



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



Class: X
Date: 20.12.2024
Adm No:

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

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.

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. When it is difficult to communicate with someone who is not willing to talk or express their feelings and views it means there is a/an _____.
 - a. Culture Barrier
 - b. Interpersonal Barrier**
 - c. Physical Barrier
 - d. Language Barrier
- ii. Kartik's Computer was running very slow, hangs and often restarts. He is very confused and tensed as he was working on a very important assignment. Kartik's friend gave him the following suggestions. Identify who has given him a genuine suggestion.
 - a. Radha : Restart your machine
 - b. Ishan : Install reliable antivirus software and update**
 - c. Amar : Don't use Pendrive
 - d. Sam : Install free antivirus from net
- iii. _____ refers to focusing human efforts for maintaining a healthy body and mind capable of better withstanding stressful situations.
 - a. Self-Motivation

- b. Stress Management**
 - c. Self-Awareness
 - d. Self-Regulation
- iv. High expectations from self can leave with chronic anxiety and stress, thus leading to _____ stress.
 - a. Physical
 - b. Emotional**
 - c. Mental
 - d. Financial
- v. Which of the following is/are a myth about Entrepreneurship?
 - a. Need a lot of Money
 - b. Must have a great Idea
 - c. Should know everything about business
 - d. All of these**
- vi. Name the organization that has the Sustainable Development Goals?
 - a. UNICEF
 - b. League of Nations
 - c. United Nations**
 - d. World Health Organization

Q.(2) Answer any 5 out of the given 6 questions.

(5 x 1 = 5)

- i. Which one is not the tab of the insert/index Table window of Writer Document?
 - a. Entries
 - b. Background
 - c. Style
 - d. Row**
- ii. In a Writer document, which option allows you to insert a pre-designed page layout for specific purposes like resumes or flyers?
 - a. Page Styles
 - b. Templates**
 - c. Formatting Toolbar
 - d. Outline View
- iii. Saurabh has made an advertisement in Digital Document. He is facing difficulty in positioning the images within the text. Suggest him how he can adjust the image?
 - a. Wrap text**
 - b. Crop
 - c. Alignment
 - d. Layout
- iv. Which feature in a digital document is used to format text to appear in a specific style, such as headings, titles, or body text?
 - a. Table of Contents
 - b. Styles and Formatting**
 - c. Insert Table
 - d. Text Alignment
- v. To increase the contrast of an image, _____ option is used in a document.
 - a. Smooth
 - b. Sharpen**
 - c. Aging
 - d. mosaic
- vi. What is the purpose of the "Track Changes" feature in digital documentation?
 - a. To auto-correct grammar errors

b. To monitor and display edits made to the document

- c. To translate the document into another language
- d. To create hyperlinks in the document

Q.(3) Answer any 5 out of the given 6 questions.

(5 x 1 = 5)

- i. _____ is specifically designed to minimize the results according to a set rules that we define in a spreadsheet.
 - a. Goal Seek
 - b. Scenario
 - c. Solver
 - d. Subtotal**
- ii. Sahil and his partners have created a list of their company employees in one of the spreadsheets in the office. Now the rest of the task they want to complete from home. Which option they should use to access the same Spreadsheet from home?
 - a. Consolidate Worksheet
 - b. Link Worksheet**
 - c. Merge Worksheet
 - d. Lock Worksheet
- iii. Anikan wants to know the name given to the mathematical expression to perform calculation on data in cells. Help him to find the correct option.
 - a. Goal Seek
 - b. Macro
 - c. Formula**
 - d. Subtotal
- iv. Identify the part of a Spreadsheet using which a user can manage multiple sheets.
 - a. Status Bar
 - b. Sheet Tab**
 - c. Formula Bar
 - d. Worksheet Area
- v. Spreadsheet software can find the changes by _____ sheets.
 - a. Changing
 - b. Comparing**
 - c. Renaming
 - d. Editing
- vi. Amir was working in a file of a spreadsheet software. His friend was also working in the same file, but Amir wants to know what changes had been done by him. What feature does he use to track the changes done by his friend.
 - a. Comment
 - b. Track Changes**
 - c. Resolve Conflicts
 - d. Accepting Changes

Q.(4) Answer any 5 out of the given 6 questions.

(5 x 1 = 5)

- i. It enables users to view, enter, and change data directly in database objects.
 - a. Report
 - b. Query
 - c. Form**
 - d. Database
- ii. There are _____ types of Relationships in a table of a database.

- a. 1
 - b. 3**
 - c. 4
 - d. Many
- iii. A Relational database uses _____ commands which is a standard user application that provides an easy programming interface for database interaction.
- a. Access
 - b. Python
 - c. SQL**
 - d. Protocol
- iv. Suraj wants to create a database for his clients. For this purpose, he needs to store the Email IDs of his clients. Which datatype should he use to accomplish this purpose?
- a. Numeric
 - b. Varchar**
 - c. Binary
 - d. Boolean
- v. Geet has written a SQL query in SQL view. But he doesn't know how to execute the query using keyboard keys. Suggest him the shortcut key to complete the task.
- a. Enter
 - b. Ctrl + E
 - c. Space bar
 - d. F5**
- vi. A table can have only _____ primary key in a database.
- a. 1**
 - b. 2
 - c. 3
 - d. Many

Q.(5) Answer any 5 out of the given 6 questions.

(5 x 1 = 5)

- i. What is the purpose of hazard signs in the workplace?
- a. To decorate the office
 - b. To alert employees of potential dangers**
 - c. To increase workplace stress
 - d. To provide entertainment
- ii. Which of these is an example of an ergonomic hazard?
- a. Repetitive motion injuries**
 - b. Chemical spills
 - c. Loud machinery
 - d. Poor lighting
- iii. In terms of fire safety, which class of fire extinguisher is used for electrical fires?
- a. Class A
 - b. Class B
 - c. Class C**
 - d. Class D
- iv. What is the primary purpose of workplace safety measures?
- a. To reduce employee salaries
 - b. To ensure employee health and well-being**
 - c. To increase workplace noise
 - d. To create a competitive environment
- v. What is the full form of RSI ?

- a. **Repetitive Strain Injury**
 - b. Rational Strain Injury
 - c. Repetitive Stress Injury
 - d. Risk Strain Injury
- vi. An at workplace is a physical or mental injury following an incident or exposure.
- a. Evacuation routes and exits
 - b. **Accident**
 - c. Emergency
 - d. None of the above

SECTION B: SUBJECTIVE TYPE QUESTIONS

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

(3 x 2 = 6)

Q. (6) Name and explain the different components of communication cycle.

Ans. :

Sender, Idea, Message, Encoding, Communication channel, Receiver, Decoding, Feedback

Sender : It is the person whowants to send the information.

Idea ; The information or ideas the sender wants to share with the receiver.

Receiver : The receiver or the target to whom the information is intended to be sent.

Feedback : The target response to the source information

Q. (7) What is self-awareness ? What are the four kinds of self-awareness ? Explain.

Ans. : Self awareness refers to your knowledge and understanding of yourself – youe emotions, beliefs, values, biases, knowledge base, abilities, motivations, interests etc.

(i) Self awareness of your strength : Take time to discover your strength.

(ii) Self awareness of your weakness : Discovering your weaknesses builds your humility.

(iii) Self awareness of your dark side : Your dark side includes your character flaws and your hidden weaknesses.

(iv) Self awareness of your emotional trigger : These are your trigger points. Some times known to you, at other times not known to you.

Q. (8) Explain in detail, different types of threats that can affect a computer system.

Ans. :

There are two types of threats that affect a computer system :

Natural threats : There are the threats posed by the environment.

Fire, Flood, Lightning

Human threats : These are threats from human agents that may attempt to lay their hands on sensitive data which is of great importance to the owner.

Physical theft, Virus, Trojan Horse and Worm, Spyware, Online predators, Online scams

Q. (9) What do you know about entrepreneur and entrepreneurship ? Explain myths about Entrepreneurship.

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

Myths about Entrepreneurship

- i. It is easy to start a business
- ii. Lots of money is needed to start a new business
- iii. A startup cannot borrow from banks
- iv. Talent is more important than industry.
- v. Most startups are successful

Q. (10) Describe the meaning and importance of sustainable development. Write and explain any two problems related to sustainable development.

Ans. :

Sustainable Development refers to an approach to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Its significance lies in fostering long-term economic growth while ensuring social well-being and environmental protection.

climate change	energy consumption
waste production	threats to public health
poverty	social exclusion
management of natural resources	loss of biodiversity
land use.	

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

(4 x 2 = 8)

Q. (11) What are templates? What are the advantages of using templates?

Ans. A template is a model that you use to create other documents. For example, you can create a template for business reports that has your company's logo on the first page. When you create a new documents from this template will all have your company's logo on the first page. One of the major advantages of using templates is the ease of updating styles in more than one document. Another advantage is that it also saves your time.

Q. (12) What is the advantage of sharing worksheet data ? Explain

Ans. : Enhance the speed of data entering

To facilitate collaboration, make things easy

Q. (13) Explain features of accepting or rejecting changes in Spreadsheet.

Ans. ;

Here are some features of accepting or rejecting changes in a spreadsheet:

Accept or reject individual changes: Accept or reject each change by clicking Accept or Reject.

Accept or reject all changes: Accept or reject all changes at once by clicking Accept All or Reject All.

Filter changes: Use the When, Who, and Where checkboxes and drop-down menus to filter changes.

Review changes: Review information about each change in the Accept or Reject Changes dialog box.

Select a value: If prompted to select a value for a cell, click the value that you want, and then click Accept.

Highlight changes: Even after accepting or rejecting changes, they will still be highlighted in your workbook. To remove them completely, turn off Track Changes in Excel.

Q. (14) What do you mean by Form and Report in Open Office Base ? Explain two types of reports created in OpenOffice Base.

Ans. :

A report helps to display the data in a summarized manner. It is used to generate the overall work outcome in a clear format.

Form	Report
It is a way of storing data into a database	It is a way to display data in a printed form
Values entered in the form can be modified	Values in the report cannot be modified.

Two types of report created in OpenOffice Base are:

- a. Static Report : It contains the data in the selected fields at the time the report was created.
- b. Dynamic Report : It can be updated to show the latest data.

Q. (15) How to maintain a healthy life style to survive and sustain in the workplace ? Write and explain at least four points in support of your answer.

Ans. :

- .(i) Watch your plate : Promote consumption of a variety of foods.
- (ii) Watch your waist and weight : Encourage the use of weighing scale. Measuring tapes and devices to monitor individual physical fitness.
- .(iii) Watch your steps : actively engage and promote physical activities: walking, using stairs, taking active breaks and movements throughout the day.
- .(iv) Watch your stress level : Introduce stress consultation and counselling services for staff.
- .(v) Watch your change :
- .(vi) Watch your tobacco and alcohol :
- .(vii) consumption :

Q. (16) What are the general evacuation procedure during hazard ? Mention and explain at least four points.

Ans. :

- (i) First aid boxes at various places in the offices.
- (ii) Trained first aiders – on all floors of a building
- (iii) Knowledge of the nearest casualty department or local hospital
- (iv) Access to call for an ambulance
- (v) Ability to provide immediate assistance to casualties with illnesses or injuries caused by a specific hazard at work.

Answer any 3 out of the given 5 questions on Subject Specific Skills.

(3 x 4 = 12)

Q.(17) Explain following terms for positioning of graphic:

- (a) Arrangement (b) Alignment (c) Anchoring (d) Text Wrapping

Ans. :

Positioning of a graphic is controlled by four settings:

Arrangement refers to the placement of a graphic on an imaginary vertical axis. Arrangement controls how graphics are stacked upon each other or relative to the text.

Alignment refers to the vertical or horizontal placement of a graphic in relation to the chosen anchor point.

Anchoring refers to the reference point for the graphics. This point could be the page, or frame where the object is, a paragraph, or even a character. An image always has an anchor point.

Text wrapping refers to the relation of graphics to the surrounding text, which may wrap around the graphic on one or both sides, be overprinted behind or in front of the graphic, or treat the graphic as a separate paragraph or character. It is available under FORMAT Tab. Its options are: Wrap Off, Page Wrap, Optimal Page Wrap, Wrap Through, In Background.

Q.(18) Define Scenarios with example. What is the use of Display Border and Copy back option in scenarios ?

Ans. : A **scenario** is a specific situation or set of circumstances used in planning, analysis, or decision-making. It is typically employed to explore different possibilities, outcomes, or responses to particular events or decisions, usually in the context of business, project management, simulation, or forecasting. Scenarios help forecast and plan for different outcomes in various situations.

In a business or project management context, a scenario refers to a detailed plan or projection of how a certain project or situation might unfold under specific conditions. For example, in financial planning, scenarios can help project how a company might perform under different market conditions, like a recession or a boom.

1. Display Border:

- The **Display Border** option is used to visually highlight or separate different scenarios or data within a set of options. It helps users distinguish between various groups of data or scenarios. **Display Border** helps in visually separating different scenarios or outcomes for clarity.

2. Copy Back:

- The **Copy Back** option is used to transfer or update values or parameters from a scenario back into the main model or dataset. This is especially useful in scenario-based planning where changes made in a scenario model are meant to be reflected back into the original data or system. **Copy Back** allows you to update the original dataset with changes made in a scenario model.

Q.(19) What are the different types of SQL commands ? Name and explain with examples.

Ans. :

Classification of SQL Statements :

(i) Data Definition Language (DDL) Commands : It allows you to perform tasks related to data definition. Eg. : CREATE TABLE, ALTER TABLE, DROP TABLE, CREATE INDEX, ALTER INDEX, DROP INDEX, RENAME TABLE, TRUNCATE

(ii) Data Manipulation Language (DML) Commands : These are used to manipulate data. Means we can do retrieval, insertion, deletion and modification of data in the database. Eg. : INSERT INTO, UPDATE, DELETE, SELECT, LOCK TABLE.

(iii) Data Control Language (DCL) : It is used to create roles, permissions and referential integrity as well it is used to control access to database by securing it. These commands are used for providing security to database objects. Eg. : GRANT, REVOKE

(iv) **Transaction Control Language (TCL) Commands** : It manage changes made by DML commands. These SQL commands are used for managing changes affecting the data. Eg. ; COMMIT, ROLLBACK, SAVEPOINT, SET TRANSACTION.

Q.(20) Consider the following 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

Write SQL commands for :

- Display all the Employee ID and Name of all employees in the table.
- Display all the name of all Female employees.
- Display all the employee names and genders for whom the salary is more than 30000.
- Display all the employee names with “ar” anywhere in the name.

Ans. :

- Select Employee_ID, Name from Employees;
- Select Name from Employees where Gender = “Female”;
- Select Name, Gender from Employees where Salary > 30000;
- Select * from Employees where Name like “% ar %”;

Q.(21) Name and explain the different types of accidents at workplace. (At least 4)

Ans. :

- Slips, trips and falls** : One of the common accidents in workplace is slipping on wet floor or you likely encountered slippery tiled surfaces.
- Muscle strains** : It can occur with the person who regularly lifts heavy items at workplace or continuously work on the computer system with incorrect body posture.
- Being hit by falling objects** : At the workplace, it may happen some objects may fall on you from shelves or out of the cupboard, causing some nasty injuries.
- Repetitiv strain injury (RSI)** : RSI is another problem that’s become increasingly common place at work over the years, though even now some employers don’t seem to take it entirely seriously.
- Crashes and collisions**
- Cuts and lacerations**
- Inhaling toxic fumes**
- Exposure to loud noise**
- Walking into objects**
- Fights at work**

..... BEST OF LUCK