GAIL DAV PUBLIC SCHOOL

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Class XI

Subject: - Computer Science

Topic: Computer System Basics

Section A: Assertion – Reason

Choose the correct option:
A. Both A and R are true and R is the correct explanation
B. Both A and R are true but R is not the correct explanation
C. A is true but R is false
D. A is false but R is true

1.

Assertion: CPU is called the brain of the computer.
Reason: It performs all arithmetic and logical operations.

2.

Assertion: RAM is a volatile memory.
Reason: Data is lost when power is switched off.

3.

Assertion: Compiler converts the whole program at once.
Reason: It translates line by line.

4.

Assertion: Operating System acts as an interface between user and hardware.
Reason: It manages system resources.

5.

Assertion: Secondary memory is faster than primary memory.
Reason: It stores data permanently.

Section B: MCQs

1. Which of the following is an input device?
   a) Monitor
   b) Printer
   c) Keyboard
   d) Speaker

2. Which memory is non-volatile?
   a) RAM
   b) Cache
   c) ROM
   d) Register

3. Which unit performs calculations?
   a) CU
   b) ALU
   c) Memory
   d) Input Unit

4. Example of system software:
   a) MS Word
   b) Windows
   c) Photoshop
   d) Excel

5. Full form of CPU:
   a) Central Processing Unit
   b) Control Processing Unit
   c) Central Program Unit
   d) Computer Processing Unit

Section C: Short Answer Questions

1. Define **hardware and software** with examples.
2. What is the difference between **RAM and ROM**?
3. Explain the **functions of Operating System**.
4. What is a **compiler and interpreter**?
5. Define **cache memory** and its importance.

Section D: Long Answer Questions

1. Explain the **basic structure of a computer system** with diagram.
2. Differentiate between:
   - Primary and Secondary Memory
   - System Software and Application Software
3. Explain **types of software** with suitable examples.
4. Describe the **functions of CPU (ALU & CU)** in detail.

Section E: Case-Based Questions

1. A school is setting up a computer lab. They need to decide on hardware and software components.

   Answer the following:
   a) Name any two input and two output devices.
   b) Suggest one system software and one application software.
   c) Explain why RAM is required.

Section F: Very Short Questions (1 Mark each)

1. What is IPO cycle?
2. Name any one output device.
3. What is firmware?
4. Define storage device.
5. What is booting?