

MODEL TEST PAPER

Max. Time: 2 Hours

Max. Marks: 50

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of **21 questions** in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **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.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A – Objective Type Questions (24 Marks):**
 - (i) This section has 05 questions.
 - (ii) Marks allotted are mentioned against each question/part.
 - (iii) There is no negative marking.
 - (iv) Do as per the instructions given.
7. **SECTION B – Subjective Type Questions (26 Marks):**
 - (i) This section has 16 questions.
 - (ii) A candidate has to do 10 questions.
 - (iii) Do as per the instructions given.
 - (iv) Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

1. Answer any 4 out of the given 6 questions on Employability Skills (1 × 4 = 4 marks)
 - (i) Which of the following is not a punctuation mark? (1)
(a) Full stop (b) Comma (c) Colon (d) Verb
Ans. (d) Verb
 - (ii) A program that tells the computer what to do is known as— (1)
(a) Software (b) Hardware (c) Firmware (d) Liveware
Ans. (a) Software
 - (iii) Identify the renewable source of energy from the following: (1)
(a) Fossil Fuel (b) Minerals (c) Hydropower (d) Phosphates
Ans. (c) Hydropower
 - (iv) The enterprises that buy manufactured goods and sell them further are known as (1)
companies.
(a) Manufacturing (b) Merchandise (c) Service (d) Hybrid
Ans. (b) Merchandise
 - (v) 'Dreaming and striving to achieve the dream' refers to Skills. (1)
(a) Self-Motivation (b) Self-Regulation (c) Self-Awareness (d) Self-Management
Ans. (a) Self-Motivation
 - (vi) Sahib, an IT professional, has a month to complete a website design project showcasing his coding skills. He wants to effectively manage his time, resources and tasks. Consider the following scenario:
What would be the most effective strategy for Sahib to demonstrate self-management skills in completing the IT project? (1)
(a) Working on the project continuously without breaks.
(b) Creating a detailed project plan with deadlines for each stage.
(c) Relying solely on his existing knowledge without seeking external resources.
(d) Addressing challenges only when they arise without proactive problem-solving.
Ans. (b) Creating a detailed project plan with deadlines for each stage.

2. Answer any 5 out of the given 6 questions

(1 × 5 = 5 marks)

(i) Share Spreadsheet is available under which of the following menu?

- (a) View (b) Tools (c) Data (d) Styles

Ans. (b) Tools

(ii) Which of the following is referred to as 'tuples' in RDBMS?

- (a) Columns (b) Fields (c) Rows (d) All of these

Ans. (c) Rows

(iii) The benefit(s) of a healthy workplace is—

- (a) Increases absenteeism (b) Increases employee morale
(c) Improves Company image (d) Both (b) and (c)

Ans. (d) Both (b) and (c)

(iv) Modifying an image does not include:

- (a) Resizing (b) Rotating (c) Cropping (d) Creating template

Ans. (d) Creating template

(v) Which of the following helps to manage stress effectively?

- (a) Workload (b) Ignoring the problem
(c) Avoiding sleep (d) Exercising

Ans. (d) Exercising

(vi) Teachers teaching students demonstrates which type of relationship?

- (a) One-to-One (b) One-to-Many (c) Many-to-One (d) Many-to-Many

Ans. (d) Many to Many

3. Answer any 5 out of the given 6 questions

(1 × 5 = 5 marks)

(i) DELETE command is a DML query. (True/False)

Ans. True

(ii) The flow of text around an image is known as

Ans. Text Wrapping

(iii) Which symbol is used in LibreOffice Calc to insert a new sheet after the default sheet?

- (a) * (b) + (c) X (d) None of these

Ans. (b) +

(iv) A statement or command that fetches records as the output about an entity is called a (1)

Ans. Query

(v) method saves a copy of the image file in a Writer document. (1)

Ans. Drag-and-Drop

(vi) In which menu would you find the Goal Seek option in Calc? (1)

- (a) Data (b) Tools (c) Insert (d) View

Ans. (b) Tools

4. Answer any 5 out of the given 6 questions

(1 × 5 = 5 marks)

(i) LibreOffice Calc offers types of What-If Analysis tools. (1)

Ans. Three

(ii) Goal Seek tool requires parameters such as (1)

- (a) Target value (b) Scenario (c) Constraints (d) Objective function

Ans. (a) Target value

(iii) Safety at workplace is of utmost importance to maintain social, mental and physical wellbeing of employees. (True/False) (1)

Ans. True

(iv) Styles affect numbered and bulleted lists. (1)

Ans. List

(v) An application knows how to establish connection with a/an data source. (1)

- (a) Registered (b) Installed (c) Embedded (d) All of these

Ans. (c) Embedded

(vi) is a technique to examine the changes done in a shared spreadsheet. (1)

Ans. Track Changes

5. Answer any 5 out of the given 6 questions

(1 × 5 = 5 marks)

(i) hazards refer to an illness or injury one might receive while performing their duty. (1)

Ans. Occupational

(ii) SOP stands for (1)

Ans. Standard Operating Procedure

(iii) By default, how many levels of headings are available in LibreOffice Writer for a Table of Contents? (1)

- (a) 3 (b) 5 (c) 10 (d) 4

Ans. (c) 10

(iv) Arithmetic Operation =Sum(3,5) results in (1)

Ans. Error

(v) Which of the following is not a data type in DBMS? (1)

- (a) Integer (b) String (c) Boolean (d) Date

Ans. (b) String

(vi) The file extension for LibreOffice Calc is (1)

- (a) .odt (b) .ods (c) .xls (d) .doc

Ans. (b) .ods

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills

(2 × 3 = 6 marks)

Answer each question in 20 – 30 words

6. Describe the ABC of Stress Management. (2)

Ans. Managing stress is about making a plan to cope effectively with daily pressures. The ultimate goal is to strike a balance between life, work, relationships, relaxation and fun. By doing this, you can deal with daily stress triggers and meet these challenges head on. Always keep in mind the ABC of stress management:

A: Adversity or stressful event

B: Beliefs or the way you respond to the event

C: Consequences or outcomes of the event

7. "Having sufficient funds is the only criterion to start a business." Do you agree with the statement? Justify your answer. (2)

Ans. It is possible to start a business without significant amount of money but it may require creativity, resourcefulness and hard work. Some businesses such as service-based businesses or online ventures can be started with minimal investment. But in either case, hard work and determination important.

8. How does IT help in meeting SDGs? (2)

Ans. IT's contribution to the Sustainable Development Goals starts with SDG 9: Building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation. IT helps countries deploy broadband connectivity and develop ICT applications to facilitate the provision of free or low-cost digital access for schools, hospitals and the underprivileged population. IT supports countries in achieving SDG 9 (specifically SDG Target 9(C) by enabling access to the internet and other ICTs.

9. Imagine you are a student working on a group project in your IT class. The project requires effective communication among team members. However, you notice that there are some barriers hindering the communication process.

Identify two common barriers to effective communication in a group project scenario and suggest one solution for each barrier. (2)

Ans. 1. Lack of Clear Roles and Responsibilities:

- **Explanation:** When team members are unclear about their roles and responsibilities, it can lead to confusion and miscommunication.
- **Solution:** Establish a project kick-off meeting where each team member's role is clearly defined. Create a document outlining the responsibilities and expectations. Regularly revisit and update this document as the project progresses.

2. Ineffective Communication Channels:

- **Explanation:** Relying solely on one communication channel (e.g., email) may hinder effective communication as important messages may be overlooked or delayed.
- **Solution:** Implement a diverse set of communication channels such as messaging apps, video conferencing and project management tools. Clearly communicate which channel to use for different types of communication, ensuring timely and efficient information exchange.

10. Write any two methods by which a computer virus may spread. (2)

Ans. The two methods by which a computer virus may spread are:

- (a) Email attachments (b) Removable Media.

Answer any 4 out of the given 6 questions in 20-30 words each

(2 × 4 = 8 marks)

11. Explain DDL and DML in the context of database. (2)

Ans. DDL is **Data Definition Language** which is used to create and modify the structure of database objects such as tables, databases, etc., for example, create table, alter table, drop database, etc.

DML is Data Manipulation Language which is used to manipulate data itself and it works on the data (records) in a table, for example, insert, update, delete.

12. What is ToC? Write its advantage. (2)

Ans. The Table of Contents (ToC) feature of Writer lets you build an automated table of contents from the headings in your document. Before you start, make sure that the headings are styled consistently. For example, you can use the Heading 1 Style for chapter titles and the Heading 2 or Heading 3 Styles for chapter subheadings. The advantage of Table of Contents is that it makes it easier for users/readers to navigate through different sections of their content.

13. Differentiate between Relative and Absolute Hyperlinking in LibreOffice Calc. (2)

Ans. An absolute hyperlink will stop working only if the target is moved. A relative hyperlink will stop working only if the start and target locations change, relative to each other. For instance, if you have two spreadsheets linked to each other in the same folder and you move the entire folder to a new location, a relative hyperlink will not break. To change the way that LibreOffice saves the hyperlinks in your file, select Tools → Options → Load/Save → General and choose if you want the URLs saved relatively when referencing the file system, or the internet or both. You can insert and modify links using the Hyperlink dialog box.

14. List some common types of accidents at workplace. (2)

Ans. The common types of workplace accidents are as follows—

- (a) Fire (b) Slips and fall accidents
(c) Exposure to harmful substances (d) Contact with harmful objects or equipment

15. What are the different categories of emergencies? (2)

Ans. The three different categories of emergencies are—

- (i) Natural (ii) Work-related
(iii) External

16. Explain the concept of data consolidation with the help of an example. (2)

Ans. Data consolidation allows you to gather your data from separate worksheets into a master worksheet. In other words, the Data Consolidation function takes data from a series of worksheets or workbooks and summarizes it into a single worksheet that you can update easily.

For example: Annual Performance Result sheet is created by consolidating marks scored by a student in UT-I, UT-II, Half-Yearly and Final Examination, respectively. This can be achieved using Data Consolidation tool by adding the marks from the respective worksheets holding the marks in UTs and half-yearly and finally consolidating to a new sheet titled 'Annual Marksheet'.

Answer any 3 out of the given 5 questions in 50-80 words each

(4 × 3 = 12 marks)

17. In a manufacturing unit, a worker suffers an injury while operating a machine. The incident prompts a review of the health and safety practices at the workplace.

Answer the following questions:

- What immediate actions should be taken to provide assistance to the injured worker?
- How can electrical safety protocols be enforced to prevent accidents like this in the future?
- What initiatives can be taken to promote healthy eating habits among employees to enhance their overall wellbeing?
- What measures should be taken to identify and mitigate potential hazards in the manufacturing unit to ensure a safe working environment?

Ans. (a) First aid should be administered promptly to the injured worker, including assessing the injury, providing basic treatment and arranging for further medical treatment if necessary.
(b) Electrical safety measures should include proper training for workers on the safe use of electrical equipment and regular maintenance checks of machinery.
(c) Initiatives to promote healthy eating habits may include providing access to nutritious food options in the workplace, offering educational resources on healthy eating and organizing wellness programs.
(d) Hazard identification and mitigation efforts should involve regular inspections of the manufacturing unit to identify potential hazards such as faulty equipment, slippery floors or inadequate ventilation. Once hazards are identified, appropriate measures should be taken to eliminate or control them to minimize the risk of accidents or injuries.

18. Define the term Styles and also discuss the types of Styles available in LibreOffice Writer. (4)

Ans. Styles are a group of predefined combination of many formatting features and types like font style, text size, color, etc., that can be applied to selected pages, text, tables, lists, headings in a document to enhance their appeal.

LibreOffice Writer supports the following six types of Styles:

- Paragraph Styles:** Controls all aspects of a paragraph's appearance like text alignment, tab stops, line spacing, borders and formatting, including character formatting.
- Character Styles:** Used for a selected piece of text within a paragraph. They are also used to change the formatting of individual characters or of the selected text. These changes include font style or name, size of text, bold or italic formats, etc.
- Frame Styles:** Used for changing graphic and text frames in a document. We can format text wrap, borders, backgrounds and columns.
- Page Styles:** It is used to format pages of a document. Page size, page margins, borders, headers and footers and backgrounds come under this category.
- List Styles:** Used to format the information presented in the lists. It also allows us to select, format and position numbers or bullets in lists.
- Table Styles:** It is used to format tables. It also helps provide different look to a table.

19. Consider the following table: **Customer**

Cust_Id	Name	DOB	Amount
123	Ravi	11/11/2003	6500
124	Shyam	09/08/1980	12000
125	Jyoti	01/12/1999	15444
126	Kishan	18/04/2001	3490
127	Anjali	18/06/2001	5000
128	Bhanu	21/12/1996	6800

- How many fields and records are there in Customer table?
- Write SQL commands for the following—
 - Display Customer ID and Names of customers whose Amount is more than 6000 rupees.
 - Display the details of customers in the alphabetical order of their names.
 - Display customer names and the profits they earned. (Profit can be calculated as Amount*0.05)

(For visually impaired candidates)

Answer the following questions:

- Which command is used to add a column to an existing table?
- Name the SQL function to display the highest value of a column.
- Which clause is used to put a condition in an SQL query?
- Which SQL command is used to insert new records in an existing table?

Ans. (a) Fields: 4

Records: 6

- (b) (i) Select Cust_ID, Name from Customer where Amount > 6000;
(ii) Select * from Customer Order by Name;
(iii) Select Name, Amount * 0.05 as "Profit" from Customer;

(For visually impaired candidates)

- (a) Alter (b) max()
(c) where (d) INSERT INTO

20. (a) Define the term Macros.

(b) How does it help us while manipulating data?

(c) Which option is used in LibreOffice Calc to sort the columns using Macros? (4)

Ans. (a) Macros is an action or a set of actions that we can record, give a name to, save and run as many times as we want and whenever we want.

(b) It helps us to save time on repetitive tasks involved in data manipulation and data reports that are required to be done frequently.

(c) Sort option available in Data menu is used in LibreOffice Calc to sort the columns using Macros.

21. Define the following:

(i) Sorting (in the context of DBMS)

(ii) Referential Integrity

(iii) One-to-One Relationship (in the context of DBMS)

(iv) Candidate Key (4)

Ans. (i) Sorting means to arrange data either in ascending or descending order. The SQL ORDER BY clause is used to sort the data in ascending or descending order, based on one or more columns. Some databases sort the query results in an ascending order by default. Column you are using to sort must be available in the column-list.

(ii) Referential integrity is used to maintain the accuracy and consistency of data in a relationship. In the LibreOffice Base, data can be linked between two or more tables with the help of Primary Key and Foreign Key constraints. Referential integrity helps to avoid:

- Adding records to a related table if there is no associated record available in the primary key table.
- Changing values in a Primary Key if any dependent records are present in the associated table(s).
- Deleting records from a Primary Key table if there are any matching related records available in the associated table(s).

(iii) A One-to-One relationship in DBMS is established when each record of one table corresponds to only one record in the other table. This relationship ensures the uniqueness of the connection between the two tables.



(iv) Each table has only a single primary key. Each relation may have one or more candidate keys. One of these candidate keys is called Primary Key. Each candidate key qualifies for Primary Key. Therefore, the candidates for Primary Key are called Candidate Keys.

For example,

Student_ID	Student_Enrol	Student_Name	Student_Email
S02	4545	Dave	ddd@gmail.com
S34	4541	Jack	jjj@gmail.com
S22	4555	Mark	mmm@gmail.com

Student_ID, Student_Enrol, Student_Name and Student_Email are the candidate keys. They are considered candidate keys since they can uniquely identify the student record.

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PRACTICE PAPER

Max. Time: 2 Hours

Max. Marks: 50

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2. This Question Paper consists of **21 questions** in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **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.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A – Objective Type Questions (24 Marks):**
 - (i) This section has 05 questions.
 - (ii) Marks allotted are mentioned against each question/part.
 - (iii) There is no negative marking.
 - (iv) Do as per the instructions given.
7. **SECTION B – Subjective Type Questions (26 Marks):**
 - (i) This section has 16 questions.
 - (ii) A candidate has to do 10 questions.
 - (iii) Marks allotted are mentioned against each question/part.
 - (iv) Do as per the instructions given.

SECTION A: OBJECTIVE TYPE QUESTIONS

1. Answer any 4 out of the given 6 questions on Employability Skills

(1 × 4 = 4 Marks)

- (i) The response to a received message is called (1)
 - (a) Result
 - (b) Answer
 - (c) Feedback
 - (d) Conversation
- (ii) are small bits of data stored as text files on your computer by the websites you visit. (1)
 - (a) Firewalls
 - (b) Temporary files
 - (c) Cookies
 - (d) Viruses
- (iii) Which of the following is a role of green skills? (1)
 - (a) Rainwater harvesting
 - (b) Conserving energy
 - (c) Reducing pollution
 - (d) All of these
- (iv) Enterprises where you get a ready set-up and facilities like training, support, branding, etc., are called (1)
- (v) How we deal with adversities and hardships develops our (1)
 - (a) Confidence
 - (b) Belief
 - (c) Agility
 - (d) Motivation
- (vi) OS that runs on smart phones is (1)

2. Answer any 5 out of the given 6 questions

(1 × 5 = 5 Marks)

- (i) Applying a set of values on a dataset to analyze the changes in calculations and results is achieved by (1)
- (a) Consolidation
(b) Analysis
(c) Subtotals
(d) Scenarios
- (ii) is an emergency care that is provided to an injured person immediately after a mishap. (1)
- (a) First aid
(b) Emergency response
(c) Primary care
(d) Urgent care
- (iii) must be followed by organizations for handling accidents. (1)
- (iv) Which of the following is referred to as 'records' in a database table? (1)
- (a) Columns
(b) Fields
(c) Rows
(d) None of these
- (v) Which of the following is a saved sequence of commands stored for later use? (1)
- (a) Solver
(b) Auto sum
(c) Consolidate
(d) Macro
- (vi) Grayscale is an example of which of the following? (1)
- (a) Image Filter
(b) Image Mode
(c) Image Transparency
(d) None of these

3. Answer any 5 out of the given 6 questions

(1 × 5 = 5 Marks)

- (i) DELETE command in SQL is used to (1)
- (a) Delete the entire table
(b) Delete the database
(c) Delete all the columns of the table
(d) Delete all the rows of the table
- (ii) We should ensure that while doing Subtotals, columns should have labels. (True/False) (1)
- (iii) In the formula **book1:A2*book3:A4+D4**, cell D4 belongs to: (1)
- (a) Different workbook
(b) Different worksheet
(c) Current sheet
(d) Current workbook
- (iv) A set of rules that provide correct and consistent data in DBMS are (1)
- (v) Which of the following is a DML command? (1)
- (a) SELECT
(b) CREATE
(c) DROP
(d) ALTER
- (vi) A block of text inside a paragraph is affected by Styles. (1)

4. Answer any 5 out of the given 6 questions

(1 × 5 = 5 Marks)

- (i) DROP command is a DML query. (True/False) (1)
- (ii) The object that floats over the text and hides the text is (1)
- (iii) The shortcut key combination for cut is (1)
 - (a) CTRL + X
 - (b) CTRL + T
 - (c) CTRL + C
 - (d) None of these
- (iv) is not a type of natural emergency. (1)
 - (a) Flood
 - (b) Earthquake
 - (c) Power outage
 - (d) Hurricane
- (v) Graphics Styles can be applied using Styles. (1)
 - (a) Table
 - (b) Frame
 - (c) Paragraph
 - (d) Page
- (vi) The occurrence of unplanned and uncontrolled events resulting in personal injury is called (1)

5. Answer any 5 out of the given 6 questions

(1 × 5 = 5 Marks)

- (i) What is the primary function of electronic spreadsheet? (1)
 - (a) Word processing
 - (b) Data visualization
 - (c) Data analysis and manipulation
 - (d) Data training
- (ii) The two different types of hazards at workplace are and (1)
- (iii) In a spreadsheet, what does a hyperlink allow you to do? (1)
 - (a) Change the font color of a cell
 - (b) Navigate to another cell in the same worksheet
 - (c) Create a connection to a website or external file
 - (d) Apply filter
- (iv) Arithmetic operation =Average(3,5) results in (1)
- (v) A healthy mind is emotionally, and socially well balanced. (1)
- (vi) The file extension for LibreOffice Writer is (1)
 - (a) .oot
 - (b) .odt
 - (c) .ods
 - (d) .docx

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills

(2 × 3 = 6 Marks)

Answer each question in 20 – 30 words

- 6. Define any two Communication Barriers. (2)
- 7. How does gender equality help in overcoming the challenges in Sustainable Development? (2)
- 8. Define the types of Stress. (2)
- 9. 'Success is quick if we start with a small enterprise.' Do you agree with this statement? Justify your answer. (2)
- 10. Differentiate between Blog and Website. (2)

Answer any 4 out of the given 6 questions in 20-30 words each

(2 × 4 = 8 Marks)

11. Define the following:
(a) Primary Key
(b) Foreign Key (2)
12. Mention any four advantages of Buddy System at workplace. (2)
13. Define resizing and cropping of an image. (2)
14. How can data redundancy be controlled through DBMS? (2)
15. List any 4 types of Styles. (2)
16. Explain Macros with an example. (2)

Answer any 3 out of the given 5 questions in 50-80 words each

(4 × 3 = 12 Marks)

17. Explain the safety measures that should be taken to avoid slips, trips and falls. (4)
18. Write a short note on the following: (4)
 - (i) Write any one advantage of DBMS.
 - (ii) Differentiate between Tuple and Attribute of a relation.
 - (iii) What is the default date format in SQL?
 - (iv) Define Cardinality of a relation.
19. Describe a scenario where Solver is the best choice to apply. (4)
20. In a business workshop, a team of technicians is asked to assemble electronic devices for an upcoming product launch. As they work with various electrical equipment and machinery, one technician accidentally receives electric shock due to improper handling of a power tool. Although, the shock was minor, it raised concerns about safety practices in the workshop.
What precautions should be taken to avoid such accidents while using electrical equipment? (4)
21. Define the following: (4)
 - (i) Flat File Database
 - (ii) Relational Database
 - (iii) DDL
 - (iv) Composite Primary Key