

Marking Scheme
Strictly Confidential
(For Internal and Restricted use only)
Secondary School Examination, 2026
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, 2026
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 (Objective Type Questions) (24 Marks)		
1.	Answer any 4 out of the given 6 questions on Employability Skills.	4×1=4
(i)	Identify the imperative sentence: Ans: (A) Shut the front door. <i>(1 mark for correct answer)</i>	1
(ii)	Breaking down big goals into smaller parts will make the goals _____. Ans: (C) achievable <i>(1 mark for correct answer)</i>	1
(iii)	Define the term 'Time Management'. Ans: Time management is the ability to plan and control how you spend the hours of your day well and do all that you want to do. OR Time management means planning and organizing your time properly so that you can complete your work on time without stress. OR Time management includes making a daily study timetable, giving more time to difficult subjects, avoiding distractions like excessive mobile use, and finishing	1

	homework before deadlines. <i>(1 mark for correct/relevant answer)</i>	
(iv)	What should a strong password consist of? Ans: (D) Letters, numbers and special characters <i>(1 mark for correct answer)</i>	1
(v)	A misconception about an entrepreneur is: Entrepreneurs are _____ not _____. Ans: born not made OR rich not poor <i>(1 mark for any correct answer)</i>	1
(vi)	Choose the option which is <i>not</i> a Sustainable Development Goal according to the United Nations. Ans: (A) Population <i>(1 mark for correct answer)</i>	1
2.	Answer any 5 out of the given 6 questions.	5×1=5
(i)	Ramesh wants to apply a specific paragraph style to multiple non-contiguous sections of his document. Which feature of LibreOffice Writer should he use to avoid manually applying the style each time? Ans: (B) Fill Format <i>(1 mark for correct answer)</i>	1
(ii)	While working with images in LibreOffice Writer, _____ acts as a reference point for image or drawing. Ans: (C) Anchoring <i>(1 mark for correct answer)</i>	1
(iii)	Which of the following style categories in LibreOffice Writer is used to define layout elements such as margins, headers, and footers? Ans: (B) Page Style <i>(1 mark for correct answer)</i>	1
(iv)	LibreOffice Writer supports up to _____ levels of headings. Ans: (B) 10 <i>(1 mark for correct answer)</i>	1
(v)	Which of the following image tools is used to change the image to black and white, grayscale or a watermark? Ans: (B) Image Mode <i>(1 mark for correct answer)</i>	1
(vi)	A _____ is a preset layout that helps to create professional and/or formal documents easily. Ans: (A) Template <i>(1 mark for correct answer)</i>	1

3.	Answer any 5 out of the given 6 questions.	5×1=5
(i)	<p>Ravi is analysing monthly sales data in Calc. He wants to test how changing the discount rate affects total revenue. Which feature should he use to simulate different outcomes?</p> <p>Ans: (C) What-if Scenarios (1 mark for correct answer)</p>	1
(ii)	<p>While reviewing a shared spreadsheet, Priya notices that some cells have been modified, but she's unsure who made the changes. Which feature should she use to identify the editor?</p> <p>Ans: (B) Track Changes (1 mark for correct answer)</p>	1
(iii)	<p>Which of the following is the correct way to record a macro in LibreOffice Calc?</p> <p>Ans: (A) Tools → Macros → Record Macro (1 mark for correct answer)</p>	1
(iv)	<p>Which one of the following is the default function when a Consolidate dialog box opens in LibreOffice Calc?</p> <p>Ans: (B) Sum (1 mark for any correct answer)</p>	1
(v)	<p>Which Calc feature allows multiple users to suggest edits while preserving the original data?</p> <p>Ans: (D) Insert Comments (1 mark for correct answer)</p>	1
(vi)	<p>In Calc, which of the following types of hyperlink uses the complete location where the file to be linked is stored?</p> <p>Ans: (A) Absolute hyperlink (1 mark for correct answer)</p>	1
4.	Answer any 5 out of the given 6 questions.	5×1=5
(i)	<p>In a database, a form is _____.</p> <p>Ans: (B) an object with a user-friendly interface for data entry (1 mark for correct answer)</p>	1
(ii)	<p>Which of the following is an example of a DBMS?</p> <p>Ans: (B) MySQL (1 mark for correct answer)</p>	1
(iii)	<p>While forming a relationship between two tables in LibreOffice Base, the _____ of the common field must be _____.</p> <p>Ans: (B) data type, same (1 mark for correct answer)</p>	1

(iv)	Which of the following advantages of DBMS ensures that changes in data are reflected across all tables? Ans: (C) Data Consistency <i>(1 mark for correct answer)</i>	1
(v)	Which of the following best explains the use of a query in LibreOffice Base? Ans: (B) To retrieve data from the database and display it in the desired format <i>(1 mark for correct answer)</i>	1
(vi)	In _____ Data Model, the data is stored in the form of linked records, organised into a tree-like structure. Ans: (D) Hierarchical <i>(1 mark for correct answer)</i>	1
5.	Answer any 5 out of the given 6 questions.	5×1=5
(i)	Arjun notices that his colleague frequently complains of neck pain and sore shoulders after long working hours. Which of the following is the most likely cause? Ans: (B) Improper ergonomic setup <i>(1 mark for correct answer)</i>	1
(ii)	Which of the following types of fire extinguishers should <i>not</i> be used to extinguish an electrical fire? Ans: (B) Mechanical foam <i>(1 mark for correct answer)</i>	1
(iii)	Which of the following is the correct typing posture? Ans: (A) Fingers should be above the home position (asdf and jkl; keys) on the keyboard, when your elbows are by your sides <i>(1 mark for correct answer)</i>	1
(iv)	A company mandates regular breaks, provides adjustable desks, and encourages hydration for its employees. What is the primary objective of these policies? Ans: (C) To promote employees' health and safety <i>(1 mark for correct answer)</i>	1
(v)	Which type of hazards are most common in the manufacturing and pharmaceutical industries? Ans: (B) Biological and chemical hazards <i>(1 mark for correct answer)</i>	1

(vi)	<p>Materials are classified by risk of catching fire. Which of the following falls in the category of Class B materials?</p> <p>Ans: (C) Grease</p> <p><i>(1 mark for correct answer)</i></p>	1
<p style="text-align: center;">SECTION - B: (Subjective Type Questions)</p>		
	<p>Answer any 3 out of the given 5 questions on Employability Skills in 20 - 30 words.</p>	3x2 = 6
6.	<p>Write the 7 C's of Communication.</p> <p>Ans: <i>7 C's of communication are:</i></p> <ul style="list-style-type: none"> (i) Clear/ Clarity (ii) Concise/Conciseness (iii) Concrete/Concreteness (iv) Correct/Correctness (v) Coherent/Coherence (vi) Complete/Completeness (vii) Courteous/Courtesy <p><i>(1 mark each for any two correct/relevant answer)</i></p>	2
7.	<p>(a) What is emotional intelligence?</p> <p>(b) Name any two skills included in emotional intelligence.</p> <p>Ans: (a) Emotional intelligence is the ability to identify and manage one's own emotions as well as the emotions of others.</p> <p style="text-align: center;">OR</p> <p>Emotional Intelligence is the ability to handle your feelings positively and respecting the emotions of people around you.</p> <p><i>(1 mark for any correct/relevant answer)</i></p> <p>(b) Skills included in emotional intelligence are:</p> <ul style="list-style-type: none"> • Emotional awareness • Managing emotions • Harnessing emotions • Self-Awareness • Motivation • Empathy • Social Skills etc. <p><i>(1/2 mark each for any two correct/relevant answer)</i></p>	1+1
8.	<p>How do ICT skills help us in our day-to-day activities?</p> <p>Ans: ICT skills helps us to communicate, run our business and stay connected with our family and friends. Every person needs to acquire ICT skills and build them to stay updated with the</p>	2

	<p>latest software and applications.</p> <p style="text-align: center;">OR</p> <p>ICT skills help us in communication, Education and Learning, Online Services (shopping, reservations, payments, banking etc.), Improve Work Efficiency and find information easily.</p> <p style="text-align: center;"><i>(2 marks for any correct/relevant answer)</i></p>	
9.	<p>State the qualities to become a successful entrepreneur.</p> <p>Ans:</p> <p>Qualities to become a successful entrepreneur are:</p> <ul style="list-style-type: none"> • Confident • Keep trying new idea • Patience • Creative/ Innovative • Responsible • Hardworking • Problem solving • Risk Taking • Leadership Skills • Decision Making etc. <p style="text-align: center;"><i>(1 mark each for any two correct/relevant answer)</i></p>	2
10.	<p>Define the term 'Sustainable Development'.</p> <p>Ans:</p> <p>Sustainable development is the development that satisfies the need of the present without compromising the capacity of future generations, guaranteeing the balance between economic growth, care for the environment and social well-being.</p> <p style="text-align: center;">OR</p> <p>Sustainable development means using resources wisely today so that future generations can also meet their needs.</p> <p style="text-align: center;">OR</p> <p>Sustainable development is development that supports economic progress without harming natural resources for the future.</p> <p style="text-align: center;">OR</p> <p>Sustainable development means improving quality of life while conserving resources for coming generations.</p> <p style="text-align: center;">OR</p> <p>Sustainable development is responsible development/consumption that maintains environmental balance along with social and economic growth.</p> <p style="text-align: center;">OR</p> <p>Sustainable development means attaining any of the 17 SDGs (like No poverty, Quality education etc.)</p> <p style="text-align: center;"><i>(2 marks for any correct/relevant answer)</i></p>	2
	Answer any 4 out of the given 6 questions in 20 – 30 words.	4x2 = 8
11.	<p>What is the significance of the Table of Contents feature in LibreOffice Writer? Discuss briefly.</p> <p>Ans:</p> <p>Table of Contents, allows to insert an automated table of contents/index in a document. The entries or contents of this table are automatically taken from the</p>	2

	<p>headings and sub headings of the document. Also, these contents are hyperlinked in the table. So by clicking on any topic in the table of contents, we can navigate directly to the selected topic.</p> <p style="text-align: center;"><i>(2 mark for the correct/relevant answer)</i></p> <p style="text-align: center;">OR</p> <p>Significance of Table of Contents are:</p> <ul style="list-style-type: none"> • Easy Navigation – It helps readers quickly find different sections or topics in the document. • Saves Time – Users can directly click on headings to jump to a specific page. • Professional Appearance – It gives the document a neat, structured, and formal look. • Automatic Updating – When headings or page numbers change, the TOC is updated automatically. • Useful for Long Documents – Such as projects, reports, books etc. <p style="text-align: center;"><i>(1/2 mark each for any two correct/relevant significance and 1 mark for writing correct/relevant explanation)</i></p>	
12.	<p>Briefly explain the purpose of the Subtotal tool in the LibreOffice Calc software.</p> <p>Ans:</p> <p>The Subtotal tool in Calc creates the group automatically and applies common functions like sum, average on the grouped data. One can use any type of summary function for each column as per the requirements of data analysis. It can group subtotals by using category and sorts them in ascending or descending order so that one need not to use filters.</p> <p style="text-align: center;">OR</p> <p>Purpose of Subtotal in LibreOffice Calc is to calculate summary values (like sum, average, count, etc.) for grouped data in a worksheet.</p> <p style="text-align: center;">OR</p> <p>Subtotals is a feature of LibreOffice Calc software to group the data and perform functions (like sum, average, count, etc.) on the groups which help us to analyze data and saves time.</p> <p style="text-align: center;"><i>(2 mark for any correct/relevant answer)</i></p>	2
13.	<p>Give any two prerequisites before consolidating data in Calc.</p> <p>Ans:</p> <p>Two prerequisites before consolidating data in Calc are:</p> <ul style="list-style-type: none"> • The corresponding data types should match in all sheets to be consolidated. • All the tables used for consolidation should be consistent across all sheets. • Match the labels from all the sheets which are used for consolidating. • Enter the first column as the primary column on the basis of which the data is to be consolidated. <p style="text-align: center;"><i>(1 mark for any two correct/relevant answer)</i></p>	2
14.	<p>How are data and information different from each other? Explain with an appropriate example.</p>	2

	<p>Ans:</p> <table><tr><th>Data</th><th>Information</th></tr><tr><td>Raw facts, unprocessed and meaningless on their own. For Example: Marks obtained by students and their roll numbers are the data.</td><td>Processed data that is meaningful and useful. For Example: The report card/ sheet is the information.</td></tr></table> <p><i>(1 mark for any relevant difference and 1 mark for any relevant example)</i></p>	Data	Information	Raw facts, unprocessed and meaningless on their own. For Example: Marks obtained by students and their roll numbers are the data.	Processed data that is meaningful and useful. For Example: The report card/ sheet is the information.	
Data	Information					
Raw facts, unprocessed and meaningless on their own. For Example: Marks obtained by students and their roll numbers are the data.	Processed data that is meaningful and useful. For Example: The report card/ sheet is the information.					
15.	<p>List two common causes of electrical accidents at the workplace. State any one measure to prevent them.</p> <p>Ans:</p> <p>Common causes of electrical accidents at the workplace are:</p> <ul style="list-style-type: none">• Exposed or worn-out wiring• Overloading of electrical outlets• Damaged or faulty electrical wires• Faulty or poorly maintained electrical equipment• Wet hands or working in damp conditions• Lack of proper earthing (grounding)• Using electrical appliances with loose connections• Lack of safety precautions or negligence• Using Substandard/ low-quality wires/ electrical Equipment• Ignoring signage/ warning signs (like sparks, burning smell, or frequent tripping of MCB etc.)• Unauthorized repairs or untrained handling of electrical systems etc. <p>Preventive Measures:</p> <ul style="list-style-type: none">• Electrical technicians and engineers should carry out routine inspections of all wiring to make sure there are no damaged or broken wires• Replace damaged or exposed wires immediately• Ensure proper earthing (grounding) of all electrical equipment• Install MCB for circuit protection• Avoid overloading electrical sockets• Switch off the main power supply before repair or maintenance work• Do not handle electrical appliances with wet hands• Use insulated gloves and proper safety tools while working• Use ISI-marked and standard quality electrical equipment• Provide safety training and awareness to employees• Display warning signs near high-voltage areas etc. <p><i>(1/2 mark each for any two correct/relevant causes and 1 mark for any one correct/ relevant preventive measure)</i></p>	2				
16.	<p>Briefly explain any two general emergency handling procedures at the workplace.</p> <p>Ans:</p> <p>General emergency handling procedures at the workplace are :</p> <ul style="list-style-type: none">• First Aid : Accessible supplies to treat minor injuries such as cuts, burns, headaches and muscle cramps	2				

	<ul style="list-style-type: none">• Electrical Safety : Routine inspection of electrical devices• Evacuation : Safely leaving the premises during an emergency under guidance• Employees must be provided instructions about electrical safety• Keep a list of numbers to call during emergency• Place fire alarms/ fire extinguishers at various locations• Never place any objects near the emergency doors or windows• Conduct regular mock drills• Do not panic• Do not spread rumours• If possible, assist the person with disability to move towards the exit• Do not use the escalators or elevators (lifts), use the stairs/ emergency exit instead• If required, call for an ambulance <p>(1 mark each for any two correct/relevant answer)</p>									
	Answer any 3 out of the given 5 questions in 50 – 80 words.	3x4=12								
17.	<p>You are designing a digital brochure for a school event in LibreOffice Writer.</p> <p>(a) Mention any four ways by which an image file stored on the computer can be inserted into a document.</p> <p>(b) How do the “Wrap Off” and “Wrap Through” text wrapping options differ when placing images alongside text in Writer?</p> <p>Ans:</p> <p>(a) The image file stored on the computer, can be inserted into a document by following ways:</p> <ul style="list-style-type: none">• Using Insert Image dialog• Using Drag and Drop option• Using Cut, Copy and Paste option• By linking• Using Gallery option <p>(1/2 mark each for any four correct/relevant answer)</p> <p>(b)</p> <table><tr><th>Wrap Off</th><th>Wrap Through</th></tr><tr><td>Text is placed above and below the image.</td><td>Superimposes the image on the text.</td></tr><tr><td>OR</td><td>OR</td></tr><tr><td>It means no wrap or no change.</td><td>The image floats over the text and hides the text.</td></tr></table> <p>(2 marks for any correct/relevant answer)</p>	Wrap Off	Wrap Through	Text is placed above and below the image.	Superimposes the image on the text.	OR	OR	It means no wrap or no change.	The image floats over the text and hides the text.	2+2
Wrap Off	Wrap Through									
Text is placed above and below the image.	Superimposes the image on the text.									
OR	OR									
It means no wrap or no change.	The image floats over the text and hides the text.									
18.	<p>Mr. Prasanna, a General Manager in a multinational company, has been given two spreadsheets : an original billing file Bill.ods and a reviewed version of the same spreadsheet Rev_Bill.ods. Both contain customer billing details prepared by different teams. Write the steps he should follow to compare these worksheets and identify the differences between them.</p>	4								

	<p>Ans:</p> <ol style="list-style-type: none"> 1. Open the spreadsheet file Bill.ods. 2. Click on Edit → Track Changes → Compare Document 3. In the Compare to dialog window, select the spreadsheet file Rev_Bill.ods to be compared. Click the Open button. 4. The Manage Changes dialog window will appear to accept or reject the changes. After reviewing the changes, click the Close button to close the Manage Changes dialog window. <p style="text-align: center;"><i>(1 mark for each correct step)</i></p>	
19.	<p>With reference to DBMS, answer the following questions:</p> <ol style="list-style-type: none"> (a) What is the purpose of using reports in DBMS? (b) Can we generate a report from multiple tables in a database? (c) What is a dynamic report? (d) In LibreOffice Base, to insert the current date and time in a report, the steps to be followed are : <p>Step 1 : Click inside the Page Header area to activate it.</p> <p>Step 2 : Click _____ > _____</p> <p>However, the correct menu item and option names are missing. Identify the correct menu item and option name needed to complete this task.</p> <p>Ans:</p> <ol style="list-style-type: none"> (a) A report is one of the useful features of a database management system to present the retrieved data in an attractive and customized manner. <p style="text-align: center;">OR</p> <p>Reports are used to present data in a well-organized/summarized, formatted/uneditable, and printable form for analysis and decision-making.</p> <ol style="list-style-type: none"> (b) Yes (c) A report in which, as the field values in the base table or query change, the report also changes automatically. <p style="text-align: center;">OR</p> <p>Any changes or updates made even after the report has been generated will be reflected whenever the report is refreshed or reloaded.</p> <ol style="list-style-type: none"> (d) Insert, Date and Time. <p style="text-align: center;"><i>(1 mark for correct/relevant answer of each part)</i></p>	1+1+1+1
20.	<p>Answer the following questions in the context of Workplace Safety :</p> <ol style="list-style-type: none"> (a) Mention any two health hazards caused by a high contrast between the computer screen and its surroundings. (b) Suggest one way to avoid contrast problems caused by bright light sources behind the display screen. (c) How can poor sitting posture while using a computer, affect a person's health? (d) Mention any one way to reduce stress at the workplace. 	1+1+1+1

	<p>Ans:</p> <p>(a) Eye Fatigue, Eye Strain, Dry Eyes, Watery Eyes, Blurred Vision, Headache, Mental Fatigue, Stress, Burnout etc. (any two)</p> <p>(b) Ways to avoid contrast problems are: (any one)</p> <ul style="list-style-type: none"> • Use blinds or drapes on windows to eliminate bright light • Use well-distributed diffuse light • Blinds and furniture placement should be adjusted to allow light into the room, but not directly into your field of view • Use indirect or shielded lighting where possible and avoid intense or uneven lighting in your field of vision • Ensure that lamps have glare shields or shades to direct light away from your line of sight • Reorient the workstation so bright lights from open windows are at correct angles with the computer screen • Rearrange the desk or monitor at a proper distance from bright light sources. • Adjust screen brightness to match room lighting • Attach an anti-glare filter/screen to reduce reflections on the monitor <p>(c) Pain, Strain, Headache, Muscle stiffness, Spinal problems, Wrist and Hand Problems, Poor Blood Circulation etc. (any one)</p> <p>(d) Way to reduce stress are: (any one)</p> <ul style="list-style-type: none"> • Conflict resolution with colleagues • Relaxing hobbies for stress relief against long working hours • Plan Your Work Properly • Take Short Breaks • Maintain Healthy Communication • Practice Deep Breathing or Meditation • Avoid Overloading Yourself • Maintain Work-Life Balance • Exercise Regularly • Keep a Positive Attitude • Organize Your Workspace • Get Proper Sleep etc. <p><i>(1 mark for correct/relevant answer for each part)</i></p>	
21.	<p>An electronic gadget shop keeps records of its electronic products, such as mobile phones, laptops, etc., in a table named Gadgets, which has columns for ItemID (Primary key), ItemType (mobile, iPad, Laptop), Size, Quantity, Price and Supplier.</p> <p>It also stores the billing data in another table named Bill, which has columns as BillNo (Primary key), ItemID, Price, CustName and CustPhoneNo.</p> <p>Based on the above, answer the following questions :</p> <p>(a) Name any two columns of the Gadgets table where duplicate values are allowed.</p>	1+1+1+1

	<p>(b) Assume that the table Gadgets already contains a product having value of ItemID as I001. Can we enter a new record with value of ItemID as I001? Justify.</p> <p>(c) Is it possible to store photos of the products in a new column of the table, Gadgets? If yes, then suggest a suitable data type to store images.</p> <p>(d) Briefly explain the principle of referential integrity with respect to the tables, Gadgets and Bill.</p> <p>Ans:</p> <p>(a) ItemType, Size, Quantity, Price, Supplier (any two)</p> <p>(b) No, because ItemID is a primary key in Gadget table.</p> <p>(c) Yes, BINARY/ LONGVARBINARY</p> <p>(d) According to the principle of referential integrity, no unmatched foreign key values should exist in the database. Therefore, if a record of any ItemID is not present in the Gadgets table, then it should not be present in the Bill table.</p> <p style="text-align: center;">OR</p> <p>Referential integrity is a rule in a database that ensures data in related tables remains consistent and valid.</p> <p style="text-align: center;">OR</p> <p>It means that a foreign key in one table must match a primary key in another table.</p> <p style="text-align: center;"><i>(1 mark for correct/relevant answer for each part)</i></p>	
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