



**BK BIRLA CENTRE FOR EDUCATION**  
**SARALA BIRLA GROUP OF SCHOOLS**  
**SENIOR SECONDARY CO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL**  
**ANNUAL EXAMINATION 2024-25**  
**INFROMATION TECHNOLOGY (802)**



**Class: XI (SUBJECT-5)**

**Date:**

**Name: .....**

**MARKING SCHEME**

**Duration: 3 hrs.**

**Max Marks: 60**

**Exam No. :**

**General Instructions:**

1. Please read the instructions carefully.
2. This Question Paper consists of 24 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 (30 MARKS):**
  - i. This section has 06 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 (30 MARKS):**
  - i. This section has 18 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.

**SECTION A: OBJECTIVE TYPE QUESTIONS**

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

**(4 x 1 = 4)**

- (i) Choose the correct example of oral communication.
 

(a) Reports	(b) Newspapers
(c) <b>Face-to-face interaction</b>	(d) Notes
- (ii) ..... refers to knowing one's potential by examining and analyzing intellectual and spiritual capacities.
 

(a) Self management	(b) <b>Self exploration</b>
(c) Grooming	(d) Intelligence
- (iii) ..... refers to the things people do to keep themselves neat and presentable.
 

(a) Team norms	(b) Team process
(c) <b>Grooming</b>	(d) None of these
- (iv) ..... is not an alignment option in OpenOffice writer.
 

(a) Left	(b) justified
(c) <b>Squeeze</b>	(d) Right
- (v) ..... are basically the beliefs about what matters the most, how to behave and which goals are important to achieve.
 

(a) <b>Values</b>	(b) Perseverance
(c) Attitude	(d) None of these
- (vi) ..... comes from natural sources or processes that are constantly replenished.
 

(a) Non renewable energy	(b) <b>Renewable energy</b>
(c) Green Energy	(d) None of these

**Q.(2) Answer any 6 questions out of the given 7 questions on Computer Organization.**

**(6 x 1 = 6)**

- (i) What does the term 'IPO' stand for in the context of computer operation.  
(a) **Input-Process-Output** (b) Input-Program-Output  
(c) Instruct-Process-Operate (d) Input-Process-Operate
- (ii) In the binary number system, what does the digit "1" represent?  
(a) False (b) High voltage  
(c) **Binary** (d) Low voltage
- (iii) What is the main advantage of using an SSD over an HDD?  
(a) Higher capacity (b) Slower speed  
(c) Mechanical components (d) **Faster speed**
- (iv) What type of memory is volatile and loses its data when the computer is turned off?  
(a) ROM (b) Cache memory  
(c) SSD (d) **RAM**
- (v) What type of operation is the Arithmetic Logic Unit (ALU) responsible for?  
(a) Managing memory storage (b) Directing data flow within the CPU  
(c) **Arithmetic and Logical operations** (d) Interpreting instructions
- (vi) Which of the following input device is used to capture images of physical documents?  
(a) **Scanner** (b) Mouse  
(c) Keyboard (d) Joystick
- (vii) Which of the following output devices produces hard copies of digital documents?  
(a) **Printer** (b) Monitor  
(c) Speakers (d) Microphone

**Q.(3) Answer any 6 questions out of the given 7 questions on Networking and Internet.**

**(6 x 1 = 6)**

- (i) What does DNS Stand for in the context of the Internet?  
(a) **Domain Name Service** (b) Digital Networking System  
(c) Data Node System (d) Device Network Service
- (ii) What is the latest version of Internet protocol?  
(a) IPv5 (b) **IPv6**  
(c) IPv7 (d) IPv8
- (iii) In which year was ARPANET created by US Department of Defence?  
(a) 1950s (b) **1960s**  
(c) 1970s (d) 1980s
- (iv) Who introduced the concept of communication?  
(a) Donal Davies (b) **Alexander Graham Bell**  
(c) Len Kleinrock (d) National Science Foundation
- (v) Which protocol allows communication between heterogeneous networks?  
(a) ARPANET (b) PSIN  
(c) **TCP/IP** (d) Digital packet Switching.
- (vi) Which network device is used to regenerate and boost weak signal?  
(a) Router (b) **Repeater**  
(c) Hub (d) Gateway
- (vii) Which Topology requires the least cabling?  
(a) **Bus Topology** (b) Ring Topology  
(c) Star Topology (d) Mesh Topology

**.(4) Answer any 5 questions out of the given 6 questions on Office Automation Tools.**

**(5 x 1 = 5)**

- (i) What is the purpose of Word processing software?  
(a) Editing images (b) Managing database  
(c) Creating spreadsheet (d) **creating and editing word documents**
- (ii) Which tab in OpenOffice write used for commands like create, save, print, open and close?  
(a) **Edit tab** (b) View tab (c) Tools tab (d) Format tab
- (iii) Which menu of OpenOffice Calc will need to be used for using macros?  
(a) Insert (b) Format (c) **Tools** (d) Window
- (iv) By default how many sheets are there in a newly opened spreadsheet?  
(a) One (b) Two  
(c) **Three** (d) Four
- (v) In copying the data and moving the data, the common part is the:  
(a) **Paste operation** (b) Format  
(c) Cut (d) Autofill
- (vi) With OpenOffice.....we can explore a wide range of slide transition effects and animation option.  
(a) Calc (b) Writer  
(c) **Impress** (d) Draw

**Q.(5) Answer any 5 questions out of the given 6 questions on Relational Database Management System.**

**(5 x 1 = 5)**

- (i) Which language is sued to manage data in a database?  
(a) **SQL**  
(b) Java  
(c) HTML  
(d) Python
- (ii) What is MySQL?  
(a) A programming language (b) **A software for managing database**  
(c) A graphical design tool (d) A data visualization tool
- (iii) What are the various types of MySql commands?  
(a) Procedural language  
(b) **DDL,DML,DCL**  
(c) Frontend and backend  
(d) Conditional and iterating
- (iv) What is the ALTER TABLE statement used for?  
(a) Adding new column to a table  
(b) To remove specific column from a table  
(c) Renaming database  
(d) **Modifying the data inside a table.**
- (v) Which statement is used to insert a row in a table?  
(a) **Add Row**  
(b) Insert Row  
(c) Create Row  
(d) Put Row

- (vi) What is the purpose of the select statement?
- (a) To update data in table
  - (b) To delete data from a table
  - (c) To insert data into a table
  - (d) To retrieve data from a table**

**Q.(6) Answer any 4 questions out of the given 6 questions on Fundamentals of Java. (4 x 1 =4)**

- (i) What is the result of the expression  $8\%3$ ?
- (a) 2**
  - (b) 3
  - (c) 2.67
  - (d) 2.0
- (ii) Which operator is used to compare if two values are equal in java?
- (a) =
  - (b) ==**
  - (c) !=
  - (d) <=
- (iii) Which operator is used to perform logical AND operator in java?
- (a) &&**
  - (b) &
  - (c) @
  - (d) \$
- (iv) Which operator is used to increment a variable by 1 in java?
- (a) ++**
  - (b) +1
  - (c) +=
  - (d) \*=
- (v) What will be the value of x after the following code `int x=5;x+=3;`
- (a) 6
  - (b) 7
  - (c) 8**
  - (d) 9
- (vi) Which operator is used for exponentiation in java?
- (a) ^**
  - (b) \*\*
  - (c) {}
  - (d) ^^

## **SECTION B: SUBJECTIVE TYPE QUESTIONS**

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

(3 x 2 = 6)

**Q. (7)** What is communication? Name 7 Cs of effective communication.

**Ans- Communication** is the process of exchanging information, ideas, thoughts, or emotions between individuals or groups. It can occur through verbal, nonverbal, written, or visual means and is essential for building understanding, relationships, and effective collaboration.

7 Cs of effective communication are-

Clarity

Conciseness

Correctness

Completeness

Consideration

Courtesy

consistency

**Q. (8)** How can loss of individuality influence team work?

**Ans-** The loss of individuality in a team can significantly impact teamwork, both positively and negatively.

**Negative Impacts**

Decreased Motivation and Engagement

Lower Job Satisfaction

Positive Impacts

Stronger Team Cohesion

Improved Collaboration

**Q. (9)** Define Word Processor? Mention its advantages over the use of typewriter.

**Ans-** A **word processor** is a computer application used for creating, editing, formatting, and printing text documents. It offers a wide range of features such as spell check, grammar check, font styles, page layouts, and the ability to insert images and tables, making it a versatile tool for document creation.

**Advantages of Word Processors Over Typewriters**

Editing Capability

Formatting Features

Spell and Grammar Checking

Document Storage and Retrieval

**Q. (10)** Who is an entrepreneur? What are the three types of business activities?

**Ans-** An **entrepreneur** is an individual who identifies a business opportunity, takes the initiative to organize and manage resources, and assumes the risks involved in starting and operating a business.

**Three types of business activities**

Operating Activities

Investing Activities

Financing Activities

**Q. (11)** What is Green economy? Explain its components.

**Ans-** A **green economy** is an economic system aimed at achieving sustainable development while minimizing environmental risks and ecological scarcities.

Components of a Green Economy

Renewable Energy

Sustainable Agriculture

Waste Management and Recycling

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

**(3 x 2 = 6)**

**Q.(12)** Give any three reasons why a printer may not work.

**Ans-** Connectivity Issues  
Paper or Ink Problems  
Software or Configuration Errors

**Q.(13)** What is computer network ? What type of devices can be connected to a PAN network?

**Ans-** A **computer network** is a system of interconnected devices that communicate with each other to share resources, data, and applications.

Computing Devices

Laptops

Tablets

Smartphones

Desktop computers

Peripheral Devices

Printers

Scanners

External hard drives

USB devices

**Q.(14)** Define the purpose of various tabs provided in OpenOffice Writer.

**Ans-** File Tab-Provides options for managing documents.

Edit Tab- Offers tools for modifying the text and content in a document.

View Tab-Controls how the document and interface are displayed.

Insert Tab- Allows the addition of objects and elements to the document.

Format Tab- Provides tools for formatting text and document elements.

**Q.(15)** Which keywords removes redundant data from display. Explain with example.

**Ans-** In SQL, the DISTINCT keyword is used to remove redundant (duplicate) data from the display of query results. It ensures that only unique rows are returned from the specified column(s).

```
SELECT DISTINCT column_name(s) FROM table_name;
```

**Q.(16)** What is Class in Java?

**Ans-** In Java, a **class** is a blueprint or template for creating objects. It defines the properties (fields) and behaviors (methods) that the objects of the class will have.

**Answer any 2 out of the given 3 questions on Subject Specific Skills.**

**(2 x 3 = 6)**

**Q.(17)** What is the main function of repeater in a network? How does it work?

**Ans-** A **repeater** is a network device used to extend the range of a network signal. Its primary function is to **amplify or regenerate** weak or degraded signals, allowing them to travel longer distances across a network.

Signal Regeneration or Amplification:

Signal Transmission:- After amplification or regeneration, the repeater then retransmits the signal, ensuring that it reaches the next network device or segment without degradation.

**Q.(18)** Define charts and graphs. Explain the various types of charts available in spreadsheet.

**Ans- Chart:** A chart is a visual representation of data. It is used to make the relationships between variables easier to understand and interpret. Charts are used in many applications, including spreadsheets, to display data trends, comparisons, distributions, and more.

**Graph:** A graph is a type of chart that displays data points as a series of points, lines, or bars, showing how the data changes over time or across different categories. Graphs are used to show patterns, trends, and relationships between variables.

Various types of charts available in spreadsheet-

Column chart

Pie chart

Bar chart

Line Chart

Area Chart

Scatter chart

**Q.(19)** Explain what is MySQL? List important features of MySQL.

**Ans-** **MySQL** is an open-source relational database management system (RDBMS) that is widely used for storing, organizing, and managing data in tables.

Important Features of MySQL:

High Performance:

Reliability and Stability:

Support for SQL (Structured Query Language):

Data Security:

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

**(3 x 4 = 12)**

**Q.(20)** What general procedure must you follow if any peripheral device is NOT working ?

**Ans-** If a **peripheral device** (such as a printer, scanner, keyboard, mouse, etc.) is not working properly, we can follow these general troubleshooting steps to identify and resolve the issue:

Check the Physical Connections:

Restart the Device and Computer:

Check the Device Manager

Check for Software Issues or Drivers:

Check for Software/Operating System Issues:

**Q.(21)** Write short notes on network topology. Explain the different types of Topology.

**Ans- Network topology** refers to the physical or logical arrangement of devices, nodes, and the connections between them in a network. It determines how devices in a network are arranged and how they communicate with each other.

Types of Network Topology:

**Bus Topology:**In a bus topology, all devices are connected to a single central cable (the "bus") that carries the data. Each device listens for signals on the bus to communicate with other devices.

**Star Topology:**In star topology, all devices are connected to a central device (typically a switch or hub), which manages communication between devices. Each device has a dedicated connection to the central device.

**Ring Topology:**In a ring topology, each device is connected to exactly two other devices, forming a ring. Data travels in a circular direction around the network until it reaches the destination.

**Mesh Topology:**In a mesh topology, each device is connected to every other device in the network. This provides multiple paths for data to travel, ensuring reliability.

**Q.(22)** What can a presentation software used for? Explain any three views in which slides of impress can be viewed.

**Ans-** resentation software, like **Impress** (part of the LibreOffice suite), is used for creating and delivering slide-based presentations. These presentations often include text, images, charts, graphs, videos, and other multimedia elements to convey information effectively to an audience.

Presentation software can be used for:

**Normal View:** This is the default view in Impress, where the user can create and edit individual

slides.

**Slide Sorter View:** In Slide Sorter view, all the slides in the presentation are shown as thumbnails, making it easier to rearrange or reorganize the presentation by dragging and dropping.

**Slide Show View (Presentation View):** This view is used for presenting the slides to an audience. The presentation is displayed in full-screen mode with no editing options visible.

**Q.(23)** Define DBMS. Write the advantages of DBMS. State the various DML command with their corresponding functions.

Ans- A Database Management System (DBMS) is a software system designed to manage databases and provide an interface for users and applications to interact with the data.

Advantages of DBMS:

- i. Data Redundancy Control:
- ii. Data Consistency:
- iii. Data Security:

Data Manipulation Language (DML) Commands and their functions:

**SELECT:** The SELECT command is used to retrieve data from one or more tables in the database.

**INSERT:** The INSERT command is used to add new rows (records) into a table.

**UPDATE:** The UPDATE command is used to modify the existing data in a table.

**DELETE:** The DELETE command is used to remove one or more records from a table.

**Q.(24)** What is NetBeans? What are the various components used to create a GUI front end interface?

Ans- **NetBeans** is an open-source **Integrated Development Environment (IDE)** used primarily for developing applications in Java,

NetBeans is widely used for creating **desktop applications, web applications, and mobile applications.**

Components Used to Create a GUI Front-End Interface in NetBeans:

**JFrame:** A JFrame is the main window for any Java GUI application. It serves as the container for all other components (such as buttons, text fields, labels, etc.).

**JPanel:** A JPanel is a container that allows grouping of components. It can be placed inside a JFrame and is often used to organize related components.

**JLabel:** A JLabel is used to display text, images, or both. It is commonly used to provide instructions or information to the user.

**Button:** A JButton is a clickable button that performs an action when clicked by the user.

**JTextField:** A JTextField is a single-line text input field that allows users to enter data.

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