CBSE
Solved Paper 2023
Information Technology
Class-10ᵗʰ
(Delhi & Outside Delhi Set)

Time : 2 Hours   **Max. Marks : 50**

General Instructions :

1. *Please read the instructions carefully.*
2. *The 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 Types Questions

1. Answer any 4 out of the given 6 questions are Employability Skills.   **4 × 1 = 4**

   (i) _____ refers to focussing human efforts for maintaining a healthy body and mind, capable of withstanding stressful situations.   **1**

   (a) Artificial Intelligence   (b) Stress management

   (c) Motivation   (d) Emotional intelligence

   (ii) Which of the following is not the benefit of stress management?   **1**

   (a) Boosts immunity   (b) Reduces efficiency

   (c) Improves mood   (d) Prevents behavioural problems

   (iii) _____ are computer programs that can damage the data and software programs or steal the information stored on a computer.   **1**

   (a) Spam   (b) Viruses

   (c) Junk mail   (d) BIOS

   (iv) _____ is a horizontal bar present at bottom of the Windows 7 desktop.   **1**

   (a) Status Bar   (b) Menu Bar

   (c) Task Bar   (d) Recycle bin

   (v) State whether the following statement is a myth or reality: Entrepreneurs are born a certain way.   **1**

(vi) Which one of the following is not true for entrepreneurs? **1**

(a) They create needs and demands.

(b) They provide raw materials.

(c) They do not create jobs.

(d) They help society by supporting infrastructure development.

2. Answer any 5 out of the given 6 questions. **5 × 1 = 5**

(i) _____ controls all aspects of a paragraph's appearance, such as text alignment, tab stops, line spacing, and borders, and can include character formatting. **1**

(a) Page Style (b) Character Style

(c) Cell Style (d) Paragraph Style

(ii) How many levels of headings does Open Office. Writer evaluate to build the Table of contents? **1**

(a) 8 (b) 9

(c) 10 (d) 12

(iii) Reema has created a pamphlet on "Tour to West India'. She has inserted many images to make it more presentable but the size of images is occupying a lot of space. Her friend has suggested her to reduce the size of images. Which of the following options will help her in doing the task without losing any content of the image? **1**

(a) Recolor (b) Docking

(c) Resize (d) Rotate

(iv) Which of the following Graphic filter is used to increase the contrast of an image in a document? **1**

(a) Smooth (b) Sharpen

(c) Remove Noise (d) Invert

(v) Which of the following is not used when creating a mail-merge document? **1**

(a) Spreadsheet (b) Document

(c) Paint (d) Database

(vi) Which mode is used to apply a style to many different areas of a document quickly without going back to styles and formatting window in Writer? **1**

3. Answer any 5 out of the given 6 questions. **5 × 1 = 5**

(i) A colored border, with _____. appears around a cell where changes are made in a shared worksheet. **1**

(a) a dot in the upper left-hand corner

(b) a dot in the lower left-hand corner

(c) a cross in the upper left-hand corner

(d) a cross in the upper right-hand corner

(ii) _____ feature adds data arranged in a group of cells in Calc, with labels for columns and/or rows. **1**

(a) Average (b) Subtotal

(c) Goal seek (d) Solver

(iii) A _____ refers to a cell or a range of cells on a worksheet whose data values can be used in a formula. **1**

(a) sheet (b) cell

(c) cell reference (d) cell data

(iv) _____ feature of Calc is used to test 'what-if' questions. **1**

(a) Solver (b) Goal seek

(c) Scenario (d) Styles

(v) Macros are especially useful to _____ the same way over and over again. **1**

(a) repeat a task (b) reject a task

(c) report a task (d) comment a task

(vi) _____ feature of Calc helps to track what data was changed, when the change was made, who made the change and in which cell the change has occurred.   **1**

(a) Record Changes   (b) Edit record

(c) Change record   (d) Macro

4. Answer any 5 out of the given 6 questions.   **5 × 1 = 5**

    (i) Which one of the following is not an example of DBMS ?   **1**

(a) Postgres SQL   (b) SQL Lite

(c) Fox Pro   (d) Impress

    (ii) A _____ is an interface in a user specified layout that lets users to view, enter, and change data directly in database objects such as tables.   **1**

(a) frame   (b) form

(c) relation   (d) report

    (iii) Which of the following is expanded form of SQL?   **1**

(a) Systematic Query Language   (b) Structured Query Language

(c) Software Query Language   (d) Structural Query Language

    (iv) _____ is usually suitable for less amount of data. (Relational/Flat file)   **1**

    (v) Binary data types in a database can be using for storing _____.   **1**

(a) photos, music files, etc.   (b) integer values

(c) only image files   (d) only video files

    (vi) _____ clause can be used with the SELECT statement in SQL to specify which rows to retrieve from the table.   **1**

(a) WHERE   (b) GROUP

(c) SAME   (d) SIMILAR

5. Answer any 5 out of the given 6 questions.   **5 × 1 = 5**

    (i) _____ is an accessibility function which is designed for people who have vision impairment or cognitive disabilities.   **1**

(a) Filter Keys   (b) Sound Key

(c) Toggle Keys   (d) Sticky Keys

    (ii) Networks in which certain computers have special dedicated tasks, providing services to other computers (in the network) are called _____ networks.   **1**

(a) hierarchical   (b) dedicated server

(c) peer to peer   (d) client server

    (iii) _____ provides Internet access by transmitting digital data over wires of a local telephone network.   **1**

(a) HSDPA   (b) P2P

(c) DSL   (d) Modem

    (iv) A _____ is an unplanned event that may happen all of a sudden and may lead to unwanted or unprecedented results/outcomes.   **1**

(a) emergency   (b) hazard

(c) accident   (d) illness

    (v) A _____ worker will always perform to the best to his ability   **1**

(a) fast working   (b) highly educated

(c) happy and healthy   (d) stressed

    (vi) _____ is the process of emptying a place in case of an emergency disaster.   **1**

(a) Emergency   (b) Accident

(c) Drill   (d) Evacuation

SECTION - B

(Subjective Types Questions

Answer any 3 out of the given 5 questions are Employability Skills.

Answer each question in 20-30 words. **3 × 2 = 6**

6. What is self-awareness? Also give any two benefits of self-awareness. **2**

7. Give one example each of following stress casual agents for students:
   (a) Mental
   (b) Social **2**

8. Differentiate between files and folders. **2**

9. Give any two qualities of a successful entrepreneur. **2**

10. Give any two promotional functions of an entrepreneur. **2**

    Answer any 4 out of the given 6 questions in 20-30 words each. **4 × 2 = 8**

11. Differentiate between Keep scale and Keep image size options while cropping an image in a document. **2**

12. Give any two characteristics of a template in Open Office Writer. **2**

13. Why do we need to merge worksheets? **2**

14. What is a Primary Key? How is it different from foreign key? **2**

15. Expand and explain the term WAN. **2**

16. (a) Identify the following network/Internet connectivities as wired or wireless: **2**
       (i) Dial-up
       (ii) WiMax
    (b) Give any one feature of Instant messaging.

    Answer any 3 out of the given 6 questions in 50-80 words each. **3 × 4 = 12**

17. Explain the following terms with respect to positioning the graphics in a document: **4**
    (a) Arrangement
    (b) Text Wrapping

18. Distinguish between the following with respect to spreadsheets: **2 + 2 = 4**
    (a) Relative and Absolute hyperlink.
    (b) Internet hyperlink and Document hyperlink.

19. Explain any four data types of DBMS. **4**

20. (a) Structure of a table "Orders" is given below. Suggest suitable data type of each column **4**

Table : Orders

Order_ID	Order_date	Customer_ID	Amount
A_101	12/12/19	C3445	1200.00
A_202	11/09/19	C1245	3456.00
A_402	09/07/19	C2121	2312.00

(b) Consider the following table "Books".

BkID	Bk Name	Author	Qty	Price
B_101	Learning with Fun	Jucobins	5	355.00
B_103	How I Live Now	Meg Rusoff	4	400.00
B_104	I Capture the Castle	Dodie Smith	5	520.00
B_106	Moral Engines	Philip Reeve	4	260.00
B_110	The Kite Rider	Geraldine McCaughrean	3	270.00

Write SQL queries to

(i)   Display data of all books whose quantity is more than 3.

(ii) Display total amount of all books whose price is less than 500.

(Hint : amount = Qty × Price)

For visually impaired candidates.

Explain various relationship that can be created between two tables in a database.   **4**

21. (a)   Give two best practices for internet safety.   **2 + 2 = 4**

(b)   Give any two Falls and Slips Safety rules.

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Solutions

1. I. **Option (b) is correct.**
   Explanation: Stress management refers to the techniques that remove the stress and boosts the mental and physical health.
   II. **Option (b) is correct.**
   Explanation: Stress management improves the efficiency of a person by removing his/her stress.
   III . **Option (b) is correct.**
   Explanation: Virus are malicious programs that can delete or corrupt the data stored on a computer.
   IV. **Option (c) is correct.**
   Explanation: Taskbar is present at the bottom of the Windows 7 desktop. Menu Bar and status bar at present at the top and bottom of any program window and Recycle bin icon is available on the desktop.
   V. Myth
   Explanation: Entrepreneurs take decisions differently in different situations in business or lives.
   VI. **Option (c) is correct.**
   Explanation: Entrepreneurs create needs and demands and also create job opportunities fro many as there set up their own business. They also help society as ultimately they contribute to the economic growth of the society.

2. I. **Option (d) is correct.**
   Explanation: Paragraph styles controls the appearance of paragraphs such as text alignment, line spacing etc.
   II. **Option (c) is correct.**
   Explanation: Writer has 10 levels of headings.
   III. **Option (c) is correct.**
   Explanation: The resize option can reduce the size of the image by compressing the image.
   IV. **Option (b) is correct.**
   Explanation: The Sharpen tool is used to increase the contrast of an image in a document. It increase the contrast between the neigbouring pixels.
   V. **Option (c) is correct.**
   Explanation: Paint file or any other feature is not used with mail merge. Only a main document and a data source is required for merging the documents or letters.
   VI. Fill Format
   Explanation: The Fill Format is used to apply style to different areas of a document.

3. I. **Option (a) is correct.**
   Explanation: In a shared document, a red coloured dot appears in the upper left hand corner.
   II. **Option (b) is correct.**
   Explanation: The Subtotal feature of calc is used to add data arranged in a group.
   III. **Option (c) is correct.**
   Explanation: A cell reference refers to a cell or range of cells.
   IV. **Option (c) is correct.**
   Explanation: The what-if scenario is used to test if conditions in calc.

V. **Option (a) is correct.**
Explanation: Macros are used to repeat a task number of times. A macro records a number of keystrokes or mouse clicks required for a task and then repeats them to automate the task.
VI. **Option (a) is correct.**
Explanation: The Record changes tool is used to record the changes made in a worksheet.

4. I. **Option (d) is correct.**
   Explanation: Impress is a presentation software.
   II. **Option (b) is correct.**
   Explanation: Forms are used to view, edit and enter data in a database. The layout of the form is specified by the user.
   III. **Option (b) is correct.**
   Explanation: Structured Query Language is expanded form of SQL.
   IV. flat
   Explanation: A flat file system is suitable for less amount of data because it poses the problem of data redundancy and data inconsistency
   V. **Option (a) is correct.**
   Explanation: Binary data type can store binary data such as images, music files etc. integer values can be stored using in data types.
   VI. **Option (a) is correct.**
   Explanation: Where clause is used with the Select statement to retrieve the data based on a condition.

5. I. **Option (a) is correct.**
   Explanation: Toggle keys are specially designed for visually impaired people. When toggle keys is turned on a sound is heard whenever the caps lock, shift or ctrl key is pressed.
   II. **Option (d) is correct.**
   Explanation: In this type of architecture, there are certain dedicated systems to perform certain services. These systems are called servers and the systems that avail these services are called clients.
   III. **Option (c) is correct.**
   Explanation: DSL(Digital Subscriber Line) also provides internet connectivity through a telephone line
   IV. **Option (c) is correct.**
   Explanation: Accident is an unplanned event that occurs unexpectedly and causes damage.
   V. **Option (c) is correct.**
   Explanation: Only a happy and healthy person can do his work efficiently.
   VI. **Option (d) is correct.**
   Explanation: It is the process of moving people from a dangerous place to somewhere safe

(Subjective type questions)

6. **Self awareness:** It is the ability to know yourself, your actions, your thoughts and emotions.
   Benefits: 1. Self awareness helps in improving relationships.
   2. Self awareness enables one to make better decisions.

7. a. **Mental stress:** Stress about exams, coursework deadline or thinking about future.
    b. **Social Stress:** Not having friends, Interpersonal conflicts, peer pressure etc.
8. **File:** Data in a computer is stored in form of files. A file is created using a particular application. Files created with same application have same extension.
    Folder: Folder organises files and other folders. A folder can contain many files and sub folders .It does not have any extension.
9. **A successful entrepreneur:**
    1. Never loses his hope despite of many failures.
    2. is always self-assured in their abilities and plan well, and is always devoted to his goals.
10. **Promotional functions of an entrepreneur:**
    1. He investigates deeply.
    2. He determines the business objective thoroughly.
11. While cropping the image the Keep Scale option does not change the scale of the picture.
    Keep Image Size option is used when you do not want to change the size of the image while cropping. Using the keep size option, you can enlarge the image, shrink the image or distort the image but it does not affect the size of the picture.
12. Characteristics of a template are
    1. A template makes the task of creating similar looking professional documents easy.
    2. A template can contain text, graphics, a set of styles, and user-specific setup information such as measurement units, language, the default printer, and toolbar and menu customization etc.
13. Merging worksheets is required when there are multiple reviews of the same worksheet which need to be compared at the same time It saves time and effort.
14. **Primary Key:** A primary key is a field in a table whose values uniquely identify each record in a table. It does not allow blank values or duplicate values.
    Difference between primary key and foreign key
    A primary key is a unique value that identifies a row in a table whereas a foreign key is primary key of another table that refers to a column or set of columns in current table. A table can have only one primary key but a table can have multiple foreign keys.
15. **WAN:** The expanded form of WAN is Wide Area Network. A Wide Area Network (WAN) covers a large geographical area such as a city, a country, or many countries. It connects LANs in different cities or countries via optical fiber cables, satellite, or microwave radio links, etc. The example of a WAN is the internet.
16. a. **Dial -up: Wired**
    Wi-Max: Wireless
    b. Most instant messaging software include the option for performing file transfers, audio chat, video calling and conferencing, sharing desktops, etc.
17. a. **Arrangement:** Arrangement refers to the placement of an image on an imaginary vertical axis. The Arrangement tool controls how images are stacked upon each other or relative to the text. The arrangement options are available in the Format tab. Writer provides many options to arrange an image such as: Forward One, Back One, Bring to Front, Send to Back, To Foreground and To Background.
    b. **Text wrapping:** Text wrapping refers to the relation of images to the surrounding text, which may wrap around the image on one or both sides, overprinted behind or in front of the image, or treat the image as a separate paragraph or character. The text wrapping tool is available on the standard toolbar. Writer provides many options to wrap an within the text such as: Wrap off, Page Wrap, Optimal Page Wrap, Wrap Left, Wrap Right and Wrap Through.
18. a. **Relative Hyperlink:** A relative hyperlink is a link that contains an address that is relative to the address of the output file. It holds only a partial address. The relative path starts from the location of the destination file. This type of linking can be done only when the source and destination links are on the same drive. A relative hyperlink is broken when linked files are in different folders and one of them is moved.
    Absolute Hyperlink: An absolute hyperlink is the link that contains the full path of the destination file. For e.g, file name with the drive name, and a parent folder name. An absolute hyperlink is broken when the target file is moved. The linked files can be located anywhere fro an absolute hyperlink to work
    b. **Internet Hyperlink:** Internet hyperlink enables you to create a hyperlink to access a web page. To insert an internet hyperlink we need to select its type (web or FTP) and then enter the URL of the web page.
    Document Hyperlink: The Document Hyperlink is used to create a link to access any other document or a location in the same document.
19. A data type is used to specify the type of data that can be entered in a particular field for a record. It could be text (alphanumeric values), number (decimal or numeric values) and date and time (date values).. The common data types used in Libre Office along with their descriptions are given below:
    *   **Memo [LONGVARCHAR]:** It is used to store a large amount of text, such as a description field.
    *   **Text [VARCHAR]:** It is used for a short string of text, such as names or addresses.
    *   **Yes/No [BOOLEAN]:** It allows to enter Boolean values yes or no.
    *   **Time [TIME]:** It is used to store the hours, minutes, and seconds. The format of the date can be set in the table design view.
20. a. **Order_ID:** CHAR(10)
    Order_Date: Date
    Customer_ID: CHAR
    Amount: Decimal
    b. I. Select * from Books where Qty> 3;
    II.SELECT Qty*Price AS "AMOUNT" FROM Books WHERE Price <500;

For Visually Impaired candidates
Answer: Types of Relationships
    One to One: It is used to create a relationship between two tables in which a single row of the first

table can be related to only one record of a second table. Similarly, the row of a second table can also be related to only one row of the first table.

One to Many: It is used to create a relationship between two tables. Any single rows of the first table can be related to one or more rows of the second table.

Many to Many: In this type, record of the first table can relate to any records (or no records) in the second table. Similarly, each record of the second table can also be related to more than one record of the first table.

21. a. I. Use strong passwords. Never share the password with anyone.

II. Do not click on any unverified or unknown links.

b. I. If something spills at the work place, it should be cleaned immediately to avoid salip and fall.

II. Walking surfaces should be proper neat and clean.

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