



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



TERM-1 EXAMINATION (2025-26)
INFORMATION TECHNOLOGY (802) / SUBJECT-05

Class : XI A/B/C
Date : 03-09-2025
Admission No.:

Duration : 3 Hrs.
Max. Marks : 60
Roll No.:

General Instructions:

- (i) Please read the instructions carefully.
- (ii) This question paper consists of 24 questions in two Sections: Section – A & Section – B.
- (iii) Section – A has Objective type questions whereas Section – B contains Subjective type questions.
- (iv) Out of the given (6 + 18) = 24 questions, a candidate has to answer (6 + 11) = 17 questions in the allotted (maximum) time of 3 hours.**
- (v) All questions of a particular section must be attempted in the correct order.

(vi) Section – A: Objective Type Questions (30 marks)

- (a) This section has 06 questions.
- (b) There is no negative marking.
- (c) Do as per the instructions given.
- (d) Marks allotted are mentioned against each question/part.

(vii) Section – B: Subjective Type Questions (30 marks)

- (a) This section has 18 questions.
- (b) A candidate has to do 11 questions.
- (c) Do as per the instructions given.
- (d) Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q 1. Answer any 5 out of the given 6 questions on Employability Skills (1 x 5 = 5 marks)

- i. What is the purpose of Communication ? 1
 - a. Inform (tell someone about something) b. Influence (get someone to do something you want) c. Share thoughts, ideas , feelings d. All of the above
- ii. Which of the following methods is used to receive information from the sender ? 1
 - a. Listening b. Speaker c. Telling d. Writing
- iii. What does an upright (straight) body posture convey or show ? 1
 - a. Shyness b. Fear c. Confidence d. Intelligence
- iv. _____ refers to knowing one's potential by examining and analysing intellectual and spiritual capacities ? 1
- v. _____ means having the ability to impress the mind, arousing admiration, awe, respect for the way someone looks or carries oneself. 1
 - a. Grooming b. Team norms c. Impressive appearance d. None of these
- vi. _____ refers to a group of people who have complementary skills and work towards a common goal. 1
 - a. Group b. Company c. Team d. None of these

- Q 2. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**
- What does the term “IPO” stand for in the context of computer Operations? 1
 a. Input-Process-Output b. Input-program-Output c. Instruct-Process-Operate
 d. Input-Process-Operate
 - In the binary number system, what does the digit “1” represent? 1
 - What is the advantage of using high-level programming languages over machine language? 1
 a. Faster execution b. Direct electric signal interpretation
 c. Simplicity for developers d. Better compatibility with binary code
 - What are the two main types of storage devices in a computer? 1
 a. RAM and ROM b. HDD and SSD
 c. Flash Memory and Cache Memory d. USB and Memory Cards
 - Which storage device uses spinning disks or platters to store data? 1
 a. Cache Memory b. SSD c. Flash Memory d. HDD
 - What is the main advantage of using an SSD over an HDD? 1
- Q 3. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**
- What type of memory is volatile and loses its data when the computer is turned off? 1
 - What is the role of the Control Unit (CU) in a CPU? 1
 a. Perform arithmetic operations b. Interpret instructions and manage data flow
 c. Manage memory storage d. Control input/output devices
 - Which of the following is not an example of an operating system ? 1
 a. Windows b. macOS c. Linux d. Chrome
 - What is the role of a driver in computing ? 1
 a. It allows the operating system to communicate with a specific hardware device.
 b. It provides a common platform for programs and devices to communicate with each other.
 c. It ensures that data is transmitted accurately and efficiently.
 d. It identifies unique characteristics of peripheral devices.
 - Which of the following is not an example of a hardware device that requires a driver to function properly with an operating system ? 1
 a. Keyboard b. Monitor c. Processor d. Printer
 - What is the main function of an operating system ? 1
- Q 4. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**
- Which of the following is NOT one of the tasks performed by an operating system when a program is launched ? 1
 a. Allocating necessary resources b. Ensuring programs interfere with each other
 c. Manage and scheduling tasks and processes d. Prioritizing tasks based on importance.
 - What is the purpose of assigning a unique process ID to a process in an operating system ? 1
 a. To prioritize the process b. To manage the state of the process
 c. To schedule the execution of the process d. To identify the process
 - What type of memory stores data and instructions that the processors needs to access quickly ? 1
 a. Non-volatile memory b. Volatile memory c. Secondary memory d. Tertiary memory
 - How is memory allocated to processes ? 1
 a. Static allocation b. Dynamic allocation c. Fixed allocation d. None of these
 - Which of the following is an input device ? 1
 a. Monitor b. Keyboard c. Printer d. Speakers
 - Which of the following is an output device ? 1
 a. Mouse b. Scanner c. Headset d. Projector
- Q 5. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**
- Which of the following input devices is used to capture images of physical documents ? 1
 a. Scanner b. Mouse c. Keyboard d. Joystick
 - Which of the following output devices produces hard copies of digital documents ? 1

- a. Printer b. Monitor c. Speakers d. Microphone
- iii. Which of the following is an example of an input-output device ? 1
- a. Printer b. Scanner c. Touchscreen d. Speakers
- iv. What is the primary function of the CPU ? 1
- a. To house the main processor b. To execute user instructions
- c. To provide connections for other
- d. To store data and information components of the computer.
- v. How are processors classified ? 1
- a. Based on their size and weight b. Based on their colour and design
- c. Based on their clock speed d. Based on their price and availability cores and manufacturing technology.
- vi. Why are pen drives popular ? 1
- Q 6. Answer any 5 out of the given 8 questions (1 x 5 = 5 marks)**
- i. What is the result of the expression $8 \% 3$?
- ii. Which operator is used to compare if two values are equal in Java ?
- a. == b. = c. != d. None of these
- iii. What will be the value of x after the following code: `int x=5 ; x +=3`
- a. 8 b. 5 c. 3 d. 15
- iv. Which operator is used to perform logical AND in Java ?
- a. && b. || c. ! d. &
- v. What will be the value of y after the following code: `int y=10; y *=2;`
- a. 5 b. 10 c. 20 d. 12
- vi. Which operator is used to increment a variable by 1 in Java ?
- a. ++ b. -- c. += d. *=
- vii. Predict the output of the following code snippet:
- ```
int x = 5;
System.out.println(x++);
System.out.println(++x);
```
- viii. Predict the output of the following code snippet:
- ```
String name = "Java";
name.concat(" Programming");
System.out.println(name);
```

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks) Answer each question in 20 – 30 words.

- Q 7. Write down the different types of verbal communication with examples of each. 2
- Q 8. Explain the communication cycle briefly. 2
- Q 9. Write all 7 Cs of effective communication. Explain any one. 2
- Q 10. What is a team ? Mention some factors which influence team building. 2
- Q 11. Define time management. Give examples. 2
- Answer any 3 out of the given 5 questions in 20 – 30 words each (2 x 3 = 6 marks)**
- Q 12. What is the main difference between RAM and ROM. 2
- Q 13. What are some common uses of pen drives ? 2
- Q 14. Name the different types of operating systems 2
- Q 15. What are the various components used to create a GUI front-end interface ? 2
- Q 16. Write a short note on variables and naming convention for variables. 2
- Answer any 2 out of the given 3 questions in 30– 50 words each (3 x 2 = 06 marks)**
- Q 17. Explain the concept of refresh in DRAM and how it affects its performance and operation. 3
- Q 18. What is the role of an operating system in facilitating communication amongst various hardware and software components of a computing device ? 3
- Q 19. Write a java program which takes three numbers as input from the user and display their sum and products. 3

- Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)**
- Q 20. Discuss the advantages and disadvantages of using HDD and SDD as storage devices in a computer. How would you choose between them based on specific needs ? 4
- Q 21. What are the limitations to the amount of RAM that can be effectively utilized in a computer system ? 4
- Q 22. What are storage devices ? What is the difference between the secondary storage and primary storage of computer ? 4
- Q 23. Why is memory allocation in a dynamic manner beneficial for the operating system ? 4
- Q 24. Create a GUI interface in NetBeans IDE which accepts two inputs from the user and calculates all the four arithmetic operations like addition, subtraction, multiplication and division 4

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