



BK BIRLA CENTRE FOR EDUCATION
SARALA BIRLA GROUP OF SCHOOLS
SENIOR SECONDARY CO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL
MID TERM EXAMINATION 2024-25
INFORMATION TECHNOLOGY (402)



Class: X
Date: 16.09.2024
Name:

Duration: 2 hrs.
Max Marks: 50
Exam No. :

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of 20 questions in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. All questions of a particular section must be attempted in the correct order.
5. **SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):**
 - i. This section has 04 questions.
 - ii. Marks allotted are mentioned against each question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given.
6. **SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**
 - i. This section has 16 questions.
 - ii. A candidate has to do 11 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

MARKING SCHEME

SECTION A: OBJECTIVE TYPE QUESTIONS

Q.(1) Answer any 4 out of the given 6 questions on Employability Skills. (4 x 1 = 4)

- (i) Which of the following is more helpful for improving one's present performance ?
 - (a) Generic feedback
 - (b) Summative feedback
 - (c) **Specific feedback**
 - (d) None of the above
- (ii) Which of the following stress enhances your productivity in terms of output ?
 - (a) Distress
 - (b) **Eustress**
 - (c) Both (a) & (b)
 - (d) None of the above
- (iii) feature of Windows 7 allows you to create a copy of data for future use.
 - (a) **Backup and Restore**
 - (b) Spyware
 - (c) Keylogger
 - (d) All of the above
- (iv) A.....is attached to a CPU for capturing keystrokes.
 - (a) Wire
 - (b) Key
 - (c) **Keylogger**
 - (d) Hardware
- (v) Which of the following characteristics should an entrepreneur have ?
 - (a) Innovativeness
 - (b) Motivator
 - (c) Leadership
 - (d) **All of these**
- (vi) Which of the following is an advantage of entrepreneurship as a career ?
 - (a) Risk
 - (b) Hard work
 - (c) Uncertain Income
 - (d) **None of these**

Q.(2) Answer any 7 questions out of the given 8 questions on Digital Documentation.

(7 x 1 = 7)

- (i) A is a model that you use to create other documents.
(a) **Template** (b) Document (c) Design (d) Letter
- (ii) Sumit wants to create Table of Contents in his document. Which tab he should use to do so ?
(a) File tab (b) Format tab (c) **Insert tab** (d) View
- (iii) Bhabesh wants to know the answer of the blank : “ controls how images are stacked upon each other or relative to the text.” Answer to his problem.
(a) **Arrangement** (b) Alignment (c) Anchoring (d) Positioning
- (iv) Gaurav has inserted an image in a document. He wants to remove the unwanted area of the image. Which option of the word processor he will use to complete the task?
(a) Clip art (b) Cut (c) **Crop** (d) None of the above
- (v) Samyak is working in Writer. He wants to learn the ways to launch the Drawing tool bar, if not available on the interface. Help him to do so.
(a) **View>Toolbars>Drawing** (b) Insert>Drawing
(c) Insert>Group>Drawing (d) View>Group>Drawing
- (vi) Which toolbar is by default placed below the menu bar?
(a) Title (b) Formatting (c) Picture (d) **Standard**
- (vii) What is the shortcut to bring up the style and formatting window in Writer?
(a) Ctrl+F1 (b) Ctrl+F5 (c) **F11** (d) Ctrl+F12
- (viii) Which of the following is used to apply a style to many areas quickly without having to go back to the Styles Deck and double click each time?
(a) Paragraph Style (b) Frame Style
(c) **Fill Format mode** (d) Character Style

Q.(3) Answer any 7 questions out of the given 8 questions on Electronic Spreadsheet.

(7 x 1 = 7)

- (i) Which of the following is more elaborate form of Goal Seek?
(a) Subtotal (b) Scenario (c) **Solver** (d) Consolidate
- (ii) Which of the following is a correct way to refer to a cell in Calc ?
(a) <Sheet name>.<Row name> (b) <Sheet name>.<Column name>
(c) **<Sheet name>.<Cell reference>** (d) <Column name>.<Sheet name>
- (iii) Reema does not know which sign is used to insert a formula or function in a spreadsheet application. Help her to find the correct option.
(a) **=(Equal to)** (b) ? (Question mark)
(c) <(Less than) (d) >(Greater than)
- (iv) Arguments passed to a macro from Calc are always :
(a) **Values** (b) References (c) Objects (d) Text
- (v) Shaurya wants to protect the spreadsheet so that no one can make unnecessary changes to it. Which option is used to protect the spreadsheet ?
(a) Edit>protect Document (b) File>Protect Document
(c) **Tools>Protect Document** (d) None of the above
- (vi) Mayank wants to know the difference between reference to a file and to a hyperlink. Answer to his query.
(a) **In file, /// is used while in hyperlink // is used.**
(b) In file, // is used while in hyperlink /// is used.
(c) There is no difference.
(d) None of the above
- (vii) Reena is curious to know as what cells can hold as the individual elements. Answer to her question.
(a) Text (b) Number (c) Formula (d) **All of the above**

- (viii) Deepa wants to know that in interface of spreadsheet software what does A, B, C and so on, are referred.
 (a) Status Bar (b) Title bar (c) **Column Headers** (d) Row Headers

Q.(4) Answer any 6 questions out of the given 8 questions on Database Management System. (6 x 1 = 6)

- (i) Which data type shows value in the form of True or False ?
 (a) **Boolean** (b) Integer (c) Real (d) Text
- (ii) Asterisk (*) symbol in criteria for query stands for :
 (a) **Any number of characters** (b) One character
 (c) Zero characters (d) None of the above
- (iii) Ranjan wants to know the name given to the singular form for data. Help him to find the answer.
 (a) Datus (b) Datan (c) **Datum** (d) Data
- (iv) Mrunal wants to know the name of the form of DBMS which is due to E.F. Codd of IBM. Answer to her query.
 (a) Codd DBMS (b) **RDBMS** (c) Simple DBMS (d) Primary key
- (v) Database servers are referred to as.....
 (a) Front-ends (b) **Back-ends** (c) Clients (d) Nodes
- (vi) COMMIT and ROLLBACK commands are of which type ?
 (a) DML (b) **TCL** (c) DDL (d) DCL
- (vii) Which clause can be used with the SELECT statement in SQL to specify which rows to retrieve from the Table?
 (a) **Where** (b) Which (c) Set (d) Like
- (viii) To modify the data type of a column in table, which command and keyword is used?
 (a) Create, change (b) **Alter, modify** (c) drop, change (d) None

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 4 questions on Employability Skills (3 x 2 = 6)

Q. (5) Explain any four 7 Cs of effective communication.

Ans. : Clear information, Complete information, Concise message, Concrete and coherent presentation, Correctness of facts, Consideration of the message and the receiver, Courtesy towards receiver.

Clear information : Choosing appropriate words and phrases to convey ideas in the form of a message is very important. You need yourself to be fully clear of what exactly your message is, what the objective of your message is, and to whom you are going to share it with.

Complete information : Completeness of information is very important as it brings the desired results without additional messages, builds goodwill. Add 5 W's in your information : who, what, when, where, why.

Concise message : In this world, every person lacks time. Hence, it is necessary to keep the message crisp and concise. It adds not only to the efficacy of the message but also saves the receiver's time in understanding it.

Correctness of facts : Make sure that whatever you communicate is correct to the best of your knowledge. This can be ensured by using the right level of language, presenting accurate facts, words and figures.

Q. (6) Briefly explain any four stress management techniques.

Ans. : Yoga, Meditation, Physical Exercise, Vacations, Taking nature walks

Yoga : Yoga for breathing exercises is an effective way of dealing with stress. It brings good supply of oxygen to your brain.

Meditation : It helps in enhancing our mindfulness. It bring peace to your mind.

Physical Exercise :

Vacations : Good vacation helps us to reconnect with ourselves, operating as a vehicle for self discovery and helping us get back to feeling our best.

Taking nature walks : Taking time out for nature walks too help in reducing your stress level.

Q. (7) Write and explain any four measures to protect your computer.

Ans. : : Measures to Protect Computer

- Setting up users and password
- Using secure password
- Use of protective software
- Lock of computer

Hardware safety and Security

- Computers must be kept clean
- Should be kept at moderate temperature
- UPS must be used
- Aware of key loggers-it is a small piece of hardware that is manually attached to the keyboard. It records or captures all your keyboard strokes while typing.
- Backup and Restore data is a feature of windows 7 in control panel.

Q. (8) Define 'Entrepreneur' & 'Entrepreneurship'. Write and explain any two qualities (characteristics) of an entrepreneur.

Ans. : Entrepreneur is composite of three basic elements : invention, innovation, adaptation Purposeful activity, Creative activity, Risk bearing activity, Organising, Gap filling, Dynamic process, Initiative taking, Multi dimensional

Purposeful activity : It s a goal oriented activity. Eac and every enterprise is launched either to earn money or to serve the society.

Creative activity : It is a creative response to change in environment. It involves introduction to something new or better.

Gap filling : it identifies and fill the gaps between what the society needs and what is available.

Initiative taking ; Entrepreneurship involves taking initiative.

Answer any 4 out of the given 6 questions on Subject Specific Skills.

(4 x 2 = 8)

Q.(9) Differentiate between Keep Scale and Keep image size options while cropping an image in a document.

Ans. : When Keep scale is selected (default), cropping the image does not change the scale of the picture. When Keep image size is selected, cropping produces enlargement (for positive cropping values), shrinking (for negative cropping values), or distortion of the image so that the image size remains constant.

Keep Scale	Keep Image
When keep scale is selected, cropping the image does not change the scale of the picture.	When keep image is selected, cropping produces enlargement, shrinking or distortion of the image so that the image size remains constant.
When keep scale is selected, size of the image is changes.	When keep image is selected, size of the image does not changes.

Q.(10) What are templates? What are the advantages of using templates?

Ans. : A template is a document model that you use to create other documents.

1. **Consistency:** Templates help maintain consistency in formatting, layout, and styling throughout a document or across multiple documents.
2. **Time-Saving:** Templates can significantly reduce the time required to create new documents from scratch.
3. **Guidance and Structure:** Templates provide a structured framework that guides users through the document creation process.

Q.(11) Distinguish between the following with respect to spreadsheets (Answer any one)

- i. Relative and Absolute Hyperlink
- ii. Internet Hyperlink and Document Hyperlink

Ans. :

Hyperlinks can be used in Calc to jump to a different location from within a spreadsheet and can lead to other parts of the current file, to different files or even to websites.

i.

Relative Hyperlink	Absolute Hyperlink
A relative link will stop working only if the start and target locations change relative to each other.	A absolute link will stop working only if the target is moved.
A relative hyperlink is hyperlink that contains an address that is relative to the address of the destination file.	An absolute hyperlink is a hyperlink that contains the full address of the destination file of the website.
In relative hyperlink, the files should be in the same order.	In absolute hyperlink, the files can be stored anywhere in the system.

ii. Document hyperlinks are used to connect content within a specific document or on a local network. While Internet hyperlinks connect content across the global network of the World Wide Web.

Q.(12) What is a function in spreadsheet ? What is the formula to refer to the sum of D3 in Sheet3 and E5 in Sheet2.

Ans. : Functions are pre defined formulae in Calc. It helps us to calculate with the help of formulas.
 $=\text{Sheet3.D3} + \text{Sheet2.E5}$

Q.(13) Explain any four advantages of DBMS.

Ans. : Database Management System. It is collection of inter related data and a set of programs to access those data.

Advantages : Sharing of data, Data redundancy, Data inconsistency, Confidentiality, Highly securable

Sharing of data : Different users can use the same database to access the data according to their needs.

Data redundancy : It means duplication of data. It avoids duplication of data and ensures that there is only one instance of certain data.

Data inconsistency : It helps to avoid data inconsistency. It means if a single database is used by multiple users then it also ensures that the same data is present for all the users.

Confidentiality : It can ensure different views for the different users of the database. This keeps the confidentiality of the data safe.

Q.(14) Define Referential integrity with example. Explain different types of relationship between tables by giving suitable example of each.

Ans. : Referential integrity refers to the relationship between tables. Because each table in a database must have a primary key, this primary key can appear in other tables because of its relationship to data within those tables. When a primary key from one table appears in another table, it is called a foreign key. It means the reference from a row in one table to another table must be valid. It requires that a foreign key must have a matching primary key or it must be null.

There are three types of relationships which can be created in tables :

- (a) 1:1 (one to one) : : In this relationship, both the tables must have primary key columns. Eg. Roll number to address
- (b) 1:n (one to many) : In this relationship, one of the tables must have primary key column. It signifies that one column of primary key table is associated with all the columns of associated table. Eg. Student to subjects/teachers
- (c) m:n (many to many) : In this relationship, one of the tables must have primary key column. It signifies that all the columns of primary key table is associated with one column of associated table. Eg. Student and class teacher

Answer any 4 out of the given 6 questions on Subject Specific Skills.

(4 x 3 = 12)

Q.(15) What is a style ? Explain different types of styles which can be provided in a Writer.

Ans. : It is a combination of font effects, colours and background such that it can be saved and applied whenever needed into the writer document. Writer come with predefined styles for all document types. It has five style categories :

- (i) Paragraph style : It affect entire paragraphs represented with those styles.
- (ii) Character styles : It affect a block of text inside a paragraph.
- (iii) Frame style : It affect frames and graphics
- (iv) Page styles : It affect page formatting (page size, margin and link)
- (v) List styles : It affect outlines, numbered lists and bulleted lists.

Q.(16) What are the advantages of grouping drawing objects ? How can you group different drawing objects in a document ? How can you ungroup them ? Write steps.

Ans. : Grouping drawing objects make it easier to handle several objects as a single entity, while preserving their relative size and positions. When objects are grouped any editing operations carried out on that group are applied to all members of the group. If we click on one member of the group, the whole group is selected.

To group different drawing objects-First select all the object by pressing shift key-> Right click -> select group option or

After selecting the object-> Go to Format menu-> select Group option.

Select object with Shift key

Click Format>Group>Group OR Ctrl+Shift+G OR Right click and select Group from context menu.

Ungroup :

Click on any one object

Click Format>Group>Ungroup OR Ctrl+Alt+Shift+G OR Right click and select Ungroup from context menu.

Q.(17) Anshita is preparing spreadsheet notes for her term exam. Help her to write short note on the following. Give suitable example of each.

(a) Subtotals

(b) Consolidating data

(c) Goal seek

Ans. :

(a) Subtotals : The subtotal feature in spreadsheet helps to use statistical functions (sum, average, count, min, max, product) on the group of data repeatedly in one column. It helps to manage, analyse and extract specific information from the data.

(b) Consolidating data : We can summarise data from multiple worksheets into one worksheet or master worksheet. The consolidated worksheet can be in the same workbook or can be on another workbook. If you have consolidated it, you can update one or more workbook, the updating will automatically be reflected in the consolidated workbook.

(c) Goal Seek : Goal Seek is the process of finding the correct input value when only the output is known.

Tools-> Goal Seek

Q.(18) What are the options available in the Show Changes dialog box while reviewing changes in spreadsheet ? Explain.

Ans. : Date, Author, Range, Comment, Show Accepted Range, Show Rejected Range

Date : Only changes made in a certain time range are displayed

Author : Only changes made by a specific author are displayed.

Range : Only changes made in a specific range of cells are displayed.

Comment : Searches the content of the comments and only displays changes which have comments that match the search criteria.

Show Accepted Changes : Only changes you accepted are displayed.

Show Rejected Changes : Only changes you rejected are displayed.

Q.(19) Your friend owns a chemist shop, he needs to keep records of the medicines with their id's, date of purchase, expiry date, price, etc. in a database program. But he does not have any knowledge about the Database. Explain to him the following to get a better understanding of the DBMS concepts.

i. What is DBMS? Explain in brief.

ii. Name any two database programs which can be used to create a table and store the data as per the requirement.

iii. Which field can be set as a Primary Key?

Ans. : - i. A Database is a collection of Records and a set of programs to access those data.

The management system is important because without the existence of some kind of rules and regulations it is not possible to maintain database.

ii. Examples of Database Management Systems program are MySQL, MS Access, Oracle, MySQL Server etc

iii. Unique field can be set as primary key. Here, id's can be made as a primary key.

Q.(20) Consider the following table : Employees

Table : Employees

Employee ID	Name	Gender	Salary
A24092	Bharat Kumar	Male	25800
B23076	Ashish Koorella	Male	24900
B24017	Kevin Caesar	Male	32000
A23094	Krunal Prabhat	Male	35300
C221	Shabhya Jain	Female	32500
B22001	Rinki Mishra	Female	34000

(a) Fields : 4 (Employee ID, Name, Gender, Salary) Records : 6

(b) Write SQL commands for the following :

(i) Select * from Employees;

(ii) Select Name, Gender from Employees where Salary>30000;

***** ALL THE BEST *****