

Marking Scheme
Strictly Confidential
(For Internal and Restricted use only)
Secondary School Examination, 2025
SUBJECT NAME: INFORMATION TECHNOLOGY
(SUBJECT CODE – 402) (PAPER CODE – 89)

General Instructions:-

1	You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully.
2	“Evaluation policy is a confidential policy as it is related to the confidentiality of the examinations conducted, evaluation done and several other aspects. It’s leakage to public in any manner could lead to derailment of the examination system and affect the life and future of millions of candidates. Sharing this policy/document to anyone, publishing in any magazine and printing in News Paper/Website etc. may invite action under various rules of the Board and IPC.”
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. However, while evaluating, answers which are based on latest information or knowledge and/or are innovative, they may be assessed for their correctness otherwise and due marks be awarded to them. In Class-X, while evaluating competency-based questions, please try to understand given answer and even if reply is not from marking scheme but correct competency is enumerated by the candidate, due marks should be awarded.
4	The Marking scheme carries only suggested value points for the answers. These are in the nature of Guidelines only and do not constitute the complete answer. The students can have their own expression and if the expression is correct, the due marks should be awarded accordingly.
5	The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. If there is any variation, the same should be zero after deliberation and discussion. The remaining answer books meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.
6	Evaluators will mark (✓) wherever answer is correct. For wrong answer CROSS ‘X’ will be marked. Evaluators will not put right (✓) while evaluating which gives an impression that answer is correct and no marks are awarded. This is the most common mistake which evaluators are committing.
7	If a question has parts, please award marks on the right-hand margin for each part and underline it. Marks awarded for different parts of the question should then be totalled up and written in the left-hand margin and encircled. This may be followed strictly.
8	If a question does not have any parts, marks must be awarded in the left-hand margin and encircled. This may also be followed strictly.

9	If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out with a note “Extra Question/Extra Attempt” .
10	No marks to be deducted for the cumulative effect of an error. It should be penalized only once.
11	A full scale of marks _____ (example 0 to 80/70/60/50/40/30 marks as given in Question Paper) has to be used. Please do not hesitate to award full marks if the answer deserves it.
12	Every examiner has to necessarily do evaluation work for full working hours i.e., 8 hours every day and evaluate 20 answer books per day in main subjects and 25 answer books per day in other subjects (Details are given in Spot Guidelines). This is in view of the reduced syllabus and number of questions in question paper.
13	<p>Ensure that you do not make the following common types of errors committed by the Examiner in the past: -</p> <ul style="list-style-type: none"> • Leaving answer or part thereof unassessed in an answer book. • Giving more marks for an answer than assigned to it. • Wrong totalling of marks awarded on an answer. • Wrong transfer of marks from the inside pages of the answer book to the title page. • Wrong question wise totalling on the title page. • Wrong totalling of marks of the two columns on the title page. • Wrong grand total. • Marks in words and figures not tallying/not same. • Wrong transfer of marks from the answer book to online award list. • Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line. Same is with the X for incorrect answer.) • Half or a part of answer marked correct and the rest as wrong, but no marks awarded.
14	While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as cross (X) and awarded zero (0) Marks.
15	Any unassessed portion, non-carrying over of marks to the title page, or totalling error detected by the candidate shall damage the prestige of all the personnel engaged in the evaluation work as also of the Board. Hence, in order to uphold the prestige of all concerned, it is again reiterated that the instructions be followed meticulously and judiciously.
16	The Examiners should acquaint themselves with the guidelines given in the “Guidelines for spot Evaluation” before starting the actual evaluation.
17	Every Examiner shall also ensure that all the answers are evaluated, marks carried over to the title page, correctly totalled and written in figures and words.
18	The candidates are entitled to obtain photocopy of the Answer Book on request on payment of the prescribed processing fee. All Examiners/Additional Head Examiners/Head Examiners are once again reminded that they must ensure that evaluation is carried out strictly as per value points for each answer as given in the Marking Scheme.

MARKING SCHEME
Secondary School Examination, 2025
INFORMATION TECHNOLOGY (Subject Code-402)
[Paper Code:89]

Max. Time: 2 Hours

Max. Marks: 50

General Instructions:

- (i) Please read the instructions carefully.
- (ii) This question paper consists of **21** questions in **two** Sections: **Section A** and **Section B**.
- (iii) **Section A** has Objective type questions, whereas **Section B** contains Subjective type questions.
- (iv) Out of the given $(5 + 16) = 21$ questions, a candidate has to answer $(5 + 10) = 15$ questions in the allotted (maximum) time of 2 hours.
- (v) All questions of a particular section must be attempted in the correct order.
- (vi) **Section A: Objective Type Questions (24 marks):**
 - (a) This section has **5** questions.
 - (b) There is no negative marking.
 - (c) Do as per the instructions given.
 - (d) Marks allotted are mentioned against each question/part.
- (vii) **Section B: Subjective Type Questions (26 marks) :**
 - (a) This section has **16** questions.
 - (b) A candidate has to do **10** questions.
 - (c) Do as per the instructions given.
 - (d) Marks allotted are mentioned against each question/part.

Note: If a child has attempted more number of questions than asked for, please refer to point number 9 in General Instructions.

Q. No.	EXPECTED ANSWER / VALUE POINTS	Marks
	SECTION—A	
Q1.	Answer any 4 out of the given 6 questions on Employability Skills.	4×1=4
i)	<p>The school is organizing a Career Counselling Workshop. Which of the following will be the most effective method of communication to inform all students of the school?</p> <p>Ans: (B) Notice/Poster</p> <p style="text-align: center;"><i>(1 mark for correct answer)</i></p>	1
ii)	<p>Which of the following is the most suitable term for the ability to regulate one's own emotions and help others also to do the same?</p> <p>Ans: (A) Managing emotions</p> <p style="text-align: center;"><i>(1 mark for correct answer)</i></p>	1
iii)	<p>Roshin studies in class X and is practising hard with a lot of sample papers to get good marks in her exams. She gets up early in the morning to study and completes her revision work. This is an example of _____.</p> <p>Ans: (B) Self-motivation</p> <p style="text-align: center;"><i>(1 mark for correct answer)</i></p>	1
iv)	<p>A _____ is a location where a group of files can be stored in the computer.</p> <p>Ans: (A) Folder</p> <p style="text-align: center;"><i>(1 mark for correct answer)</i></p>	1

v)	Which of the following is a myth about entrepreneurs? Ans: (B) Every business idea must be unique or special. <i>(1 mark for correct answer)</i>	1
vi)	Which one of the following is the most important factor for sustainable development and helps us become aware of our role as a responsible citizen? Ans: (B) Education <i>(1 mark for correct answer)</i>	1
Q2.	Answer any 5 out of the given 6 questions.	5×1=5
i)	Ravi has to prepare a project report. He wants to save certain formatting features and then apply them on the project report. He can use the _____ feature of OpenOffice Writer. Ans: (A) Styles <i>(1 mark for correct answer)</i>	1
ii)	During a recent excursion, Roshni has taken some pictures for making a report in Writer. She wants to increase the contrast of the images. Which one of the following image filters should she use in Writer? Ans: (C) Sharpen <i>(1 mark for correct answer)</i>	1
iii)	Which one of the following image arrangement options in Writer sends the drawing object behind the text? Ans: (A) To background <i>(1 mark for correct answer)</i>	1
iv)	_____ feature of Writer is based on different types of heading styles and is used to give the listing of the contents of the document. Ans: (D) Table of Contents <i>(1 mark for correct answer)</i>	1
v)	_____ is the default template for the files being created in Writer. Ans: (C) Blank document <i>(1 mark for correct answer)</i>	1
vi)	Shanta is creating a project report in Writer and wants to apply the same style on headings / titles in the entire document as she has done at the beginning of the document. She can use the _____ feature of Writer to apply the same format on each line / word, wherever needed. Ans: (B) Fill Format <i>(1 mark for correct answer)</i>	1
Q3.	Answer any 5 out of the given 6 questions.	5×1=5
i)	To add your own comments in Calc, select _____ → Track changes → Comment. Ans: (B) Edit <i>(1 mark for correct answer)</i>	1

ii)	To add a new sheet in the spreadsheet, click on the _____ sign located at the left bottom of the spreadsheet. Ans: (D) + <i>(1 mark for correct answer)</i>	1
iii)	_____ is a set of values that can be used within the calculations in the spreadsheet to explore and compare various alternatives depending on changing conditions. Ans: (C) What-if Scenarios <i>(1 mark for correct answer)</i>	1
iv)	The recorded macros are actually stored as _____. Ans: (A) a set of instructions in a programming language. <i>(1 mark for any correct answer)</i>	1
v)	Which/(While) creating a hyperlink in calc, if the complete path along with filename is given then it is an example of _____. Ans: (C) Absolute hyperlink <i>(1 mark for correct answer)</i>	1
vi)	This tool in Calc allows you to create a group of cells automatically and apply common functions like sum, average on the grouped data. It is known as _____ tool. Ans: (B) Subtotal <i>(1 mark for correct answer)</i>	1
Q4.	Answer any 5 out of the given 6 questions.	5×1=5
i)	_____ is the database software that is used to create, manipulate and manage data. Ans: (A) Ingress/Ingres <i>(1 mark for correct answer)</i>	1
ii)	The process of arranging data in ascending or descending order is known as _____. Ans: (D) Sorting <i>(1 mark for correct answer)</i>	1
iii)	With reference to LibreOffice Base, which of the following is a valid data type to indicate the monetary values? Ans: (B) Currency <i>(1 mark for correct answer)</i>	1
iv)	Data can be retrieved and displayed from one or more tables in a DBMS using a _____. Ans: (C) Query <i>(1 mark for correct answer)</i>	1
v)	While designing a form, it is suggested to get the date input by adding the _____ to the date field to prevent entering invalid dates. Ans: (A) Calendar <i>(1 mark for correct answer)</i>	1

vi)	While designing a form, titles, headings or sub-headings may be added using _____ tool available on the Form Controls tool box. Ans: (B) Label <i>(1 mark for correct answer)</i>	1
Q5.	Answer any 5 out of the given 6 questions.	5×1=5
i)	_____ is a state of physical, mental and social well-being. Ans: (C) Health <i>(1 mark for correct answer)</i>	1
ii)	Which one of the following is a class B ignition material? Ans: (B) Gas <i>(1 mark for correct answer)</i>	1
iii)	The _____ has prepared the policy to provide employees with a healthy and safe work environment. Ans: (B) DoIT <i>(1 mark for correct answer)</i>	1
iv)	RSI stands for : Ans: (D) Repetitive/Repetition Strain Injury <i>(1 mark for correct answer)</i>	1
v)	_____ is the science that deals with designing and arranging the things at workplace so that people can use them easily and safely. Ans: (B) Ergonomics <i>(1 mark for correct answer)</i>	1
vi)	Which one of the following is a wrong safety guideline? Ans: (C) Wear loose clothing or jewellery while working with machines. <i>(1 mark for correct answer)</i>	1

SECTION - B:
(Subjective Type Questions)

	Answer any 3 out of the given 5 questions on Employability Skills in 20 – 30 words.	3x2 = 6
Q6.	Briefly explain the meaning of any 2 C's out of the 7 C's of effective communication. Ans: 7 C's of effective communication are: (i) Clear/ Clarity : Be clear about what you want to say. (ii) Concise/Conciseness : Use simple words (say only what is needed) (iii) Concrete/Concreteness : Use exact words and facts. (iv) Correct/Correctness : Use correct spelling and grammar. (v) Coherent : Words should make sense and relate to the main topic. (vi) Complete/Completeness : Include all the needed information.	2

	(vii) Courteous/Courtesy: Be respectful, friendly, and honest. <i>(1 mark each for any two correct/relevant explanation)</i>	
Q7.	<p>What is Stress management?</p> <p>Ans: Managing stress is about making a plan to be able to cope effectively with daily pressures. The ultimate goal is to strike a balance between life, work, relationships, relaxation and fun.</p> <p style="text-align: center;">OR</p> <p>ABC of stress management</p> <p>A : Adversity or the stressful event. B : Beliefs or the way you respond to the event. C : Consequences or actions and outcomes of the event.</p> <p style="text-align: center;">OR</p> <p>Stress management refers to a set of techniques, strategies and practices aimed at reducing, coping with and effectively handling the various stressors that individuals encounter in their lives.</p> <p style="text-align: center;">OR</p> <p>Stress management means finding ways to handle stress and stay healthy, both mentally and physically. By doing this, you are able to deal with daily stress triggers and meet these challenges head on.</p> <p style="text-align: center;"><i>(2 marks for any correct/relevant answer)</i></p>	2
Q8.	<p>Give any four tips to keep the computer in perfect working condition.</p> <p>Ans: Tips to keep the computer in perfect working condition are :</p> <ul style="list-style-type: none"> • Uninstall unused programs and apps. • Run disk-cleaner software. • Run full system virus scan. • Run disk defragmentation. • Shut down the computer after use. • Keep your computer clean by wiping off dust from the keyboard and screen. • Keep your computer software/apps updated. • Install licensed antivirus software. • Be careful with food and drinks while working on computer. • Do not overcharge your battery. • Backup your data regularly. • Do not use pirated software. • Do not respond to/open spam emails and unknown links. • Organise photos into folders or albums. <p style="text-align: center;"><i>(1/2 mark each for any four correct/relevant answer)</i></p>	2
Q9.	<p>Mention any four main functions of an entrepreneur.</p> <p>Ans: Functions of an entrepreneur are :</p> <ul style="list-style-type: none"> • Making decisions. • Managing the business/ arranging raw material/hiring people/capital. 	2

	<ul style="list-style-type: none"> • Dividing the income/Buying raw material/Paying rent/Paying salaries. • Taking risk. • Creating a new method/idea/product/employment. <p><i>(1/2 mark each for any four correct/relevant answer)</i></p>	
Q10.	<p>Explain any two problems related to sustainable development.</p> <p>Ans:</p> <p>Problems related to sustainable development are:</p> <ul style="list-style-type: none"> • Food : The amount of rich, fertile land needed to grow crops, such as wheat, rice, etc., is becoming less as we are using up more and more land for other purposes. • Water : We use fresh water from rivers and ponds for drinking and cleaning but dump garbage into them. • Fuel : We are using a lot of wood from trees as fuels and for construction of homes and furniture. As more and more trees are being cut, it is affecting the climate of the place. <p>(Note: Any problem related to 17 SDG's should also be considered.)</p> <p><i>(1 mark each for any two correct/relevant answer)</i></p>	2
	Answer any 4 out of the given 6 questions in 20 – 30 words.	4x2 = 8
Q11.	<p>Out of various style categories provided by Writer, briefly explain Frame style category in brief.</p> <p>Ans:</p> <p>Using frame style, a document can be organised in sections, so that each section of the page can have a different appearance.</p> <p style="text-align: center;">OR</p> <p>Frames are like containers, which can hold text, graphics and lists.</p> <p style="text-align: center;">OR</p> <p>Frame Styles allows to format a frame by specifying its size, position, border and how the text is placed around the picture.</p> <p><i>(2 marks for any correct/relevant answer)</i></p>	2
Q12.	<p>What is a Macro? Give any two rules that should be followed while naming a Macro or module in Calc.</p> <p>Ans:</p> <p>A macro is a single instruction that executes a set of instruction.</p> <p style="text-align: center;">OR</p> <p>The recorded macros are actually stored as a set of instructions in a programming language.</p> <p style="text-align: center;">OR</p> <p>A macro is a set of commands or keystrokes that are stored for later use.</p> <p>Rules for naming a macro are :</p> <p>The name should</p> <ol style="list-style-type: none"> Begin with a letter Not contain spaces Not contain special characters except for (underscore) <p><i>(1 mark for writing correct/relevant definition and 1/2 mark each for any two correct rules)</i></p>	<p>1</p> <p>1</p>

<p>Q13.</p>	<p>What is the main purpose of Goal Seek in Calc ? Give an example to support your answer.</p> <p>Ans:</p> <p>Goal seek helps in finding out the input for the specific output.</p> <p style="text-align: center;">OR</p> <p>Goal seek helps to do backward/reverse calculation to obtain an input that would result in a given output.</p> <p>For example, if you want to know the number of units produced to get the desired output then use Goal seek analysis tool.</p> <p style="text-align: center;"><i>(1 mark for correct/relevant definition and 1 mark for any relevant example)</i></p>	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p>
<p>Q14.</p>	<p>What are the important prerequisites for setting a relationship between two tables in LibreOffice Base? Mention any two.</p> <p>Ans:</p> <p>Important prerequisites for setting a relationship between two tables in LibreOffice Base are :</p> <p>(a) both the tables must have a common column</p> <p>(b) the data type of the common field/column in the table must be the same</p> <p style="text-align: center;"><i>(1 mark each for any correct/relevant answer)</i></p>	<p style="text-align: center;">2</p>
<p>Q15.</p>	<p>For a computer workplace, give any two health and safety requirements while using a keyboard.</p> <p>Ans:</p> <ul style="list-style-type: none"> • The keyboard should tilt and separate from the screen to find a comfortable working position and avoid fatigue in the arms or hands. • The space in front of the keyboard must be sufficient to provide support for the hands and arms of the user • The keyboard should have a matte surface to avoid reflective glare. • The symbols on the keys must be adequately contrasted and legible from the design working position. • Maintain proper posture and wrist positioning to prevent strain. • Do not touch the keyboard with wet hands. • Do not keep food or drinks near the keyboard. <p style="text-align: center;"><i>(1 mark each for any two correct/relevant answer)</i></p>	<p style="text-align: center;">2</p>
<p>Q16.</p>	<p>Excessive use of computers might have a bad impact on your vision. Give any two eye-related problems that might arise due to long hours spent on a computer.</p> <p>Ans:</p> <p>Eye-related problems that might arise due to long hours spent on a computer are:</p> <ul style="list-style-type: none"> • Computer's bright light, glare and flickering images can cause eye strain and visual fatigue. 	<p style="text-align: center;">2</p>

	<ul style="list-style-type: none"> • Computer Vision Syndrome is caused by poor lighting and glare on the computer screen. • When you constantly focus on screen, you forget about blinking your eyes that can cause of drying eyes. • Eye discomfort/ fatigue/ blurry vision/ headaches/ weak eye sight/ itching/ twitching/ colour blindness. <p><i>(1 mark each for any two correct/relevant answer)</i></p>	
	Answer any 3 out of the given 5 questions in 50 – 80 words.	3x4=12
Q17.	<p>(a) What is the benefit of grouping drawing objects in Writer ?</p> <p>(b) Differentiate between text wrapping and image alignment feature in Writer.</p> <p>Ans:</p> <p>(a) LibreOffice Writer allows grouping different shapes, to behave as a single entity without affecting their size and position. Once grouped, all shapes belonging to that group become its member and a change applied on one-member works on all.</p> <p style="text-align: center;">OR</p> <p>Grouping drawing objects in Writer allows users to move, align, resize, and format multiple objects simultaneously.</p> <p>(b) Text Wrapping : It allows the placement of image in relation to text.</p> <p style="text-align: center;">OR</p> <p>Controls how text flows around an image or object.</p> <p>Image alignment : It allows the vertical or horizontal placement of the image with respect to its anchor.</p> <p style="text-align: center;">OR</p> <p>Determines the placement of an image relative to the page or text, such as aligning left, right, or center.</p> <p><i>(2 marks for correct/relevant answer of each part)</i></p>	<p style="text-align: center;">2</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p>
Q18.	<p>Mr. Amit, Sales Manager of ABC Sales Corporation has created a spreadsheet in LibreOffice Calc that lists Sales for different years in different regions in different worksheets. He wants to summarize and make certain decisions based on it. Help him by answering the following questions :</p> <p>(a) Which tool in Calc can be used to combine the sales data from multiple sheets into a single summary sheet ?</p> <p>(b) Name the Menu Option and Sub-Menu Option that can be used to generate combined summary of all the worksheets.</p> <p>(c) Name the function that can be used to display total of all sales.</p> <p>(d) He wants to open a summary document stored at a different location from within the sheet by clicking on a text stored in a cell. How can it be done ?</p> <p>Ans:</p> <p>(a) Consolidate data</p> <p>(b) Data -> Consolidate</p>	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p>

- To prevent Data Inconsistency.
- To maintain Data Accuracy.
- To retrieve data from multiple tables.
- Restricts the user from entering invalid data.
- Any updation in the master table / parent table is automatically reflected in the transaction table/ child table.

(b) Many-to-many relationship : there will be multiple records in the master table that correspond to multiple records in the transaction table.

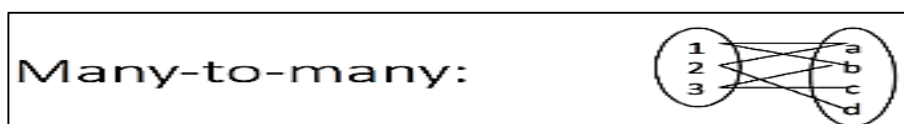
OR

A many-to-many relationship exists when multiple records in one table relate to multiple records in another table.

OR

A many-to-many relationship occurs when a record in Table A can be related to multiple records in Table B.

OR



OR



(2 marks for correct/relevant answer of each part)

Q21.

Consider the following table :

Table : Student

Student_ID	Name	Age	Phone_Number
S001	Amit	15	9876543210
S002	Priya	16	8765432109
S003	Priya	15	7654321098

Answer the following questions :

- You are given the task to design the student database for your school in LibreOffice Base. Based on the given table structure, suggest the datatype of student_id and age field that would be suitable to store student's-id and age respectively.
- As a database administrator, you need to ensure each student has a unique identifier. Which field in the table would you choose as the primary key and why ?
- Identify the field that can serve as an alternate key. Justify your answer.
- How many attributes and records are present in the above shown table ?

	<p>Ans:</p> <p>(a) Suitable Datatype</p> <ul style="list-style-type: none"> • Student_ID : Char/ Varchar/ Longvarchar • Age : Integer/ Tinyint/ Smallint/ Bigint/ Numeric <p>(b) Primary Key: Student_ID or Phone_Number.</p> <p>It uniquely identifies each student in the table.</p> <p style="text-align: center;">OR</p> <p>No two students have the same Student_ID/ Phone_Number.</p> <p>(c) If Primary Key: Student_ID then Alternate Key Phone_Number</p> <p style="text-align: center;">OR</p> <p>If Primary Key: Phone_Number then Alternate Key Student_ID</p> <p>(d) Attributes : 4</p> <p>Records : 3</p> <p style="text-align: center;"><i>(1 mark each for correct answer of each part)</i></p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p>
--	---	---
