Ans.

1. Gathering and Analysing Market Information:

This is necessary to identify the needs of the customers and take various decisions for the successful marketing of the products and services.

2. Marketing Planning:

This involves development of marketing plans like plan for increasing the level of production, promotion of the products, etc to achieve the marketing objectives of the organisation.

3. Product Designing and Development:

Product designing and development helps to make the product attractive to the target customers. A good design can improve performance of a product and also give it a competitive advantage in the market.

4. Customer Support Services:

This includes services like after sales services, handling customer complaints and adjustments, maintenance services, technical services etc.

(1½ x 4 = 6 marks)

QUESTION PAPER CODE 66/1

EXPECTED ANSWERS/VALUE POINTS

1. Q. 'In an organization employees are happy and satisfied, there is no chaos and the effect of management is noticeable.' Which characteristic of management is highlighted by this statement?

Ans: Management is an intangible force. **1 mark**
2. Q. Name the process of working with and through others to effectively achieve organizational objectives by efficiently using its limited resources in the changing environment.

Ans: Management. **1 mark**
3. What is the main objective of 'Method Study'?

Ans: The objective of Method Study is to find out the best way of doing the job. **1 mark**
4. Q. 'Identifying and dividing the work' is the first step in the process of one of the functions of management. Identify the function.

Ans: Organizing function of management. **1 mark**
5. Q. How have the management principles been derived?

Ans: Through observation and experimentation or experience and collective wisdom of managers. **1 mark**
6. Q. Name the function which reviews the operations in a business unit.

Ans: Controlling function. **1 mark**

7. Q. Identify the decision taken in financial management which affects the liquidity as well as the profitability of business.

Ans: Investment decision / working capital decision/ liquidity decision.

1 mark

8. Q. State why the working capital needs for a 'Service Industry' are different from that of a manufacturing industry.

Ans: Service industries require less working capital because usually no processing is involved where as in manufacturing business processing is required for converting raw material into finished products.

1 mark

OR

Service industries require no inventory and manufacturing overheads, hence require less working capital.

9. Q. Rita wants to buy a packet of juice. As an aware customer how can she be sure about the quality of juice she plans to buy?

Ans: FPO mark/ Standardisation mark.

1 mark

10. Q. Amrit filed a case against 'Volvo Ltd' in the 'State Commission'. But he was not satisfied with the orders of the 'State Commission'. Name the authority to which he can appeal against the decisions of 'State Commission'.

Ans: National Commission.

1 mark

11. Explain how planning reduces the risk of uncertainty.

Ans: Planning reduces the risk of uncertainty because

- (i) it enables a manager to look ahead and anticipate changes.
- (ii) it shows the way to deal with changes and uncertain events.
- (iii) changes or events cannot be eliminated but they can be anticipated and managerial responses to them can be developed.

(If a student has given the answer in a paragraph covering the above points, full credit is to be given)

1x3 = 3 marks

12. Q. What is meant by 'informal organization'? List any two limitations of informal organization.

Ans. Informal organisation is a network of personal and social relations not established or required by the formal organisation but arising spontaneously as people associate with one another.

Limitations of informal organisation: (any two with brief explanation)

- (a) Spreads rumours.
- (b) Resistance to change.
- (c) Subordination of organizational interest to group interests.

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

1 mark + 1/2 m for heading + 1/2 m for explanation 1x2= 2marks (1+2= 3marks)

- 13.** Q. There are some barriers in communication which are concerned with encoding and decoding of message. State any three such barriers.

Ans. These are semantic barriers. Three such barriers are: (any three)

1. Badly expressed message: in which the intended meaning may not be conveyed on account of inadequate vocabulary, usage of wrong words, omission of needed words etc.

2. Symbols with different meanings: where a word may have several meanings and the receiver has to perceive one such meaning for the word used by the communicator.

3. Faulty translations: where the communication drafted in one language is not properly translated in a language understandable to workers.

4. Unclear assumptions: where communication may have certain assumptions which are subject to different interpretations.

5. Technical jargon: where the specialists use it to explain something to persons who are not specialists in the concerned field as a result of which it is not understood clearly by the receiver.

6. Body language and gesture decoding: becomes a barrier when there is no match between what is said and what is expressed in body movements.

1x3= 3marks

- 14.** Q. Explain any three merits of 'packaging'.

Ans. Merits of packaging are: (any three)

- (a) Helps in product identification.
- (b) Helps in product protection
- (c) Facilitates use of the product
- (d) Helps in promotion of the product
- (e) Helps in preventing adulteration.
- (f) Helps in product differentiation.
- (g) Increased scope of marketing due to innovative packaging.

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

1/2 mark for heading + 1/2 mark for explanation (1x3= 3marks)

15. Q. Nature of 'capital-market' can be well explained with the help of its features. State any three such features of capital-market.

Ans: Features of capital-market are: (any three)

1. Facilitates arrangement of long term and medium term funds
2. Funds are raised through both – debt and equity i.e. equity shares, shares, bonds, preference shares etc.
3. It includes Primary and Secondary market.
4. The participants are financial institutions, banks, corporate entities, foreign investors and ordinary retail investors.
5. Investment in the capital market does not necessarily require a huge financial outlay.
6. The securities traded here are considered liquid as they are marketable on the Stock Exchanges.
7. The instruments traded here are risky.
8. The returns here are higher.

1 mark for statement of each feature (1x3=3 marks)

16. Q. Explain 'Procedure' and 'Programme' as types of plans, with a suitable example.

Ans:

Procedure: They are routine steps on how to carry out activities. They detail the exact manner in which any work is to be performed. They are specified in a chronological order.

Example:

Procedure for requisitioning supplies before production. OR any other suitable example.

Programme: They are detailed statements about a project which outlines the objectives, policies, procedures, rules etc. to implement any course of action.

Example:

Introduction of a new product in the market OR any other suitable example.

1mark for meaning + 1mark for example of each = (2+2= 4marks)

17. Q. To avoid the problem of shortage and surplus of funds what is required in financial management? Name the concept and explain its any three points of importance.

Ans. Financial planning.

Importance of financial planning (any three):

- (i) It aids the company to prepare for the future.
- (ii) It helps in avoiding business shocks and surprises.
- (iii) It serves as a guide in developing a sound capital structure so as to maximise returns to the shareholders.
- (iv) It helps in co-ordinating various business functions.
- (v) It reduces waste, duplication of efforts, gaps in planning and avoids confusion.
- (vi) It serves as a control technique.
- (vii) It links the present with the future.
- (viii) It provides a link between investment and financing decisions.

1 mark for the concept + 1 mark for explaining each point 1x3= 3 marks (1+3 = 4marks)

18. Q. Explain the following rights of a customer:

- (i) Right to choose
- (ii) Right to be informed.

Ans: Right to choose: The customer has the freedom to choose from a variety of products at competitive prices.

This implies that the marketers should offer a wide variety of products in terms of quality, brand, prices, size etc. and allow the customer to make a choice among these.

Right to be informed: The consumer has a right to have complete information about the product he intends to buy, including its ingredients, date of manufacture, price, quantity, direction for use etc.

It is because of this reason that the legal framework in India requires the manufacturers to provide such information on the package and the label of the product.

2 marks + 2 marks (2+2=4marks)

19. Q. State any four reasons why staffing is needed in an organization.

Ans: Staffing is needed in an organization because of the following reasons (any four):

1. It is needed to discover and obtain competent personnel for various jobs.
2. It results in improved performance by putting right person on the right job.
3. It ensures continuous survival and growth of the enterprises through the succession planning for managers.
4. It is needed to ensure optimum utilization of human resources. It avoids disruption of work by indicating in advance the shortage of personnel.
5. It improves job satisfaction and morale of employees through objective assessment and fair reward for their contribution.

6. It avoids wastage of material, time, effort and energy.
7. It is needed because of rapid advancement of technology.
8. It is required because of increasing size of the organisation.
9. It is required because of complicated behaviour of human beings.

1 mark for each statement =(1x4 =4marks)

- 20.** Q. 'It is only motivation through which the managers can inspire their subordinates to give their best to the organization.' In the light of this statement explain any four points of importance of motivation.

Ans: It is only motivation through which managers can inspire their subordinates to give their best to organization because motivation (any four)

1. helps to improve performance level of employees.
2. helps to change negative attitudes of employees to positive attitudes.
3. helps to reduce the employee turnover.
4. helps to reduce absenteeism in the organization.
5. helps managers to introduce new changes without much resistance.
6. helps in creating a supportive work environment.

(if an examinee has not given the headings but has given the correct explanation, full credit should be given)

½ mark for heading + ½ mark for explanation (1x4= 4 marks)

- 21.** Q. Dheeraj is working as 'Operations Manager' in TIFCO Ltd. Name the managerial level at which he is working. State any four functions he will perform as an Operations Manager in this company.

Ans: Middle level management

Functions of Middle level management (any four)

1. Linking the top level and the lower level of management by transmitting orders and instructions downwards and problems and suggestions upwards.
2. Implementing the plans and strategies developed by top management.
3. Preparing the organisational set up in their departments.
4. Co-ordinating the activities of various sub-units within the same department.
5. Ensuring that their department has the necessary personnel.
6. Assigning necessary duties and responsibilities to subordinates in their department.
7. Motivating the subordinates to achieve desired objectives.
8. Co-operating with other departments for smooth functioning of the organization.
9. Issuing detailed instructions to lower level of management.

1 mark for naming the level + 1 mark for each function 1x4=4 m (1+4= 5marks)

22. Q. Explain the following principles in management:

- (a) Discipline
- (b) Harmony, not discord

Ans: Discipline: It is the obedience to organizational rules and employment agreement which are necessary for the working of the organization. According to Fayol, discipline requires good superiors at all levels, clear and fair agreement and judicious application of penalties.

Harmony, not discord: According to Taylor, there should not be any conflict between owners and workers. He emphasized that there should be complete harmony between managers and workers. Both should realize that each one is important to achieve the objectives.

(2 ½ x 2= 5marks)

23. Q. To satisfy the social and psychological needs which type of incentives are needed? Explain any four types of such incentives.

Ans: Incentives to satisfy the social and psychological needs of the people are Non financial incentives:

Types of non-financial incentives:(any four)

1. Organizational climate.
2. Career advancement opportunities.
3. Job enrichment.
4. Employee recognition programmes.
5. Employee participation.
6. Job security.
7. Employee empowerment.
8. Status.

1 mark for identifying the incentive + 1/2 for naming the incentive + ½ for explanation 1x4=4 marks (1+4=5 marks)

24. Q. Distinguish between National Stock Exchange of India and Over The Counter Exchange of India on the following basis:

- (1) Year of establishment.
- (2) Paid up capital
- (3) Securities traded.
- (4) Duration of settlement
- (5) Objective

Ans:

Basis of difference	NSE	OTCEI
Year of establishment	1992	1990
Paid up capital	Not more than 3 crores	Not more than 30 lakhs
Securities traded.	Both capital and money market securities i.e. equity shares, debentures, T-bills, PSU bonds etc.	Only capital market securities i.e. equity shares, debentures etc.
Duration of settlement	15 days	7 days
Objective	Nationwide, ringless, transparent trading facility.	Serves as an exchange for small companies securities.

(1x5=
5 marks)

25. Q. "Price of product is influenced by many factors". Explain any five factors influencing pricing.

Ans: Price is influenced by the following factors (any five with brief explanation)

1. Product cost
2. Utility and Demand
3. Extent of competition in the market
4. Govt. and legal regulations
5. Pricing objectives
6. Marketing methods used
7. Prices of substitutes
8. Prices of complementary products

(if an examinee has not given the headings but has explained the correct reasons, full credit should be given)

½ mark for heading + ½ mark for explanation (1x5= 5 marks)

26. Q. What is meant by divisional structure of an organization? Explain any two advantages and any two limitations of this structure.

Ans: Divisional structure is an organisation structure comprising of separate business units or divisions. Generally, divisional structure is created on the basis of different products, geographical area, customer group etc.

Advantages of Divisional structure: (any two)

1. Product specialization.

2. Helps in fixation of responsibility.
3. Promotes flexibility.
4. Facilitates expansion and growth.

Disadvantages: (any two)

1. Conflicts may arise among different divisions
2. It may increase the cost of operations.
3. Organizational interest may be ignored by different divisional heads.
4. The organization structure becomes complex.

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

2 marks for meaning + (1/2 mark for heading + 1/2 mark for explanation) = 1x2=2 marks
(1/2 mark for heading + 1/2 mark for explanation) = 1x2=2 marks (2+2+2=6marks)

OR

What is meant by 'Delegation'? Explain any four points which highlight the importance of delegation in an organization.

Ans: Delegation is entrustment of responsibility and authority to another and the creation of accountability for performance..

Importance of delegation: (any four)

1. Effective management
2. Employee development
3. Motivation of employees
4. Facilitation of growth
5. Basis of management hierarchy
6. Better coordination.

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

2 marks for meaning + 1/2 mark for heading + 1/2 mark for explanation 1x4=4 marks) (2+4=6 marks)

- 27. Q. Which source of recruitment is needed to bring new blood in the organization? Explain any three advantages and any two limitations of this source.**

Ans: External source of recruitment is required.

Advantages of external sources: (any three)

1. Qualified personnel
2. Wider choice

3. Fresh talent
4. Competitive spirit

Limitations of external sources: (any two)

1. Dissatisfaction among existing staff
2. Lengthy process
3. Costly process

(If an examinee has not given the headings but has given the correct reasons, full credit should be given)

1 mark for identifying the source + (1/2 mark for heading + 1/2 mark for explanation of each advantage) = 1x3=3m + 1/2 mark for heading + 1/2 mark for explanation of each disadvantage 1x2=2m (1+3+2=6)

OR

‘Training is beneficial both for the organization as well as for the employees’. Explain any three benefits of training towards the organization and any three towards the employees.

Ans: Benefits of training for the organization: (any three)

- (a) It leads to systematic imparting of skills.
- (b) It leads to greater productivity.
- (c) It leads to economy in operations.
- (d) It reduces employees’ turnover.
- (e) It helps the employees to adopt the new/latest technology.

Benefits to the employees: (any three)

- (a) Improved skills and knowledge leading to better career.
- (b) Enhances the earning capacity.
- (c) Increases efficiency.
- (d) Reduces accidents.
- (e) Increases the satisfaction and morale of employees.
- (f) Provides better employment opportunities
- (g) Helps in mobility of people.

(If an examinee has not given the headings but has given the correct reasons, full credit should be given)

**(1/2 mark for heading + 1/2 mark for explanation) = 1x3=3m +
(1/2 mark for heading + 1/2 mark for explanation) = 1x3=3m (3+3=6 marks)**

28. Q. What is meant by ‘Budgetary Control’? State its four advantages.

Ans. Budgetary control is a technique of managerial control in which all operations are planned in advance in the form of budgets and actual results are compared with

budgetary standards and the necessary actions taken to ensure attainment of organizational objectives.

Advantages of budgetary control: (any four)

1. Helps in attainment of organizational objectives.
2. Source of motivation
3. Helps in optimum utilisation of resources
4. Useful in achieving co-ordination
5. Facilitates management by exception
6. Fixation of responsibility

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

2marks for the meaning + (1/2 mark for heading + 1/2 mark for explanation) 1x4= 4marks (2+4= 6marks)

OR

Q. 'Controlling is a systematic process involving a series of steps'. Explain.

Ans. Process of controlling:

- | | |
|--|---------------------|
| 1. Setting performance standards | ...1 mark |
| 2. Measurement of actual performance | ...1 mark |
| 3. Comparison of actual performance with standards | ...2 marks |
| 4. Analyzing deviations | ...1 mark |
| 5. Taking corrective action. | (1+1+1+2+1=6 marks) |

(If the sequence of steps has not been followed, 1 mark is to be deducted)

29. Q. Explain any four factors which affect the fixed capital requirement of a business.

Ans: Factors affecting fixed capital requirements of business: (any four)

- | | |
|-----------------------------|---------------------------|
| 1. Nature of business | 2. Scale of operations |
| 3. Choice of techniques | 4. Growth prospectus |
| 5. Technology upgradations. | 6. Diversification |
| 7. Financing alternatives | 8. Level of collaboration |

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

(1/2 mark for heading + 1 mark for explanation) =(1 1/2 x4 =6marks)

OR

Q. Explain any four factors which affect the capital structure of a company.

Ans: Factors affecting capital structure: (any four)

- | | |
|--------------------------------|----------------------------|
| a. Cash flow position | b. Interest coverage ratio |
| c. Debt service coverage ratio | d. Return on investment |
| e. Cost of debt | f. Tax rate |
| g. Cost of equity | h. Floatation costs |
| i. Risk consideration | j. Flexibility |
| k. Control | l. Stock market conditions |
| m. Financial leverage | n. Legal framework. |

(if an examinee has not given the headings but has given the correct reasons, full credit should be given)

$\frac{1}{2}$ mark for heading + 1 mark for explanation ($1\frac{1}{2} \times 4 = 6$ marks)

- 30.** Q. “Advertising” and “Personal Selling” both are communication tools used by the marketers to promote their products. Yet they differ in their approach. Differentiate between the two by giving any six differences.

Ans: Difference between ‘Advertising’ and ‘Personal Selling’: (any six)

S. No.	Point of Difference	Advertising	Personal Selling
1.	Form	It is a impersonal form of communication	It is a personal form of communication
2.	Message	It transmits standardized form of message.	Sales talk is adjusted keeping in view customer’s background and needs
3.	Flexibility	It is inflexible	Flexible
4.	Reach	Reaches masses	Limited people
5.	Cost	Cost per person is very low	High
6.	Time	Can cover market in short time	Time consuming
7.	Media	Use of mass media	Sales staff is used
8.	Feedback	Lacks direct feedback	Provides direct and immediate feedback
9.	Role	More useful in creating and building interest of consumers in the firm’s product	It plays important role at the awareness stage of the decision making

(1 x 6 = 6 marks)

10.	Suitability	More useful in marketing to the ultimate consumers who are large in number	More helpful in selling products to the industrial buyers, intermediaries who are relatively few in number
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OR

Q. The aim of 'Marketing' and 'Selling' is to maximize profit. Yet they differ in their approach. Differentiate between the two by giving any six differences.

Ans. Following are the differences between marketing and selling: (any six)

Basis	Marketing	Selling
Meaning	Marketing means determining the requirements of the customers and supplying products which meet their requirements.	Selling is transfer of goods and services from the producers to the consumers.
Objective/ aim	Aims at maximizing of <u>customer satisfaction</u> as a route to profit maximisation.	Selling aims at <u>maximising profits</u> through sales volume
Process	It is a process by which people satisfy their needs and wants by obtaining products in exchange for money.	It is a process by which sellers aims at maximising profits by selling products in exchange for money.
Focus	Marketing focuses on achieving maximum <u>satisfaction of the customer's needs</u> and wants.	Selling focuses on affecting <u>transfer of title</u> and possession of goods from sellers to consumers or users.
Scope	Marketing has a wider scope. Includes not only selling but other activities like advertising, market research, product planning etc.	Selling has a narrower scope- it is a part of marketing and is limited to transferring possession and ownership of goods from the seller to the buyer.
Start and end of activities	Marketing begins before production and continues even after the sale has taken place.	Selling begins after production and ends with the sale of goods.

(1 x 6 = 6 marks)

Orientation	Marketing is customer oriented/ external oriented as it emphasizes creation and maintenance of demand.	Selling is internal oriented as it presupposes existing of demand.
Emphasis	In marketing, the attempt is to develop the product and other strategies as per the customer needs.	In selling, the emphasis is on bending the customer according to the product.
Difference in the Strategies	Marketing uses integrated marketing efforts involving strategies in respect of product, promotion, pricing and physical distribution.	Selling involves efforts like promotion and persuasion i.e. seller uses sales efforts to offload what he has on to the buyer.

ACCOUNTANCY

Time allowed : 3 hours

Maximum Marks : 80

General Instructions:

- (i) This question paper contains three parts A, B and C.
- (ii) Part A is Compulsory for all candidates.
- (iii) Candidates can attempt only one part of the remaining parts B and C.
- (iv) All parts of the questions should be attempted at one place.

QUESTION PAPER CODE 67/1/1

Part A

(Not for Profit Organisations, Partnership Firms and Company Accounts)

1. Give two main sources of income of a 'Not for Profit Organisations' 1
2. "A and B are partners in a firm without a partnership deed. A is an active partner and claims a salary of Rs. 18,000 per month. State with reasons whether the claim is valid or not. 1
3. Define gaining ratio. 1
4. State any two occasions when reconstitution of a partnership firm takes place. 1
5. Give the meaning of 'Calls in Arrears'. 1
6. On the basis of the information given below calculate the amount of Stationery to be debited to the 'Income and Expenditure Account' of Good Health Sports Club for the year ended 31 st March 2007 :

	1.4.2006	31.3.2007
	Rs.	Rs.
Stock of Stationery	8,000	6,000
Creditors for Stationery,	9,000	11,000

- Stationery purchased during the year ended 31.3.2007 was Rs. 47,000. 3
7. PS Ltd forfeited 500 equity shares of Rs. 100 each for the non-payment of first call of Rs. 30 per share. The final call of Rs. 10 per share was not yet made. The forfeited shares were re-issued for Rs. 65,000 fully paid up. Pass necessary journal entries in the books of the company. 3
8. X Ltd. purchased machinery for Rs. 5,50,000 from Y Ltd. Rs. 55,000 were paid by X Ltd. in cash and the balance was paid by issue of 9% debentures of Rs. 1,000 each at 10% premium redeemable after three years. Pass necessary journal entries in the books of the company. 3
9. Ravi and Mohan were partners in a firm sharing profits in the ratio of 7:5. Their respective fixed capitals were Ravi Rs. 10,00,000 and Mohan Rs. 7,00,000. The partnership deed provided for the following:
- (i) Interest on Capital @ 12% p.a.
 - (ii) Ravi's salary Rs. 6,000 per month and Mohan's salary Rs. 60,000 per year.
- The profit for the year ended 31.3.2007 was Rs. 5,04,000 which was distributed equally, without providing for the above. Pass an adjustment entry. 4
10. A, Band C were partners in a firm sharing profits in 3:2:1 ratio. The firm closes its books on 31st March every year. B died on 12.6.2007. On B's death the goodwill of the firm was valued at Rs. 60,000. On B's death his share in the profits of the firm till the time of his death was to be calculated on the basis of previous year's profit which was Rs. 1,50,000. Calculate B's share in the profit of the firm. Pass necessary journal entries for the treatment of goodwill and B's share of profit at the time of his death. 4
11. S Ltd. was registered with an authorised capital of Rs. 4,00,000 divided into 40,000 equity shares of Rs. 10 each. The company offered to the public for subscription 30,000 equity shares. Applications for 28,000 equity shares were received and allotment was made to all the applicants. All calls were made and were duly received except the final call of Rs. 2 per share on 200 shares. Prepare the Balance Sheet of the company showing the different categories of Share Capital. 4

12. Following is the Receipt and Payment Account of Literacy Club for the year ended 31.3.2006 :

Receipts	Amount Rs.	Payment	Amount Rs.
Balance b/d	19,550	Salary	3,000
Subscriptions:		Newspaper	2,050
2004-2005 1,200		Electricity bill	1,000
2005-2006 26,500		Fixed deposit	20,000
2006-2007 <u>500</u>	28,200	(on 1.7.2005 @ 9% p.a.)	
Sale-of old newspapers	1,250	Books	10,600
Government Grants	10,000	Rent	6,800
Sale of old furniture		Furniture	10,500
(Book value Rs. 7,000)	5,700	Balance c/d	11,200
Interest on fixed deposits	450		
	65,150		65,150

Additional Information:

- (i) Subscriptions outstanding as on 31.3.2005 were Rs. 2,000 and on 31.3.2006 Rs. 2,500.
- (ii) On 31.3.2006 salary outstanding was Rs. 600 and rent outstanding was Rs. 1,200.
- (iii) The Club owned furniture Rs. 15,000 and books Rs. 7,000 on 1.4.2005.

Prepare Income and Expenditure Account of the Club for the year ended 31.3.2006 and ascertain 'Capital Fund' on 31.3.2005.

6

13. A and B were partners in a firm sharing profits and losses in the ratio of 5:3. They admitted C as a new partner. A surrendered 1/3rd of his share in favour of C and B surrendered 1/4th of his share in favour of C. C brought Rs. 1,50,000 for his capital and Rs. 58,000 for his share of goodwill. Calculate new profit sharing ratio of A, B and C, sacrificing ratio of A and B and pass necessary journal entries for the above transactions on C's admission.

6

14. Pass necessary journal entries for the following transactions:

- (i) Issued 60,000, 9% debentures of Rs. 75 each at a premium of Rs. 25 per debenture.
- (ii) Purchased 3,000, 9% own debentures of Rs. 100 each at Rs. 97 each for immediate cancellation.
- (iii) Converted 1,800, 9% debenture of Rs. 100 each into 12% debentures of Rs. 100 each issued at a premium of 25%.

6

15. X and Y were partners in a firm sharing profits in 5:3 ratio. They admitted Z as a new partner for 1/3rd share in the profits. Z was to contribute Rs. 20,000 as his capital. The Balance Sheet of X and Y on 1.4.2007 the date of Z's admission was as follows :

Liabilities	Amount Rs.	Assets	Amount Rs.
Creditors	27,000	Land and Building	25,000
Capital:		plant and Machinery	30,000
X 50,000		Stock	15,000
Y 35,000	85,000	Debtors 20,000	
General Reserve	16,000	Less Provision	
		for doubtful debts 1,500	18,500
		Investments	20,000
		Cash	19,500
	1,28,000		1,28,000

Other terms agreed upon were:

- (i) Goodwill of the firm was valued at Rs. 12,000.
- (ii) Land and Building were to be valued at Rs. 35,000 and Plant and Machinery at Rs. 25,000
- (iii) The provision for doubtful debts was found to be in excess by Rs. 400.
- (iv) A liability for Rs. 1,000 included in sundry creditors was not likely to arise.
- (v) The capitals of the partners be adjusted on the basis of Z's contribution of capital in the firm.

(vi) Excess or shortfall if any to be transferred to current accounts.

8

Prepare Revaluation Account, Partner's Capital Accounts and the Balance Sheet of the new firm.

OR

The Balance Sheet of A, Band C who were sharing profits and losses in the ratio of 1/2, 1/3 and 1/6 respectively, was as follows on 1.4.2004 :

Liabilities'	Amount Rs.	Assets	Amount Rs.
Bills Payable	6,400	Cash	25,650
Sundry Creditors	12,500	Bills Receivables	5,400
Capitals:		Debtors	17,800
A 40,000		Stock	22,300
B 25,000		Furniture	3,500
C <u>20,000</u>	85,000	Plant and Machinery	9,750
Profit and Loss A/c	4,500	Building	24,000
	1,08,400		1,08,400

A retired from the business on 1.4.2004 and his share in the firm was to be ascertained on the revaluation of the assets as follows:

Stock Rs. 20,000; Furniture Rs. 3,000; Plant and Machinery Rs. 9,000; Building Rs. 20,000; Rs. 850 was to be provided for doubtful debts. The goodwill of the firm was valued at Rs. 6,000.

A was to be paid Rs. 11 ,500 in cash on retirement and the balance in three equal yearly instalments with interest at 9% per annum.

Prepare Revaluation Account, Partner's Capital Accounts and A's Loan Account on the date of his retirement.

- 16.** X Ltd. invited applications for issuing 80,000 equity shares of Rs. 10 each at a premium of Rs. 2 per share. The amount was payable as follows:

On application Rs. 6 (including premium) per share.

On allotment Rs. 3 per share and the balance on first and final call. Applications for 90,000 shares were received. Applications for 5,000 shares were rejected and pro-rata allotment was made to the remaining applicants. Over payments received on application was adjusted towards sums due on allotment. All calls were made and were duly received except the allotment and final call on 1,600 shares allotted to Vijay. These shares were forfeited and the forfeited shares were re-issued for Rs. 18,400 fully paid up.

Pass necessary journal entries in the books of the company.

8

OR

Y Ltd. invited applications for issuing 10,000 equity shares of Rs. 100 each at a discount of 6%. The amount was payable as follows:

On application Rs. 20 per share.

On allotment Rs. 44 per share and the balance on first and final call.

Applications for 13,000 shares were received. Applications for 500 shares were rejected and pro-rata allotment was made to the remaining applicants. Over payments received with applications were adjusted towards sums due on allotment. All calls were made and were duly received except Kanwar who had applied for 250 shares failed to pay allotment and call money. His shares were forfeited. The forfeited shares were re-issued at Rs. 22,000 fully paid up.

Pass necessary journal entries in the books of the company.

Part B

(Analysis of Financial Statements)

- | | | |
|-----|---|---|
| 17. | Quick ratio of a company is 1.5:1. State giving reason whether the ratio will improve, decline or not change on payment of dividend by the company. | 1 |
| 18. | State whether conversion of debentures into equity shares by a financing company will result in inflow, outflow or no flow of cash. | 1 |
| 19. | Dividend paid by a finance company is classified under which kind of activity while preparing cash flow statement. | 1 |
| 20. | List the major headings on the asset side of the Balance Sheet of a company as per schedule VI Part I of the Companies Act 1956. | 3 |

21. From the following information prepare a comparative Income Statement:

	2006 Rs.	2007 Rs.
Sales	6,00,000	8,00,000
Cost of Goods Sold	4,50,000	4,80,000
Indirect Expenses	10% of Gross Profit	20% of Gross Profit
Income Tax	40%	40%

4

22. From the following information calculate any two of the following ratios:

- (i) Gross Profit Ratio;
- (ii) Working Capital Turnover Ratio and
- (iii) Proprietary Ratio.

Information:

Paid up capital	Rs. 8,00,000
Current assets	Rs. 5,00,000
Credit sales	Rs. 3,00,000
Cash sales	75% of Credit sales
9% Debentures	Rs. 3,40,000
Current liabilities	Rs. 2,90,000, and
Cost of goods sold	Rs. 6,80,000

4

23. From the following Balance Sheet of X Y Ltd. as on 31.3.2006 and 31.3.2007 prepare a Cash Flow Statement:

Liabilities	2006 Rs.	2007 Rs.	Assets	2006 Rs.	2007 Rs.
Equity Share Capital	4,00,000	7,50,000	Fixed Assets	5,00,000	7,00,000
Profit and Loss	1,70,000	1,20,000	Stock	2,10,000	2,50,000
10% Debentures	2,00,000	1,80,000	Debtors	1,40,000	1,90,000

8% Pref. Shares	60,000	1,00,000	Bank	50,000	60,000
Gen. Reserve	70,000	50,000			
	9,00,000	12,00,000		9,00,000	12,00,000

Additional Information: During the year machine costing Rs. 80,000 was sold for Rs. 50,000. Dividend paid Rs. 80,000.

6

Part C Computerised Accounting)

24. List any four basic requirements of a Computerised Accounting System. 2
25. Explain the concept of DDL (Data Definition Language). 2
26. Differentiate between Database and File. 2
27. Compare the features of Computerised Accounting System with a Manual Accounting System. 3
28. What are the advantages of DBMS? 4
29. Write the formulae for a spread sheet to compute the depreciation and written down value of assets. The following are the rates of depreciation:

Plant and Machinery: 10%, Computers: 30%, Furniture: 15%, Motor vehicles: 25%. Round off calculations to the nearest Rupee. .

Asset	Opening values Rs.	Depreciation Rs.	Written down value Rs.
Plant & machinery	4,12,000		
Computers	6,15,000		
Furniture and fittings	81,000.		
Motor vehicles	3,08,000		

3+4=7

QUESTION PAPER CODE 67/1

Part A

(Not for Profit Organisations, Partnership Firms and Company Accounts)

1. Distinguish between Income and Expenditure Account and Receipt and Payment Account on the basis of nature of items recorded therein. 1
2. Ram and Mohan are partners in a firm without any partnership deed. Their capitals are Ram Rs. 8,00,000 and Mohan Rs. 6,00,000. Ram is an active partner and looks after the business. Ram wants that profit should be shared in proportion of capitals. State with reason whether his claim is valid or not. 1
3. **Define goodwill** 1
4. State any two reasons for the preparation of 'Revaluation Account' on the admission of a partner. 1
5. Give the meaning of 'minimum subscription'. 1
6. Calculate the amount of sports material to be debited to the Income and Expenditure Account of Capital Sports Club for the year ended 31.3.2007 on the basis of the following information:

	1.4.2006 Rs.	31.3.2007 Rs.
Stock of sports material	7,500	6,400
Creditors for sports material	2,000	2,600

- Amount paid for sports material during the year was Rs. 19,000. 3
7. Samta Ltd. forfeited 800 equity shares of Rs. 100 each for the non-payment of first call of Rs. 30 per share. The final - call of Rs. 20 per share was not yet made. Out of the forfeited shares 400 were re-issued at the rate of Rs. 105 per share fully paid up.

Pass necessary journal entries in the books of Samta Ltd. for the above transactions. 3
 8. Deepak Ltd. purchased furniture Rs. 2,20,000 from M/s Furniture Mart. 50% of the amount was paid to Furniture Mart by accepting a bill of exchange and for the balance the company issued 9% debentures of Rs. 100 each at a premium of 10% in favour of Furniture Mart.

Pass necessary journal entries in the books of Deepak Ltd. for the above transactions. 3

9. Kumar and Raja were partners in a firm sharing profits in the ratio of 7 : 3. Their fixed capitals were: Kumar Rs. 9,00,000 and Raja Rs. 4,00,000. The partnership deed provided for the following but the profit for the year was distributed without providing for: .

- (i) interest on capital @ 9% per annum.
- (ii) Kumar's salary Rs. 50,000 per year and Raja's salary Rs. 3,000 per month.

The profit for the year ended 31.3.2007 was Rs. 2,78,000. Pass the adjustment entry.

4

10. P, Q and R were partners in a firm sharing profits in 2 : 2, : 1 ratio. The firm closes its books on 31 March every year. P died three months after the last accounts were prepared. On that date the goodwill of the firm' was valued at Rs. 90,000. On the death of a partner his share of profit in the year of death was to be calculated on the basis of the average profits of the last four years. The profits of last four years were:

Year ended 31.3.2007	Rs. 2,00,000
Year ended 31.3.2006	Rs. 1,80,000
Year ended. 31.3.2005	Rs. 2,10,000
Year ended 31.3.2004	Rs. 1,70,000 (Loss)

Pass necessary journal entries for the treatment of goodwill and P's share of 'profit on his death. Show clearly the calculation of P's share of profit.

4

11. Sagar Ltd. was registered with an authorised capital of Rs. 1,00,00,000 divided into 1,00,000 equity shares of Rs. 100 each. The company offered for public subscription 60,000 equity shares. Applications for 56,000 shares were received and allotment was made to all the applicants. All the calls were made and were duly received except the second and final call of Rs. 20 per share on 700 shares. Prepare the Balance Sheet of the company showing the different types of share capital.

4

12. Following is the Receipt and Payment Account of Indian Sports Club for the year ended 31.12.2006 :

Receipts	Amount Rs.	Payments	Amount Rs.
Balance b/d	10,000	Salary	15,000
Subscriptions	52,000	Billiards Table	20,000

Entrance Fee	5,000	Office Expenses	6,000
Tournament Fund	26,000	Tournament Expenses	31,000
Sale of old newspapers	1,000	Sports Equipment	40,000
Legacy	37,000	Balance c/d	19,000
	1,31,000		1,31,000

Other Information:

On 31.12.2006 subscription outstanding was Rs. 2,000 and on 31.12.2005 subscription outstanding was Rs. 3,000. Salary outstanding on 31.12.2006 was Rs. 1,500.

On 1.1.2006 the club 'had building Rs. 75,000, furniture Rs. 18,000, 12% investment Rs. 30,000 and sports equipment Rs. 30,000. Depreciation charged on these' items including purchases was 10%.

Prepare Income and Expenditure Account of the Club for the year ended 31.12.2006 and ascertain the Capital Fund on 31.12.2005.

6

- 13.** K and Y were partners in a firm sharing profits in 3 : 2 ratio. They admitted Z as a new partner for 1/3rd share in the profits of the firm. Z acquired his share from K and Y in 2 : 3 ratio. Z brought Rs. 80,000 for his capital' and Rs. 30,000 for his 1/3rd share as premium. Calculate the new profit sharing ratio of K, Y and Z and pass necessary journal entries for the above transactions in the books of the firm.

6

- 14.** Pass necessary journal entries in the books of Varun Ltd. for the following transactions:

6

- Issued 58,000, 9% debentures of Rs. 1,000 each at a premium of 10%.
- Converted 350, 9% debentures of Rs. 100 each into equity shares of Rs. 10 each issued at a premium of 25%.
- Redeemed 450, 9% debentures of Rs. 100 each by draw of lots.

- 15.** R, Sand T were partners in a firm sharing profits in 2 : 2 : 1 ratio. On 1.4.2004 their Balance Sheet was as follows:

Liabilities	Amount Rs.	Assets	Amount Rs.
Bank Loan	12,800	Cash	51,300
Sundry Creditors	25,000	Bills Receivable	10,800
Capitals:		Debtors	35,600
R 80,000		Stock	44,600
S 50,000		Furniture	7,000
T <u>40,000</u>	1,70,000	Plant and Machinery	19,500
Profit and Loss A/c	9,000	Building	48,000
	2,16,800		2,16,800

S retired from the firm on 1.4.2004 and his share was ascertained on the revaluation of assets as follows:

Stock Rs. 40,000; Furniture Rs. 6,000; Plant and Machinery Rs. 18,000; Building Rs. 40,000; Rs. 1,700 were to be provided for doubtful debts. The goodwill of the firm was valued at Rs. 12,000.

S was to be paid Rs. 18,080 in cash on retirement and the balance in three equal yearly instalments.

Prepare Revaluation Account, Partner's Capital Accounts, S's Loan Account and Balance Sheet on 1.4.2004.

8

OR

D and E were partners in a firm sharing profits in 3 : 1 ratio. On 1.4.2007 they admitted F as a new partner for 1/4th share in the firm which he acquired from D. Their Balance Sheet on that date was as follows:

Liabilities	Amount Rs.	Assets	Amount Rs.
Creditors	54,000	Land and Building	50,000
Capitals:		Machinery	60,000
D 1,00,000		Stock	15,000
E <u>70,000</u>	1,70,000	Debtors 40,000	
General Reserve	32,000	Less provision for bad debts 3,000	37,000
		Investments	50,000
		Cash	44,000
	2,56,000		2,56,000

F will bring Rs. 40,000 as his capital and the other terms agreed upon were:

- (i) Goodwill of the firm was valued at Rs. 24,000.
- (ii) Land and Building were valued at Rs. 70,000.
- (iii) Provision for bad debts was found to be in excess by Rs. 800.
- (iv) A liability for Rs. 2,000 included in sundry creditors was not likely to arise.
- (v) The capital of the partners be adjusted on the basis of F's contribution of capital to the firm.
- (vi) Excess or shortfall, if any, to be transferred to current accounts.

Prepare Revaluation Account, Partner's Capital Accounts and the Balance Sheet of the new firm.

16. Janata Ltd. invited applications for issuing 70,000 equity shares of Rs. 10 each at a premium of Rs. .2 per share. The amount was payable as follows:

On application	Rs. 4 per share (including premium)
On allotment	Rs. 3 per share
On first and final call —	Balance.

Applications for 1,00,000 shares were received. Applications for 10,000 shares were rejected. Shares were allotted to the remaining applicants on pro-rata basis. Excess money received with applications were adjusted towards sums due on allotment. All calls were made and were duly received except first and final call on 700 shares allotted to Kanwar. His shares were forfeited. The forfeited shares were re-issued for Rs. 77,000 fully paid up.

Pass necessary journal entries in the books of the company for the above transactions.

8

OR

Shubham Ltd. invited applications for the allotment of 80,000 equity shares of Rs. 10 each at a discount of 10%. The amount was payable as follows:

On application	Rs. 2 per share
On allotment	Rs. 3 per share
On first and final call —	Balance.

Applications for 1,10,000 shares were received. Applications for 10,000 shares were rejected. Shares were allotted on pro-rata basis to the remaining applicants. Excess application money received on application was adjusted towards sums

due on allotment. All calls were made and were duly received. Manoj who had applied for 2000 shares failed to pay the allotment and first and final call. His shares were forfeited. The forfeited shares were re-issued for Rs. 24,000 fully paid up.

Pass necessary journal entries in the books of the company for the above transactions.

PART B
(Analysis of Financial Statements)

- | | | |
|------------|---|---|
| 17. | The stock turnover ratio of a company is 3 times. State, giving reason, whether the ratio improves, declines or does not change because of increase in the value of closing stock by Rs. 5,000. | 1 |
| 18. | State whether the payment of cash to creditors will result in inflow, outflow or no flow of cash. | 1 |
| 19. | Dividend paid by a manufacturing company is classified under which kind of activity while preparing cash flow statement ? | 1 |
| 20. | Show the major headings on the liabilities side of the Balance Sheet of a company as per Schedule VI Part I of the Companies Act, 1956. | 3 |
| 21. | From the following information prepare a Comparative Income Statement of Victor Ltd : | 4 |

	2006 Rs.	2007 Rs.
Sales	15,00,000	18,00,000
Cost of goods sold	11,00,000	14,00,000
Indirect Expenses	20% of Gross Profit	25% of Gross Profit
Income Tax	50%	50%

- | | | |
|------------|--|---|
| 22. | From the following information calculate any two of the following ratios: | 4 |
| | (i) Net Profit Ratio | |
| | (ii) Debt-Equity Ratio | |
| | (iii) Quick Ratio | |

Information:

	Rs.
Paid up Capital	20,00,000
Capital Reserve	2,00,000
9% Debentures	8,00,000
Net Sales	14,00,000
Gross Profit	8,00,000
Indirect Expenses	2,00,000
Current Assets	4,00,000
Current Liabilities	3,00,000
Opening Stock	50,000

Closing Stock — 20% more than opening stock.

23. From the following Balance Sheets of Som Ltd. as on 31.3.2006 and 31.3.2007 prepare a Cash Flow Statement:

6

Liabilities	2006 Amount Rs.	2007 Amount Rs.	Assets	2006 Amount Rs.	2007 Amount Rs.
Equity Share Capital	2,00,000	5,00,000	Fixed Assets	3,00,000	4,50,000
Profit and LOSS A/c	1,25,000	25,000	Stock	1,00,000	1,50,000
10% Debentures	1,00,000	75,000	Debtors	75,000	1,25,000
8% Preference Share Capital	50,000	75,000	Bank	45,000	65,000
General Reserve	45,000	1,15,000			
	5,20,000	7,90,000		5,20,000	7,90,000

During the year a machine costing Rs. 70,000 was sold for Rs. 15,000. Dividend paid Rs. 24,000.

PART C
(Computerised Accountancy)

24. What are the subsystems (types) in the Computerised Accounting System? 2
25. Explain the concept of Data Definition Language (DDL). 2
26. Differentiate between Database and File. 2
27. What are the limitations of the computerised accounting system? . 3
28. What are the disadvantages of DBMS? 4
29. Write the formulae for a spreadsheet to compute the depreciation and written down value of assets. The following are the rates of depreciation: 4+3 = 7

Plant and Machinery: 20%; Computers: 35%; Furniture: 25%; Motor vehicles: 20%. Round off calculations to the nearest rupee.

Assets	Opening value Rs.	Depreciation Rs.	Written down value Rs.
Plant and Machinery	6,25,000		
Computers	7,24,000		
Furniture and Fittings	99,000		
Motor Vehicles	3,89,000		

Marking Scheme — Accountancy

General Instructions

1. The marking scheme provides general guidelines to reduce subjectivity in the marking. The answer given in the marking scheme are suggested answers. The content is thus indicative. If a student has given any other answer which is different from the one given in the marking scheme but conveys the same meaning, such answers should be given full weightage.
2. Some of the questions may relate to higher order thinking ability. These questions have been indicated to you separately by a star mark and are to be evaluated carefully to judge the students understanding / analytical ability.
3. Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one's own interpretation or any other consideration – Marking Scheme should be strictly adhered to and religiously followed.
4. The Head-Examiner has to go through the first five answer scripts evaluated by each evaluator to ensure that evaluation has been carried out as per the instructions given in the marking scheme. The remaining answer scripts meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.
5. If a question has parts, please award marks on the right hand side for each part. Marks awarded for different parts of the question should then be totalled up and written in the left hand margin and circled.
6. If a question does not have any parts, marks be awarded in the left hand margin.
7. If a student has attempted an extra question, answer of the question deserving more mark should be retained and the other answer scored out.
8. No marks to be deducted for the cumulative effect of an error. It should be penalized only once.
9. Deductions upto 25% of the marks be made if the student has not drawn formats of the journal and ledger and has not given the narrations.

10. A full scale of marks 1-80 has to be used. Please do not hesitate to award full marks if the answer deserves it.
11. No marks are to be deducted or awarded for writing/not writing 'TO and BY' while preparing journal and ledger accounts.
12. In theory questions, credit is to be given for the content and not for the format.

QUESTION PAPER CODE 67/1/1

EXPECTED ANSWERS/VALUE POINTS

PART A

(Not for profit organisations, partnership firms and company accounts)

1. Q. Give two main sources of income of a not for profit organisation.

Ans. Two main sources of income of a not for profit organisation are: **(any two)**

(a) Subscriptions

$\frac{1}{2} \times 2 = 1$ mark

(b) Membership fees/ admission fees/ entrance fees

(c) Donations

2. Q. A and B are partners.....valid or not.

$\frac{1}{2} + \frac{1}{2} = 1$ mark

Ans. A's claim is not valid as in the absence of a partnership deed, no salary is allowed to any partner.

3. Q. Define gaining ratio.

1 mark

Ans. Gaining ratio is the ratio in which the remaining/ continuing partners acquire the share of the outgoing partner.

4. Q. State any twotakes place.

Ans. Occasions when reconstitution of a partnership firm takes place are: **(Any two)**

$\frac{1}{2} \times 2 = 1$ mark

(a) Admission of a partner.

(b) Retirement of a partner

(c) Death of a partner.

(d) Change in the profit sharing ratio amongst existing partners.

5. **Q. Give the meaning of ‘Calls in arrears’.**

Ans. If a shareholder makes a default in sending the call amount due on allotment or on any calls, the amount not so sent is called calls in arrears/ It is the unpaid amount on calls due.

1 mark

Note: Only an entry without any explanation shall not be accepted.

6. **Q. On the basis31st March 2007.**

Ans. Calculation of Stationery debited to Income and Expenditure A/c :

	Rs.
opening stock of stationery	8,000
+Stationery purchased during the year	47,000
– closing stock of stationery	<u>6,000</u>
	<u>49,000</u>

1 mark ½ mark 1 mark ½ mark for the answer = (1 + ½ + 1 + ½ = 3 marks)

Alternate solution:

Dr.		Cr.	
Particulars	Amt (Rs.)	Particulars	Amt (Rs.)
Balance b/d	8,000	Income & Expenditure A/c –	49,000
Creditors- (Purchases)	47,000	stationery consumed	6,000
		Balance c/d	
		<u>55,000</u>	<u>55,000</u>

1 mark for opening balance + 1 mark for closing balance + ½ mark for purchases + ½ mark for the answer = (1 + 1 + ½ + ½ = 3 marks)

7. **Q. PS Ltd. forfeited.....company.**

Ans.	Journal of PS Ltd.			
Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Share capital A/c Dr. Forfeited Shares A/c Share first call A/c /calls in ArrearsA/c (500 share forfeited due to non-payment of first call)		45,000	30,000 15,000
	Bank A/c Dr. Share Capital A/c Securities Premium A/c (500 shares reissued fully paid)		65,000	50,000 15,000
	Forfeited Shares A/c Dr. Capital Reserve A/c (Share Forfeited A/c transferred to capital reserve A/c)		30,000	30,000

**1 x 3
= 3 marks**

8. Q. X Ltd. purchasedcompany.

Ans. Journal of X Ltd.

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Machinery A/c Dr. Y Ltd. A/c (Machinery purchased from Y Ltd.)		5,50,000	5,50,000
	Y Ltd A/c Dr. Bank A/c (Payment paid through cash)		55,000	55,000
	Y Ltd. A/c Dr. 9% Debentures A/c Securities Premium A/c (Issue of debentures at 10% premium)		4,95,000	4,50,000 45,000

1 x 3 = 3
marks

9. Q. Ravi and Mohanadjustment entry.

Ans. Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Mohan's current A/c Dr. Ravi's current A/c (wrong distribution of profit and omission of interest on capital and salary, now adjusted)		38,000	38,000

Note: No marks should be given for the journal entry if the examinee has written capital accounts instead of current accounts.

Working notes:

Partners	Cr. interest on Capital Rs.	Cr. salary Rs.	Dr. profits Rs.	Cr. profits Rs.	Net Effect	
					Dr. Rs.	Cr. Rs.
Ravi	1,20,000	72,000	2,52,000	98,000	-	38,000
Mohan	84,000	60,000	2,52,000	70,000	38,000	-
	2,04,000	1,32,000	5,04,000	1,68,000	38,000	38,000

1 mark for the journal entry + 3 marks for correct working in any form = (1+3 = 4 marks)

10. Q. A, B and C were partnerstime of his death.

Ans. B's share of profit = $1,50,000 \times \frac{2}{6} \times \frac{73}{365} = 90,000$

OR

B's share of profit = $1,50,000 \times \frac{2}{6} \times \frac{2.4}{12} = 90,000$

Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Profit and loss suspense A/c Dr. B's Capital A/c (B's share of profit credited to his capital A/c)		10,000	10,000
	A's Capital A/c Dr. C's Capital A/c Dr. B's Capital A/c (B's share of goodwill credited to his capital A/c in the gaining ratio)		15,000 5,000	20,000

Note: If the goodwill entry is wrong but the goodwill is calculated correctly, 1 mark should be given.

1 mark for the calculation of profit + 1 ½ marks for each journal entry

1 ½ x2 = 3 marks (1+3= 4 marks)

11. Q. S Ltd was registered.....share capital.

Ans. Balance Sheet of S Ltd. as on

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
<u>SHARE CAPITAL</u>			
<u>Authorised Capital</u> 40,000 equity shares of Rs.10 each	4,00,000		
<u>Issued Capital</u> 30,000 equity shares of Rs.10 each	3,00,000		
<u>Subscribed capital</u> 28,000 equity shares of Rs.10 each, fully called up 2,80,000 Less calls in arrears 400	2,79,600		
	2,79,600		

1 mark for authorised capital + 1 mark for issued capital + 2 marks for subscribed capital (1+1+2= 4 marks)

OR

Balance Sheet of S Ltd. as on

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
<u>SHARE CAPITAL</u>			
<u>Authorised Capital</u> 40,000 equity shares of Rs.10 each	4,00,000		
<u>Issued Capital</u> 30,000 equity shares of Rs.10 each	3,00,000		
<u>Subscribed capital</u> 28,000 equity shares of Rs.10 each	2,80,000		
<u>Called up and paid up Capital</u> 28,000 equity shares of Rs.10 each, fully called up 2,80,000 Less calls in arrears <u>400</u>	2,79,600		
	2,79,600		

**1 mark for
each amount
1x 4
= 4 mark**

Note: If the Issued Capital is taken as Rs. 2,80,000, full credit is to be given.

12. Q. Following is theas on 31. 3.2005.

Ans. Balance Sheet of A, B and C as on 31.3.2005

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Capital fund	43,550	Cash	19,550
		Subscriptions outstanding	2,000
		Furniture	15,000
		Books	7,000
	<u>43,550</u>		<u>43,550</u>

1 mark

Dr. Income and Expenditure A/c for the year ended 31st March 2006 Cr.

Expenditure	Amount (Rs.)	Income	Amount (Rs.)
Loss on sale of furniture	1,300	Subscriptions 26,500 + o/s for 05-06 <u>1,700</u>	28,200
Salary 3,000		Sale of old newspapers	1,250
(+)outstanding <u>600</u>	3,600	Government grants	10,000
Newspapers	2,050	Interest on fixed deposit	
		450	
Electricity bill	1,000	(+)outstanding <u>900</u>	1,350
Rent 6,800			
(+)outstanding <u>1,200</u>	8,000		
Surplus	24,850		
	<u>40,800</u>		<u>40,800</u>

Note : If an examinee has capitalized Government Grants by giving a note, full credit is to be given and the Surplus would then be Rs.14,850.

1 mark + ½ mark for each entry ½ x 10 = 5 marks = (1 + 5 = 6 marks)

13 Q. A and B were par

tners.....on C's admission.

Ans. A sacrifices = $5/8 \times 1/3 = 5/24$

B sacrifices = $3/8 \times 1/4 = 3/32$

Sacrificing ratio = 20 : 9

A's new share = $5/8 - 5/24 = 40/96$

B's new share = $3/8 - 3/32 = 27/96$

C's new share = $5/24 + 3/32 = 29/96$

New ratio = 40 : 27 : 29

1 ½ marks for calculation of sacrificing Ratio + 1 ½ marks for calculation of new profit sharing ratio

Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Cash A/c Dr/ C's Capital a/c Premium A/c (Cash brought in by C as his share of capital and goodwill)		2,08,000	1,50,000 58,000
	Premium A/c Dr. A's Capital A/c B's Capital A/c (C's share of goodwill credited to A and B in the sacrificing ratio)		58,000	40,000 18,000

1 ½ marks for each correct entry 1 ½ x 2 = 3 marks = (1 ½ + 1 ½ + 1 ½ + 1 ½ = 6 marks)

14. Q. Pass the necessaryof 25%.

Ans.

Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	(a) Bank A/c Dr. Debenture Application and allotment A/c (Debenture application money received)		60,00,000	60,00,000
	Debenture Application and allotment A/c Dr. 7% Debentures A/c Securities premium A/c (Debentures issued at a premium)		60,00,000	45,00,000 15,00,000
	(b) Own Debentures A/c Dr. Bank A/c (Purchase of 3,000 own debentures @Rs.97)		2,91,000	2,91,000
	9% Debentures A/c Dr. Own Debentures A/c Profit on cancellation of debentures A/c (Cancellation of 3,000 own debentures)		3,00,000	2,91,000 9,000
	Profit on cancellation of debentures A/c Dr. Capital reserve A/c (Gain on cancellation transferred to capital reserve)		9,000	9,000
	(c) 9% Debentures A/c Dr. Debentureholders A/c (Amount due to the Debentureholders)		1,80,000	1,80,000
	Debentureholders A/c Dr. 12% Debentures A/c Securities premium A/c (Issue of shares at a premium of 25%)		1,80,000	1,44,000 36,000

1 mark

1 mark

½ mark

1 mark

½ mark

1 mark

1 mark
= (1+1+1/2 +1+1/2 +1+1= 6 marks)

15. Q. X and Y are partners.....of the new firm.

Ans.

Revaluation A/c

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
Plant & Machinery	5,000	Land and building	10,000
Profit transferred to		Provision for doubtful debts	400
X capital 4,000		Creditors	1,000
Y capital <u>2,400</u>	6,400		
	11,400		11,400

2 marks

Dr.

Capital accounts

Cr.

Particulars	X Rs.	Y Rs.	Z Rs.	Particulars	X Rs.	Y Rs.	Z Rs.
Balance c/d	66,500	44,900	20,000	Bal b/d	50,000	35,000	—
				G Reserve	10,000	6,000	—
				Cash A/c	—	—	20,000
				Revaluation A/c	4,000	2,400	
				Z's current A/c	2,500	1,500	
	66,500	44,900	20,000		66,500	44,900	20,000
Current a/c – transfer	41,500	29,900	—	Balance b/d	66,500	44,900	20,000
Balance c/d	25,000	15,000	20,000				
	66,500	44,900	20,000		66,500	44,900	20,000

3 marks

Balance Sheet of X, Y and Z as on 1.4.2007

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Capitals:		Land and building	35,000
X 25,000		Plant and Machinery	25,000
Y 15,000		Investment	20,000
Z <u>20,000</u>	60,000	Stock	15,000
Current A/c		Debtors 20,000	
X 41,500		Less provision <u>1,100</u>	18,900
Y <u>29,900</u>	71,400	Cash	39,500
Creditors	26,000	Z's current A/c	4,000
	<u>1,57,400</u>		<u>1,57,400</u>

3 marks

**=
(2+3+3= 8
marks)**

Note: if an examinee has calculated the adjusted capitals as: X Rs.20,000; Y Rs.12,000 and Z Rs.16,000 and the total of the Balance Sheet is Rs.1,53,400, only ½ mark is to be deducted.

OR

Dr.	Revaluation a/c	Cr.	
Particulars	Amt (Rs.)	Particulars	Amt (Rs.)
Stock	2,300	Loss transferred to capitals:	
Furniture	500	A 4,200	
Plant and Machinery	750	B 2,800	
Building	4,000	C <u>1,400</u>	8,400
Provision for doubtful debts	850		8,400
	8,400		8,400

3 marks

1 ½ x3=
4 ½ marks

Dr.	Capital Accounts			Cr.			
Particulars	A (Rs.)	B (Rs.)	C (Rs.)	Particulars	A (Rs.)	B (Rs.)	C (Rs.)
Reval –loss	4,200	2,800	1,400	Balance b/d	40,000	25,000	20,000
A's capital	—	2,000	1,000	P & L A/c	2,250	1,500	750
Cash A/c	11,500	—	—	B'capital	2,000	—	—
A's loan	29,550	—	—	C'capital	1,000	—	—
Balance c/d	—	21,700	18,350				
	45,250	26,500	20,750		45,250	26,500	20,750

½ mark
=
(3+ 4 ½ + ½
= 8 marks)

Dr.	A's loan A/c	Cr.	
Particulars	Amt (Rs.)	Particulars	Amt (Rs.)
		A's Capital A/c	29,550

16 Q. X Ltd. invited applicationsfully paid.

Ans. Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Bank A/c Dr Share application A/c (amount received on application)		5,40,000	5,40,000
	Share Application A/c Dr. Share Capital A/c Securities premium A/c Share allotment A/c Bank A/c (Application money adjusted)		5,40,000	3,20,000 1,60,000 30,000 30,000
	Share allotment A/c Dr. Share capital A/c (Amount due on allotment)		2,40,000	2,40,000

½ mark

1 mark

½ mark

Bank A/c Share Allotment A/c (The amount received on allotment)	Dr.		2,05,800	2,05,800	1 mark
OR					
Bank A/c Calls in arrears A/c Share allotment A/c (The amount received on allotment)	Dr. Dr.		2,05,800 4,200	2,10,000	
Share first and final call A/c Share Capital A/c (The amount due on first and final call)	Dr.		2,40,000	2,40,000	½ mark
Bank A/c Share first and final call A/c (The amount received on first and final call)	Dr.		2,35,200	2,35,200	1 mark
OR					
Bank A/c Calls-in-Arrears A/c Share first and final call (The amount received on first and final call)	Dr. Dr.		2,35,200 4,800	2,40,000	
Share Capital A/c Share Forfeited A/c Share allotment A/c Share first call A/c (1,600 shares forfeited)	Dr.		16,000	7,000 4,200 4,800	1 ½ mark
OR					
Share Capital A/c Forfeited Shares A/c Calls in arrears A/c (1,600 shares forfeited)	Dr.		16,000	7,000 9,000	
Bank A/c Share Capital A/c Securities Premium A/c (1,600 shares re-issued)	Dr.		18,400	16,000 2,400	1 mark
Forfeited Shares A/c Capital Reserve A/c (Balance in share Forfeited transferred to capital reserve)	Dr.		7,000	7,000	1 mark

=
(1/2 + 1 + ½ +
1 + ½ + 1 + 1
½ + 1 + 1 = 8
marks)

OR

Q. Y Ltd. invited applications.....books of the company.

Ans. Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Bank A/c Dr. Share application A/c (amount received on application)		2,60,000	2,60,000
	Share Application A/c Dr. Share Capital A/c Share allotment A/c Bank A/c (Application money adjusted)		2,60,000	2,00,000 50,000 10,000
	Share allotment A/c Dr. Discount on issue of shares A/c Share capital A/c (Amount due on allotment)		4,40,000 60,000	5,00,000
	Bank A/c Dr. Share Allotment A/c (The amount received on allotment) OR Bank A/c Dr. Calls in Arrears A/c Dr. Share allotment A/c (Amount received on allotment)		3,82,200 3,82,200 7,800	3,82,200 3,90,000
	Share first and final call A/c Dr. Share Capital A/c (Amount due on first and final call)		3,00,000	3,00,000
	Bank A/c Dr. Share first and final call A/c (Amount received on first and final call) OR Bank A/c Dr. Calls-in-Arrears A/c Dr. Share first and final call A/c (Amount received on first and final call)		2,94,000 2,94,000 6,000	2,94,000 3,00,000

½ mark

1 mark

½ mark

1 mark

½ mark

1 mark

Share Capital A/c Forfeited Shares A/c Share allotment A/c Share first call A/c Discount on issue of shares A/c (200 shares forfeited)	Dr.	20,000	5,000 7,800 6,000 1,200	1 ½ mark
OR				
Share Capital A/c Forfeited Shares A/c Calls in arrears A/c Discount on issue of shares A/c (200 shares forfeited)	Dr.	20,000	5,000 13,800 1,200	
Bank A/c Share Capital A/c Securities Premium A/c (200 shares re-issued)	Dr.	22,000	20,000 2,000	1 mark
Forfeited Shares A/c Capital reserve A/c (Balance in share Forfeited A/c transferred to capital reserve A/c)	Dr.	5,000	5,000	1 mark

=
 $\frac{1}{2} + 1 + \frac{1}{2} +$
 $1 + \frac{1}{2} + 1 + 1 \frac{1}{2}$
+1=8 marks)

Part B
(Analysis of Financial Statements)

- 17. Q. Quick ratio of a company.....by the company.** $\frac{1}{2} + \frac{1}{2} =$
Ans. Ratio will increase as both the current assets and current liabilities will decrease. **1 mark**
- 18. Q. State whether.....no flow of cash.** **1 mark**
Ans. No Flow.
- 19. Q. Dividend paid bycash flow statement.** **1 mark**
Ans. Financing activity
- 20. Q. List the majorCompanies Act 1956.**
Ans. Major headings on the asset side are:
- Fixed Assets **½ mark**
 - Investments **½ mark**
 - Current Assets, loans and advances **1 mark**
 - (a) Current assets **½ mark**
 - (b) Loans and advances **½ mark**
 - Miscellaneous Expenditure **½ mark**
 - Profit and Loss A/c (Dr. balance) **3 marks)**
- ½ mark = ($\frac{1}{2} + \frac{1}{2} + 1$
 $+ \frac{1}{2} + \frac{1}{2} =$**

21. Q. From the following.....Statement.

Ans. Comparative Income Statement
For the years ended on 31.12.06 & 31.12.07

Particulars	2006 (Rs.)	2007 (Rs.)	Absolute Increase/ decrease Rs.	Percentage Increase/ decrease Rs.
Sales	6,00,000	8,00,000	2,00,000	33.3
Less: cost of goods sold	4,50,000	4,80,000	30,000	6.6
Gross profit	1,50,000	3,20,000	1,70,000	113.3
Less: Indirect expenses	15,000	64,000	49,000	326.6
Net profit before tax	1,35,000	2,56,000	1,21,000	89.6
Less :tax	54,000	1,02,500	48,400	89.6
Net profit after tax	81,000	1,53,600	72,600	89.6

1 mark each
for 2006,
2007, abso-
lute in-
crease/
decrease,
and percent-
age column
1x4=
4 marks

22. Q. From the following.....ratio.

Ans. Any two ratios

(a) Credit sales = Rs. 3,00,000
Cash sales = 75% of credit sales = $\frac{3}{4} \times 3,00,000 = 2,25,000$
Total Sales = Cash sales + Credit Sales
= 2,25,000 + 3,00,000
= 5,25,000
Gross Profit = Net Sales – Cost of goods sold
= 5,25,000 – 6,80,000
= - 1,55,000
Hence, Gross Loss = 1,55,000

Gross Loss Ratio = Gross Loss/ Net Sales x 100
= $(1,55,000/5,25,000) \times 100$
= **29.52%**

$\frac{1}{2}$ mark for
formula
+

1 mark for calculation + $\frac{1}{2}$ mark

OR Gross Profit Ratio = $\frac{\text{Gross profit}}{\text{Net Sales}} \times 100$
= $\frac{- 1,55,000}{5,25,000} \times 100$
= **- 29.52%**

(b) Working Capital = Current Assets – Current Liabilities
= 5,00,000 – 2,90,000 = 2,10,000

Working Capital turnover ratio = Net Sales/ Working Capital
= $\frac{5,25,000}{2,10,000}$
= **2.5 times**

OR

Working Capital turnover ratio = Cost of goods sold/ Working Capital
= $\frac{6,80,000}{2,10,000}$
= **3.24 times**

**for answer = 2 x
2 = 4 marks**

(c) **Proprietary ratio** = Proprietors funds/ Total assets
= 8,00,000/ 14,30,000
= **80 : 143 or 55.94%**

Calculation of proprietors funds:

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Paid up capital	8,00,000	Current Assets	5,00,000
9% debentures	3,40,000	Fixed Assets (bal fig)	9,30,000
Current Liabilities	2,90,000		
	14,30,000		14,30,000

23 Q. From the followingCash Flow Statement.

Ans.

Calculation of NP before tax

Net loss	(50,000)
Add dividend	80,000
Less transfer from reserve	<u>(20,000)</u>
Net profit before tax	<u>10,000</u>

1 mark

Cash Flow Statement for the year ended 31st March 2007

Particulars	(Rs.)	(Rs.)	
<u>Cash flows from operating activities</u>			
Net profit before tax		10,000	
Add interest on debentures	20,000		
Add loss on sale of machinery	30,000	50,000	1 mark
<u>Operating profit before Working Capital changes</u>		60,000	
Less:			
Increase in Debtors	(40,000)		
Increase in Stock	(50,000)	(90,000)	
Cash used in operating activities		(30,000)	1 mark
<u>Cash flows from investing activities</u>			
Purchase of fixed assets	(2,80,000)		
Sale of machinery	50,000		
Cash used in investing activities		(2,30,000)	1 mark
<u>Cash flows from financing activities</u>			
Issue of equity shares	3,50,000		
Issue of preference shares	40,000		
Redemption of Debentures	(20,000)		
Dividend paid	(80,000)		
Interest paid on Debentures	(20,000)		
Cash generated from financing activities		2,70,000	2 mark
Net increase in cash and Cash Equivalents		10,000	
Add opening balance of Cash and Cash equivalents		50,000	½ mark
Closing balance of Cash and Cash equivalents		60,000	

Working Notes:

Dr.	Fixed assets A/c		Cr.	
Particulars	Amt (Rs.)	Particulars	Amt (Rs.)	
Balance b/d	5,00,000	Bank-sale	50,000	
Bank (purchase)	2,80,000	Loss on sale	30,000	
		Balance c/d	7,00,000	
	7,80,000		7,80,000	

=
 (1+ 1+ 1+ 2
 + ½ + ½
 = **6 marks**)
 ½ mark

Note 1: Full credit to be given to an examinee if he/she has taken preference dividend separately. The answers would be:

Net Profit before tax = **Rs.14,800**

Cash used in operating activities = **Rs.(25,200)**

Cash used in investing activities = **Rs.(2,30,000)**

Cash generated from financing activities = **Rs.2,65,200**

Note 2: In case, interest on debentures and dividend on preference shares has been calculated on the closing balances, no marks should be deducted.

QUESTION PAPER CODE 67/1

EXPECTED ANSWERS/VALUE POINTS

1. **Q. Distinguish betweennature of items recorded therein.**

Ans. Income and expenditure A/c records items of revenue nature whereas receipt and payments account records items of both capital and revenue nature.

1 mark

2. **Q. Ram & Mohan Whether his claim is valid or not.**

Ans. His claim is not valid because in the absence of a partnership deed, profits and losses should be shared equally.

1 mark

3. **Q. Define goodwill.**

Ans. Goodwill is the value of the reputation of a firm in respect of the profits expected in future over and above the normal profits earned by other similar firms belonging to the same industry.

1 mark

Note : If an examinee has given any other correct definition full marks are to be awarded

4. **Q. State any two reasonson the admission of partner.**

Ans. The two reasons are:

$\frac{1}{2} \times 2 = 1$ mark

1. To show the assets and liabilities at their current/correct values.
2. To ensure that no partner is at an advantage or disadvantage due to change in the value of assets and liabilities.

Note: If an examinee has given the answer in a paragraph covering the above points, no marks should be deducted.

5. **Q. Give the meaning of minimum subscription.**

Ans. Minimum subscription is the minimum amount which in the opinion of the Board of Directors must be raised through the issue of shares so that the company has necessary funds to carry out its objectives as stated in its memorandum of Association. Minimum subscription, according to SEBI guidelines is 90% of the issued capital.

1 mark

6. **Q. Calculate the amount during the year was Rs. 19,000.**

Dr. Stock of Sports Material A/c Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To Balance b/d	7,500	By Income and	
To Creditors (purchases)	19,600	Expenditure A/c	20,700
		(stationery consumed)	
		By Balance c/d	6,400
	27,100		27,100

1 ½ marks

+

Dr.**Creditors for Sports Material A/c****Cr.**

Particulars	Amount Rs.	Particulars	Amount Rs.
To Cash (Paid)	19,000	By balance b/d	2,000
To balance c/d	2,600	By Purchases A/c (credit- bal. fig.)	19,600
	21,600		21,600

1 ½ marks**(1 ½ + 1 ½
= 3marks)****OR****Calculation of Sports Material consumed during the year**

Ans.	Cash paid during the year	19,000
Add	Opening Stock of sports Material	7,500
Less	Closing stock of sports Material	6,400
Less	Creditors in the beginning	2,000
Add	Creditors at the end	<u>2,600</u>
	Amount to be debited to income & exp. A/c	<u>20,700</u>

**½ x 6
= 3 marks****7. Q. Samta Ltd. For the above transaction.****Ans.** Journal of Samta Ltd.

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Share Capital A/c Dr. To Forfeited Shares A/c To Share first Call A/c / Calls in Arrears A/c (Being 800 shares forfeited for non payment of first call)		64,000	40,000 24,000
	Bank A/c Dr. To Share Capital A/c To Securities Premium A/c (Being 400 Shares reissued)		42,000	40,000 2,000
	Forfeited Shares A/c Dr. To Capital Reserve A/c (Being amount transferred to Capital Reserve)		20,000	20,000

**1x3
=
3 marks**

8. Q. Deepak Ltd. for the above transactions

Ans. Journal of Deepak Ltd.

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Furniture A/c Dr. To M/s Furniture Mart A/c (Being furniture purchased)		2,20,000	2,20,000
	M/s Furniture Mart A/c Dr. To Bills Payable A/c (Being Bill Payable Accepted)		1,10,000	1,10,000
	M/s Furniture Mart A/c Dr. To 9% Debentures A/c To Securities Premium (Being Debentures issued at 10% premium)		1,10,000	1,00,000 10,000

**1x3 =
3marks**

9. Q. Kumar & Raja pass adjustment entry.

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Kumar's Current A/c Dr. To Raja's Current A/c (Being adjustment made which was omitted earlier)		11,100	11,100

**1 mark for
entry**

Note: No marks should be given for the journal entry if the examinee has written capital accounts instead of current accounts.

Working Note		Kumar(Rs.)	Raja(Rs.)	Total
a)	Amount already distributed (Dr.)	1,94,600	83,400	2,78,000
b)	Amount should have been distributed			
	i) Interest on capital	81,000	36,000	1,17,000
	ii) Salary	50,000	36,000	86,000
	iii) Divisible profit	52,500	22,500	75,000
	Total (Cr.)	<u>1,83,500</u>	<u>94,500</u>	<u>2,78,000</u>
c)	Difference	11,100(Dr.)	11,100(Cr.)	

+

**3 marks for
any correct
working
= (1 + 3
= 4 marks)**

10 Q. P, Q & R P's share of profit

Ans

Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	P & L Suspense A/c Dr. To P's Capital A/c (Being share of profit credited to his A/c)		10,500	10,500
	Q's Capital A/c Dr. R's Capital A/c Dr. To P's Capital A/c (Being adjustment made in respect of P's share of goodwill)		24,000 12,000	36,000

**1 ½ marks for each journal entry
1 ½ x 2 = 3 marks**

Working Note :

a) P's Share of profit = Average Profit x $\frac{3}{12} \times \frac{2}{5}$ +

$$\text{Average Profit} = \frac{2,00,000 + 1,80,000 + 2,10,000 - 1,70,000}{4}$$

$$= \text{Rs. } 1,05,000$$

**1 mark for the calculation of profit
(1+3= 4 marks)**

$$\text{P's share of profit} = 1,05,000 \times \frac{3}{12} \times \frac{2}{5} = \text{Rs. } 10,500$$

$$\text{b) P's share in goodwill} = \text{Rs. } 90,000 \times \frac{2}{5} = \text{Rs. } 36,000$$

Note: If the journal entries are wrong but the amount of goodwill and B's share of profit are calculated correctly, 1 mark should be given.

11. Q. Sagar Ltd. different types of share capital

Ans.

Balance Sheet of Sagar Ltd. as at

Liabilities	Amount (Rs.)	Assets	Amount Rs.
<u>SHARE CAPITAL</u>			
<u>Authorised Capital</u> 1,00,000 equity shares of Rs.100 each	1,00,00,000		
<u>Issued Capital</u> 60,000 equity shares of Rs.100 each	60,00,000		
<u>Subscribed capital</u> 56,000 Equity Shares of Rs. 100 each	56,00,000		
Less calls in arrears	14,000		
	55,86,000		

**1 mark for authorised capital
+
1 mark for issued capital
+
2 marks for subscribed capital
(1+1+2= 4 marks)**

OR

Ans Balance sheet of Sagar's Ltd. as at

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
<u>Authorised Capital</u> 1,00,000 Equity Shares of Rs. 100 each	<u>1,00,00,000</u>		
<u>Issued Share Capital</u> 60,000 Equity Shares of Rs.100 each	60,00,000		
<u>Subscribed Share Capital</u> 56,000 Equity Shares of Rs.100 each	<u>56,00,000</u>		
<u>Called up and Paid up Share Capital</u> 56,000 Equity Shares of Rs. 100 each	56,00,000		
Less calls in arrears	<u>14,000</u>		
	55,86,000		

**1 mark for
each
amount
1 x 4
= 4 marks**

Note: If the Issued Capital is taken as Rs.56,00,000, full credit is to be given.

12. Q. Following is the Receipt and Paymentcapital fund on 31-12-2005

Ans.

Income & Expenditure Account for the year ended 31st Dec. 2006

Dr.

Cr.

Expenditure	Amount (Rs.)	Income	Amount (Rs.)
To Salary 15,000		By Subscription	
Add Outstanding Salary		52,000	
<u>1,500</u>	16,500	+ Subscription	
To Office expenses	6,000	outstanding at the end	
To Excess of expenses	5,000	2,000	
over tournament fund		Less Subscription	
(31,000-26,000)		outstanding in the	
To Depreciation on		beginning <u>3,000</u>	51,000
building	7,500	By Entrance Fees	5,000
To Depreciation on			
Furniture	1,800	By Sale of old	1,000
		News papers	
To depreciation on			
Sports Equipment	7,000		
To Surplus	16,800	By Accrued Interest	3,600
	60,600		60,600

**½ mark for
each entry
½ x 10 =
5 marks
(no marks for
surplus)**

Balance Sheet of As on 31st December 2005

Liabilities	Amounts (Rs)	Assets	Amounts(Rs)
Capital Fund (Balancing fig)	1,66,000	Cash Subscription Outstanding Building Furniture Sports Equipment 12% Investments	10,000 3,000 75,000 18,000 30,000 30,000
	1,66,000		1,66,000

1 mark

Note:

1. If Billiards Table is included in furniture, then depreciation on furniture would be Rs.3,800 and the surplus would be Rs. 14,800.

= (5 + 1

2. No marks are to be deducted if depreciation has been charged on Investments. The surplus would change accordingly.

= 6 marks)

13. Q. K&Y in the books of the firm

Ans.

Old Ratio = 3:2

Z's share = $1/3$

Z acquires from K = $1/3 \times 2/5 = 2/15$

Z acquires from Y = $1/3 \times 3/5 = 3/15$

$1/2$ mark

$1/2$ mark

K's new share = Old share – share given to Z = $3/5 - 2/15 = 7/15$

Y's new share = Old share – share given to Z = $2/5 - 3/15 = 3/15$

1 mark

1 mark

New profit sharing ratio = 7:3:5

= ($1/2 + 1/2 + 1 + 1$

= 3 marks)

Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Cash A/c Dr. To Z's Capital A/c To Premium A/c (Being Capital and share of goodwill brought in by the new partner)		1,10,000	80,000 30,000
	Premium A/c Dr. To K's Capital A/c To Y's Capital A/c (Being the amount of premium distributed in sacrificing ratio)		30,000	12,000 18,000

**+
1 $1/2$ marks
for each
correct entry
 $1 \frac{1}{2} \times 2 =$
3 marks
= (3 + 3 = 6
marks**

14 Q. (i) issued 58,000.....at a premium of 10%

Ans. Journal of Varun Ltd.

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	Bank A/c Dr. To Debenture Application and Allotment A/c (Being Debenture Application money received)		6,38,00,000	6,38,00,000
	Debenture Application and Allotment A/c Dr. To 9% Debentures A/c To Securities Premium A/c (Being issue of Debentures at Premium of 10%)		6,38,00,000	5,80,00,000 58,00,000

**1x2
= 2marks**

ii) Converted 350at premium of 25%

Ans . Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	9% Debentures A/c Dr. To Debenture Holders A/c (Being amount due to Debenture Holders)		35,000	35,000
	Debenture holders A/c Dr. To Equity Share Capital A/c To Securities Premium A/c (Being 2,800 Equity Shares issued at a premium of 25%)		35,000	28,000 7,000

**1x2
= 2marks**

iii) Redeemed 450 By draw of Lots.

Ans. Journal

Date	Particulars	F	Dr. (Rs.)	Cr.(Rs.)
	9% Debentures A/c Dr. To Debenture Holders A/c (Being amount due to Debenture Holders)		45,000	45,000
	Debenture holders A/c Dr. To Bank A/c (Being amount paid to Debenture Holders)		45,000	45,000

**1x2
= 2marks**

**(2+2+2
= 6 marks)**

15. R S and T were.....sheet on 1.4.2004.

Ans.

Dr.	Revaluation A/c	Cr.	
Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Stock	4,600	By Loss transferred to	
To Furniture	1,000	Partners capital A/c	
To Plant & Mach.	1,500	R 6,720	
To Building	8,000	S 6,720	
To Provision for doubtful debts	1,700	T <u>3,360</u>	16,800
	16,800		16,800

2 marks

Partner's Capital Accounts

Dr.				Cr.			
Particulars	R Rs.	S Rs.	T Rs.	Particulars	R Rs.	S Rs.	T Rs.
To Revaluation A/c	6,720	6,720	3,360	By Balance b/d	80,000	50,000	40,000
To S's Capital A/c	3,200	---	1,600	By P & L A/c	3,600	3,600	1,800
To Cash A/c		18,080		By R's Capital A/c	---	3,200	---
To S's Loan A/c	---	33,600	---	By T's Capital A/c	---	1,600	---
To Bal. c/d	73,680		36,840				
	83,600	58,400	41,800		83,600	58,400	41,800

1x3
=3marks

Balance Sheet as on 1.4.2004

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Bank Loan	12,800	Cash	33,220
Sundry Creditors	25,000	Bill Receivables	10,800
S's Loan	33,600	Debtors 35,600	
Capital: A/cs		Less Provision <u>1,700</u>	33,900
R 73,680		Stock	40,000
T <u>36,840</u>		Furniture	6,000
	1,10,520	Plant & Machinery	18,000
		Building	40,000
	1,81,920		1,81,920

2 ½ mark

S's Loan A/c

Dr.

Cr.

Date	Particular	Amount (Rs.)	Date	Particular	Amount (Rs.)
			2004 Apr.1	By S's Capital A/c	33,600

½ marks

= (2 + 3 + 2 ½
+ ½
= 8 marks)

OR

Revaluation A/c

Dr,

Cr.

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Profit Transferred to Partner's Capital A/c		By Land and building	20,000
D 17,100	22,800	By Provision for doubtful debts	800
E <u>5,700</u>		By Sundry Creditors	2,000
	22,800		22,800

2 marks

Partner's Capital A/c

Dr.

Cr.

Particulars	D Rs.	E Rs.	F Rs.	Particulars	D Rs.	E Rs.	F Rs.
To Partner's Current A/c	67,100	43,700	---	By Balance	1,00,000	70,000	---
To Balance c/d	80,000	40,000	40,000	b/d			
				By Revaluation A/c	17,100	5,700	---
				By General Reserve	24,000	8,000	---
				By Cash A/c	---	---	40,000
				By F's Current A/c	6,000	---	
	1,47,100	83,700	40,000		1,47,100	83,700	40,000

**1x3
= 3 marks**

Balance sheet as on 1st April 2007

Liabilities	Amount Rs.	Assets	Amount Rs.
Creditors	52,000	Land & Building	70,000
Capital A/c's		Debtors 40,000	
D 80,000		Less Provision <u>2,200</u>	37,800
E 40,000		Machinery	60,000
F <u>40,000</u>	1,60,000	Stock	15,000
Current A/c's		Investment	50,000
D 67,100		Cash	84,000
E <u>43,700</u>	1,10,800	F's Current A/c	6,000
	3,22,800		3,22,800

3 marks

**= (2+3+3)
= 8 marks**

Note: Full credit is to be given if an examinee has calculated the adjusted capitals as: D Rs.68,000; E Rs.34,000 and F Rs.34,000 and the total of the Balance Sheet is Rs.3,16,800.

16. Janata Ltd. for the above transaction

Ans.

In the books of Janta Ltd.

Journal

Date	Particulars	LF	Debit (Rs.)	Credit (Rs.)
	Bank A/c Dr. To Share Application A/c (Being application money received on 100000 shares @ Rs. 4 per share including premium)		4,00,000	4,00,000
	Share Application A/c Dr. To Share Capital A/c To Securities Premium A/c To Share Allotment A/c To Bank A/c (Being application money adjusted to-wards share capital & Share allotment & balance refunded)		4,00,000	1,40,000 1,40,000 80,000 40,000

½ mark

1 mark

	Share Allotment A/c To Share Capital A/c (Being amount due on share allotment)	Dr.		2,10,000	2,10,000	½ mark
	Bank A/c To Share Allotment A/c (Being allotment money received)	Dr.		1,30,000	1,30,000	1 mark
	Share First & Final Call A/c To Share Capital A/c (Being amount due on share first & final call on 70000 shares @ Rs 5 each)	Dr.		3,50,000	3,50,000	½ mark
	Bank A/c To Share First & Final Call A/c (Being first & final call received) Or Bank A/c Calls in arrears A/c To Share First & Final Call A/c (Being first & final call received)	Dr. Dr. Dr.		3,46,500 3,46,500 3,500	3,46,500 3,50,000	1 mark
	Share Capital A/c To Forfeited Shares A/c To Share First & Final Call/ Calls in Arrears A/c (Being 700 shares forfeited due to non payment of first & final call)	Dr.		7,000	3,500 3,500	1½ mark
	Bank A/c To Share Capital A/c To Securities Premium A/c (Being forfeited shares reissued @ Rs. 77000)	Dr.		77,000	7,000 70,000	1 mark
	Forfeited Shares A/c To Capital Reserve A/c (Being Capital Profit on reissued shares transferred to capital reserve A/c)	Dr.		3,500	3,500	1 mark = (½ + 1 + ½ + 1 + ½ + 1 + 1½ + 1 + 1 = 8 marks)

OR

Date	Particulars	LF	Debit (Rs.)	Credit (Rs.)	
	Bank A/c Dr. To Share Application A/c (Being application money received on 1,10,000 shares @ Rs. 2 per share) (Being application money adjusted to wards share capital & Share allotment & balance refunded)		2,20,000	2,20,000	½ mark
	Share Application A/c Dr. To Share Capital A/c To Share Allotment A/c To Bank A/c (Being application money adjusted to- wards share capital & Share allotment & balance refunded)		2,20,000	1,60,000 40,000 20,000	1 mark
	Share Allotment A/c Dr. Discount on issue of shares A/c Dr. To Share Capital A/c (Being amount due on share allotment)		2,40,000 80,000	3,20,000	½ mark
	Bank A/c Dr. To Share Allotment A/c (Being allotment money received) Or Bank A/c Dr. Calls in arrears A/c Dr. To Share Allotment A/c (Being first & final call received)		1,96,000 1,96,000 4,000	1,96,000 2,00,000	1 mark
	Share First & Final Call A/c Dr. To Share Capital A/c (Being amount due on share first & final call on 80000 shares @ Rs 4 each)		3,20,000	3,20,000	½ mark
	Bank A/c Dr. To Share First & Final Call A/c (Being first & final call received)		3,13,600	3,13,600	1 mark

	<p style="text-align: center;">Or</p> <p>Bank A/c Dr. 3,13,600 Calls in arrears A/c Dr. 6,400 To Share First & Final Call A/c (Being first & final call received)</p>			3,20,000	
	<p>Share Capital A/c Dr. 16,000 To Share Forfeited A/c 4,000 To Share allotment A/c 4,000 To Share First & Final Call A/c 6,400 To Discount on issue of shares A/c 1,600 (Being 1600 shares forfeited due to non payment of allotment & first & final call)</p> <p style="text-align: center;">Or</p> <p>Share Capital A/c Dr. 16,000 To Forfeited Shares A/c 4,000 To Calls in Arrears A/c 10,400 To Discount on issue of shares A/c 1,600 (Being 1600 shares forfeited due to non payment of allotment & first & final call)</p>				1½ mark
	<p>Bank A/c Dr. 24,000 To Share Capital A/c 16,000 To Securities Premium A/c 8,000 (Being forfeited shares reissued @ Rs. 24000)</p>				1 mark
	<p>Share Forfeited A/c Dr. 4,000 To Capital Reserve A/c 4,000 (Being Capital Profit on reissued shares transferred to capital reserve A/c)</p>				(½ + 1 + ½ + 1 + ½ + 1 + ½ + 1 = 8 marks)

PART B – ANALYSIS OF FINANCIAL STATEMENTS

- 17. Q. The Stock Turnover ————— closing Stock by Rs. 5,000.**

Ans: Stock turnover ratio will decline because the amount of average stock will increase, cost of goods sold remaining the same.

½ + ½ =
1 mark

- 18. Q. State whether the payment————— no flow of cash.**

Ans. Outflow of Cash

1 mark

19. Q- Dividend paid by a manufacturing ———while preparing cash flow statement?

Ans. Financing Activity

1 mark

20. Q- Show the major headings on ————— of Companies Act 1956.

Ans The major headings on the liability side of the balance sheet are:

1. Share Capital ½ mark
2. Reserves & Surplus ½ mark
3. Secured Loans ½ mark
4. Unsecured Loans ½ mark
5. Current Liabilities & Provisions 1 mark
 - (a) Current Liabilities $= (\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + 1$
 - (b) Provisions. $= 3 \text{ marks}$

21. Q-From the following prepare a Comparative Statement of Victor Ltd. —
—————Income Tax 50%.

Comparative Income Statement of Victor Ltd.

Particulars	2006 Rs.	2007 Rs.	Absolute Change Rs.	%age Change
Sales	15,00,000	18,00,000	3,00,000	20
Less: Cost of goods Sold	11,00,000	14,00,000	3,00,000	27.27
Gross Profit	4,00,000	4,00,000	-	-
Less: Indirect Expenses	80,000	1,00,000	20,000	25
Net Profit before Tax	3,20,000	3,00,000	(20,000)	(6.25)
Less: Income Tax	1,60,000	1,50,000	(10,000)	(6.25)
Net Profit After Tax	1,60,000	1,50,000	(10,000)	(6.25)

1 mark each
for 2006,
2007, absolute
increase/
decrease,
and percent-
age column
1x4
= 4 marks

22. Q-From the following, calculate any two of the following ratios —————
Closing Stock – 20% more than opening stock.

Ans Any Two of the following ratios:

(i) Net Profit Ratio = Net Profit/Net Sales X 100

Net Profit = Gross Profit – Indirect expenses

$$= 8,00,000 - 2,00,000$$

$$= \text{Rs. } 6,00,000$$

½ mark for
formula
+
1 mark
for calculation
+

Net Profit Ratio = $6,00,000 / 14,00,000 \times 100 = 42.86 \%$

(ii) Debt Equity Ratio = Debt / Equity

Debt = Debentures = Rs. 8,00,000

Equity = Equity Share Capital + Capital Reserve

= 20,00,000 + 2,00,000

= Rs.22,00,000

$\frac{1}{2}$ mark
for
the answer
= (2 + 2)
= 4 marks

Debt Equity Ratio = $8,00,000 / 22,00,000 = 4:11$

Note: Full credit is to be given if net profit is added to equity, then-

Debt equity Ratio = $8,00,000 / 28,00,000 = 2 : 7$

(iii) Quick Ratio = Liquid Assets / Current Liabilities

Liquid Assets = Current Assets – Closing Stock

Liquid Assets = 4,00,000 - 60,000

= Rs. 3,40,000

Current Liabilities = Rs. 3,00,000

Quick Ratio = $3,40,000 / 3,00,000 = 17: 15$ or **1.13 :1**

2 x 2
= 4 marks

- 23. Q- From the following Balance Sheets of Som Ltd. As ———
— Dividend Paid Rs.24,000.**

Ans: Calculation of Net Profit/ loss before Tax:

Profit for the year	(1,00,000)
Add transferred to reserve	70,000
Add dividend	<u>24,000</u>
	<u>(6,000)</u>

1 marks

Cash Flow Statement as on 31st March,2007

Particulars	Rs.	Rs.
<u>A. Cash Flow from Operating Activities :</u>		
Net Loss as per Profit & Loss A/c		
Adjustments :		(6,000)
Add : Debenture Interest	10,000	
Loss on sale of machinery	<u>55,000</u>	<u>65,000</u>
Operating Profit before Working Capital changes		59,000
Adjustments for Working Capital Changes		
Less : Increase in Current Assets –		
Stock	(50,000)	
Debtors	(50,000)	<u>(1,00,000)</u>

Net Cash used in Operating Activities		(41,000)	1 marks
B. Cash Flow from Investing Activities :			
Sale of Fixed Assets	15,000		
Purchase of Fixed Assets	<u>(2,20,000)</u>		
Net Cash used in Investing Activities		(2,05,000)	1 marks
C. Cash Flow from Financing Activities :			
Issue of Equity Share capital	3,00,000		
Issue of { Preference Share Capital	25,000		
Redemption of Debentures	(25,000)		
Dividend Paid	(24,000)		
Interest on Debentures paid	<u>(10,000)</u>		
Net Cash Flow from Financing Activities		<u>2,66,000</u>	
Net Increase / Decrease in Cash & Cash Equivalents		20,000	2 marks
Add : Opening Cash and Cash Equivalents		<u>45,000</u>	
Closing Cash and Cash Equivalents		<u>65,000</u>	½ marks

Working Notes:

Dr.	Fixed assets A/c	Cr.	
Particulars	Amt (Rs.)	Particulars	Amt (Rs.)
Balance b/d	3,00,000	Bank (sale)	15,000
Bank (purchase)	2,20,000	Loss on sale	55,000
		Balance c/d	4,50,000
	5,20,000		5,20,000

½ marks

Note 1: Full credit to be given to an examinee if he/she has taken preference dividend separately. The answers would be:

Net Profit before tax = Rs.(2,000)

Cash used in operating activities = Rs.(37,000)

Cash used in investing activities = Rs.(2,05,000)

Cash generated from financing activities = Rs.2,62,000

**= (1+ 1+ 1+
2 + ½ + ½
= 6 marks)**

Note 2: In case, interest on debentures and dividend on preference shares has been calculated on the closing balances, no marks should be deducted.

Part C
Computerised Accounting

24. Q. What are the.....Accounting System?

Ans: The subsystems are, Sales, purchases, inventory, Fixed assets, payroll, Revenues and expenses accounting

2 marks

25. ExplainD D L.(Data Definition language)

Ans; The commands which are used to create and maintain a database is called Data Definition language (DDL). They represent the CREATE, ALTER & DROP.

2 marks

26. Q. Differentiate..... File?

Ans: Database is a collection of information available to many users. Files are used for storing, accessing & manipulating data.

2 marks

27. Q. What areaccounting system?

Ans: The limitations of a Computerised accounting system are: Cost of implementation, opposition by the staff, system failures, disruptions, breach of security, Ill health of employees' Etc.

3 marks

28. Q.What..... DBMS?

Ans: Lack of Flexibility, Cost, no back up in systems, Expensive hardware & software, centralised control & security breach.

4 marks

29. Q. Write the.....

Ans;

Round off calculations to the nearest Rupee

Asset	Opening values Rs.	Depreciation	Written down value
Plant & machinery	6,25,000	=Round(B2*0.20,0)	=SUM(B2-C2)
Computers	7,24,000	=Round(B3*0.35,0)	=SUM(B3-C3)
Furniture & fittings	99,000	=Round(B4*0.25,0)	=SUM(B4-C4)
Motor vehicles	3,89,000	=Round(B5*0.20,0)	=SUM(B5-C5)

(4+3)
= 7 mark

ENTREPRENEURSHIP

Time allowed : 3 hours

Maximum Marks : 70

General Instructions:

- (i) *All the questions are compulsory.*
- (ii) *Marks are indicated against each question.*
- (iii) *Questions No.1 to 5 are very short answer questions carrying 1 mark each. Answer to each of these should not exceed 15 words.*
- (iv) *Questions No.6 to 10 are short answer questions carrying 2 marks each. Answer to each of these should not exceed 50 words.*
- (v) *Questions No. 11 to 17 are short answer questions carrying 3 marks each. Answer to each of these should not exceed 75 words.*
- (vi) *Questions No. 18 to 21 are short answer questions carrying 4 marks each. Answer to each of these should not exceed 150 words.*
- (vii) *Questions No. 22 to 24 are long answer questions carrying 6 marks each. Answer to each of these should not exceed 250 words.*

QUESTION PAPER CODE 98

- | | | |
|----|---|---|
| 1. | Harsh plans production of a motor car for the common man at a very low price. Name the characteristic that develops his ideas into a viable and successful project. | 1 |
| 2. | What is 'Brainstorming' ? | 1 |
| 3. | What is meant by 'Usage-Rate' in Inventory Control? | 1 |
| 4. | Name the marketing function which is concerned with transfer of goods from the producer to customer. | 1 |
| 5. | What is meant by 'Operational Level Planning' ? | 1 |
| 6. | Sale of ceiling fans during winter season is a decision prompted by an environmental factor. Name and explain the factor. | 2 |

7. Categorise the following items under different heads of a 'Project Report' : 2
 - (a) Product quality and Product need
 - (b) Skilled, Unskilled and Semi-skilled manpower
 - (c) Quality Control and scope of Research and Development
 - (d) Expenses on advertisement and publicity
8. Explain 'Market Survey and Analysis' as a characteristic of a feasibility plan. 2
9. State any two advantages of debentures from the point of view of the debenture-holders. 2
10. Differentiate between: 2
 - (a) Direct cost and Indirect cost
 - (b) Semi-variable cost and Variable cost
11. Explain any three decisions that have to be taken by an entrepreneur under 'Material Resources' while setting up a small enterprise. 3
12. Explain, with the help of an example, 'ability to perceive and preserve the basic ideas' as a factor in the process of sensing opportunities. 3
13. Explain the concept of 'circulating capital' with the help of an example. 3
14. What is a 'Project Report' ? 3
15. State the advantages of 'Inventory Control'. 3
16. Explain 'Credit Credibility' and 'Healthy Competition' as a social responsibility of an entrepreneur. 3
17. How do changes in technology affect growth? 3
18. Explain, by using any four points, why 'market-assessment' is needed for an entrepreneur. 4
19. Explain, with the help of an example, the concept that states that 'at a particular volume of production of a firm it neither makes a profit nor a loss'. 4

20. State any four functions of Industrial Development Bank of India. 4
21. Explain any four factors which affect the formulation of a financial plan. 4
22. Explain any six idea-fields which act as convenient frames of references for an entrepreneur at the time of generating ideas. 6

OR

Explain any six steps which help in identifying a feasible product or process.

23. State any six objectives of preparing a 'Project Report'. 6

OR

State the uses of a Project Report for

- (i) the entrepreneur
 - (ii) the financial institutions
 - (iii) the Government
24. Himanshi is a small entrepreneur involved in the manufacturing of coolers. She finds that the total cost of production of one unit of cooler is Rs. 3,000. She decided to have a margin of 12% as profit. Determine the sale price of a cooler. Name and explain the method of pricing she has followed. Explain one more method of pricing, specifying its distinguishing features. 6

Marking Scheme — Entrepreneurship

General Instructions

1. The marking scheme carries only suggested value points for the answers. These are only guidelines and do not constitute the complete answer. The students can have their own expression and if the expression is correct, marks will be awarded accordingly.
2. Some of the questions may relate to higher order thinking ability. These questions are to be evaluated carefully and students understanding/analytical ability may be judged (for questions such as 1 and 7)
3. Evaluation is to be done as per instructions provided in the Marking scheme.
4. If a question has parts, please award marks in the right hand side for each part. Marks awarded for different parts of the question should then be totalled up and written in the left hand margin.
5. If a question does not have any parts, marks be awarded in the left hand margin.
6. If a candidate has attempted a question twice. The first answer to be marked & considered.
7. There are few questions on distinction between two concepts. Mark should be given only if the distinction is clearly given.
8. In case of choice type question, if an examinee attempts both the choices, assess the first answer.
9. In a question, if the question asks for two features/characteristics/points but an examinee writes more than two features/characteristics/points, award marks for the first two points written.
10. It is expected that the Marking Scheme should be followed objectively to avoid over strict tendency in marking.
11. Marks should be awarded keeping in view the total marks of that particular question and not the total marks of the question paper.
12. A full scale of marks 0-70 has to be used. Please do not hesitate to award full marks if the answer deserves it. Similarly, wherever an examinee writes answer up to the mark, his/her marks should not be deducted unnecessarily.
13. Answer script's written in English should be evaluated by the examiners teaching in English and answer script's written in Hindi should be evaluated by the examiners teaching in Hindi.

QUESTION PAPER CODE 98

EXPECTED ANSWERS/VALUE POINTS

Ans.1. The characteristic that develops the idea into viable project is (1 x 1 = 1)

- 1) Creativity and vision 1 mark
 - 2) Study of Existing products or services
 - 3) Doing market research and gathering information
- (anyone point or any other suitable expression given by the students.).

Ans.2. Brainstorming - is an instructed discussion done by people in a group. In such (A brief Definition given 1 mark)
a discussion one idea leads to another. This is a very productive method for generating as many ideas as possible

Ans.3. Usage rate in inventory control refers to the average rate at which inventory is (1 mark)
drawn down over a period of time.

Ans.4. Functions of Physical Supply - Transportation/Distribution mix (1 mark)

Ans.5. Operation level planning refers to specific projects and programmes. It may be regarding budgeting, specific event or particular process. The level may vary but the process of planning remains the same. (1 mark)

Ans.6. Economic Factor (1 mark for
Economic factor consists of the economic policies and the general Health of the economy. Details of consumer trends, economic Preferences, costing, discounting etc. are all economic decisions. Coolers and ceiling fans are sold during winter season to clear stock. . stating the factor & 1 mark for Explanation (1+1=2 marks)

Ans.7. a) Economic viability and Marketability (½ mark for
b) Technical Feasibility each process)
c) Technical Feasibility
d) Financial projections (½ x 4=2marks)

Ans.8. Market Survey and Analysis

The entrepreneur should have a high sensitivity of the market. before venturing on an enterprise he should also know the market characteristics. He should be (For a correct explanation of

aware whether the production of a product is viable in the market, what are the customer needs and attributes etc. The feasibility report should carry a convincing analysis of the market trend. the concept given 2 marks)
(2 amrks)

Ans.9 Two advantages of debentures from the point of view of debenture holders are :

- a) Fixed Return (b) Secured (Any two
- c) Period of Maturity is fixed points) 1 mark
- d) Given preference/paid first in case of liquidation of the company for each point
(any two points) 1x2 = 2 marks)

Ans.10 a) Direct Cost refers to all the expenditure that is incurred to ensure the production of the material or service. (1 mark for the correct
For example raw materials, power, wages etc which directly contribute to the product. explanation
(1 mark)

Indirect Cost are expenses which are indirectly attributed to the production like the wages of stores personnel, time keepers advertising, marketing, office management etc.

- b) Semi variable Cost are those which have no relationship with time or quantum of production. They vary disproportionately.

Variable Cost are those which vary with the output, the time and other factors.

For example, the labour required in a factory may vary with the Quantum of production and the man powers required for reaching the target production. (1 mark)
1+1=2 marks

Ans.11 Three decisions taken by an entrepreneur under 'Material Resources' while setting up a small enterprise are:- (Any three) (½ mark for point ½ mark

- a) Size and location for explanation
- b) Manufacturing Process (1x3=3 marks)
- c) Identifying and Purchasing Machinery d) Obtaining Electricity Power.

Ans.12 Factors in the process of sensing opportunities.

1. Ability to Perceive and Preserve basic ideas:- Basic ideas emerge from various sources. These ideas can be categorized as follows:
 - a) Problems:- Solution of a problem is often picked up as an opportunity
E.g. Razor blade was invented with an intention of a sharp nick free and quick shaving.

- b) Change: Any kind of change like social, legal, technological, political etc. usher in new business opportunities e.g. Computer institutes in the present world. (1x3=3 marks)
- c) Inventions:- These involve new things of value and creative processes That add Value to the already prevalent branch or products eg T.V and C.D.players were mode two in one.
- d) Competition:- For getting ahead, the entrepreneur introduces new and improved ideas ego Free utensils with a new branch of tea (Any three Points with explanation)

Ans.13 Working Capital is called the changing or “Circulating Capital”, since the money circulates in various forms of current assets in a continued manner. For example, funds once tied up in the form of raw material are later converted into the form of finished goods which are not ultimately sold. (2 marks for meaning and 1 mark for example) (2+1=3 mark)

Ans.14 Project Report: It is an idea or business plan that is intended to be Carried out.

- a) It has a starting point and ending point with some specific objectives. (3 marks for meaning and
- b) It describes all necessary inputs to the enterprise example)
- c) It explains allocation and mode of utilization of resources. 3 mark
- d) It details the strategies for the execution of the project.
- e) It outlines the desired goals within specified period of time.

Ans.15 Advantages of Inventory Control. (Any three)

- i) It helps in knowing whether materials are readily available for production or use.
- ii) It helps in examining quantity discount for large orders. (1x3=3 marks)
- iii) It helps in ensuring prompt delivery of materials to consumers.
- iv) It helps in stabilizing the fluctuations of demand.

Ans.16 Social Responsibility of an entrepreneur (1½x2=3 marks)

- 1) Credit Credibility: - Adherence to repayment schedules is the prime responsibility of entrepreneurs. It is operated on the basis of trust between lending agencies and entrepreneurs. So there should be utter promptness in meeting the repayment commitment.

- 2) **Healthy Competition:-** Entrepreneur should not adopt the policy of Cutting others or causing damage, but may grow by increasing Efficiency productivity, product quality, design, use and delivery Or even by innovation new products & services.

Ans.17 If an enterprise is not sensitive to change in technology then its technology will become outdated and it has to quit the market. It is mainly because the cost of production will become higher compared to other enterprise. This will lead to decrease in demand of the product. (3 marks for Correct answer)

Ans.18 Market Assessment is needed for an entrepreneur due to the following reasons.

- 1) **Demand Analysis** - To identify the customer, there Economic status and expenditure pattern.
 - 2) **Understand the competition in the market.**- i. e who are the market players, what is their market share. (1x4 points = 4 marks)
 - 3) **Understand the existing trade practices.**
 - 3) **To determine the cost of product and to determine the price of the product.**
 - 4) **To study the existing products and prevailing innovation and changes.**
- (OR any other suitable point stated by the student)

Ans.19 The concept that states that “at a particular volume of production of a firm it neither makes a profit nor a loss” is Break Even Point (1 marks for the name of the concept)

$$\text{BEP} = \frac{\text{Fixed Cost}}{\text{Selling price per unit} - \text{variable cost.}}$$

(2 marks for explanation)

The Break Even Point is the volume of production where a firm neither makes a profit nor a loss.

It is the point where the revenue equals the Total Cost.

For Example - The Fixed Cost incurred in a manufacturing unit of coolers is Rs.30,000 variable cost is Rs.1 000 per unit. Assuming that selling price in Rs. 2,000 per unit. (1 marks for the example)

$$\text{BEP} = \frac{30.000}{2000-1000} = \frac{30.000}{1000} = 30 \text{ units} \quad (1+2+1=4 \text{ mark})$$

(OR any other appropriate explanation of the concept of BEP with an example)

Ans. 20 Four Functions of Industrial Development Bank of India are:

1. Direct Financing
2. Guaranteeing for loans
3. Refinancing
4. Acceptance and discounting of bills. (1 mark for each point written) (1x4 points = 4 marks)
5. Direct Subscriptions and underwriting of securities.
6. Undertake market and investment research and surveys
7. To provide technical and administrative assistance for the promotion and expansion of industry.

Any four points OR Any other points correctly Written keeping in mind the growing role of financial institutions in India

Ans.21 Four Factors affecting the formulation of financial Plan are:

1. Objective - i.e objectives and standards should be clearly expressed as far as possible in quantitative terms.
2. Solvency & liquidity - Funds should be invested in projects likely to give regular return and adequate cash should also be available. (½ mark for point)
3. Optimum Structure - Capital Structure should be balanced and optimum.
4. Simplicity - Financial plan should be simple economical, appropriate and flexible. (½ mark for the explanation)
5. Provision for contingencies - Proper provision should be made for contingencies. (1x4 points = 4 marks)

(Any four points)

Ans.22 Six Idea Fields which act as Convenient frames of references for an entrepreneur at the time of generating ideas are:

1. Natural resources
2. Existing Products or Services (½ mark for the point)
3. Market driven or Demand driven ideas (½ mark for the explanation)
4. Trade related ideas
5. Service Sector ideas 1x6 points = 6 marks
6. Creative Efforts
7. Other Considerations

(Any 6 points and brief explanation of each point)

OR

Six Steps in identifying & a feasible product or service are :

- | | | |
|--|------------------------|--------------------|
| 1. Product and Service Identification | 2. Application and use | (Any 6 steps |
| 3. Level of operation | | points) |
| 4. Cost | | ½ mark for the |
| 5. Competition | | point |
| 6. Technical Complexity | | ½ mark for the |
| 7. Annual Turnover | | explanation |
| (Any 6 steps and a brief explanation of each step) | | 1x6 points=6 marks |

Ans.23 Six objectives of preparing the Project Report are:

1. Identifying the requirement of the resources.
 2. To assess the scope and range of the success of the enterprise before its actual commencement.
 3. To obtain the opinions of experts from various fields.
 4. To enable the licensing of the enterprise by the concerned authorities and Seeking registration for various utilities like water, land, electricity etc.
 5. For Financial appraisal of the project by financial institutions, banks, financial companies etc.
 6. To find the critical components of the project report. (1 mark for each point)
- (OR any other points written by students depicting their understanding of the importance of the Project Report) (1x6 = 6 marks)

OR

“Uses of the project report

- 1) For the Entrepreneur - It helps the entrepreneur in the process of evolving Strategies. It is a blue print that explains to him the idea of the project in Factual terms. It can be interpreted in the form of SWOT analysis.
- 2) For the Financial Institution - The Banks and financial Institutions before extending financial assistance would like to evaluate the feasibility and profitability of the enterprise. They would like to know whether the entrepreneur would be able to generate the necessary funds periodically to repay the premium along with the interest. The appraisal of the project becomes important and the project report facilitates the above. (2 marks for each point explained)

- 3) For the Government - Many statutory and legal requirements can be Executed (2x3=6 marks)
based only on the project report. Land Tax, Sales tax, pollution, Control
Certificate are to be obtained based on the project report only.

The local Municipal Authorities also require the project report to give
Clearance.

Ans.24 Sale Price. of the cooler will be = Rs. 3360

(2 marks for

The Method of pricing followed by her Is “Cost Plus Pricing” method

calculation of

In this method the total cost of the product is first determined.

sale price)

The total cost is the sum of the variable costs and fixed costs

(1 marks for

That are attributable to one unit of the product.

(stating the

Total cost of one unit of cooler = Rs. 3000

pricing method)

Total Margin 12%

(1 marks for

$$\frac{12}{100} \times 3000 = 360$$

explanation)

Sale Price of one unit of cooler Rs. 3360

One more method of pricing that she could have used:

1. Variable Price Method

1 mark for any

2. Market Rate Method

one method

3. Base Price and Discounts Method

mentioned.

4. Skimming Price Method

5. Penetrating Pricing Methods

1 marks for 2 features

Two Features of anyone of the methods mentioned above.

(2+1+1+1+1= 6 mark)