

**Class: VI** 

then produces output.

# **B.K. BIRLA CENTRE FOR EDUCATION**



Time: 1 hr.

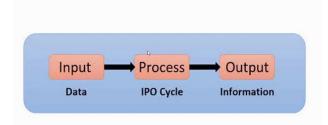
SARALA BIRLA GROUP OF SCHOOLS A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL

# PERIODIC TEST-I: 2025-26 ARTIFICIAL INTELLIGENCE

| Date: 05-07-2025<br>Admission No  | •••••                                 |                          | Max Marks: 25<br>Roll No. :           |
|-----------------------------------|---------------------------------------|--------------------------|---------------------------------------|
|                                   | ANSWE                                 | R KEY                    |                                       |
| I. Multiple Choice Questions :    |                                       | $(8 \times 1 = 8)$       |                                       |
| (1) Which of the following        | •                                     |                          |                                       |
| (a) Scanner                       | (b) Printer                           | (c) Speakers             | (d) Plotter                           |
|                                   | n as the                              |                          |                                       |
| (a) Visual Display Unit           |                                       | (b) Virtual Display Unit |                                       |
| (c) Video Data Unit               |                                       | (d) Virtual Data Unit    |                                       |
|                                   | ists of the physical parts o          | <u>-</u>                 | (1) 37 (1) 1                          |
| (a) Software                      | (b) Hardware                          | (c) Instruction          | (d) None of the above                 |
|                                   | ng is a pictorial representa          | •                        | (1) A1 - 11                           |
| (a) Pseudocode                    | (b) Program                           | (c) Flowchart            | (d) Algorithm                         |
| (a) Decision                      | l box in a flowchart is used          |                          | (d) Dragge                            |
| ` '                               | (b) Input owing is not a characterist | (c) Output               | (d) Process                           |
| (a) Finiteness                    | •                                     | (c) Ambiguity            | (d) Feasibility                       |
| (7) An algorithm is a set         | ` '                                   | (C) Ambiguity            | (u) reasionity                        |
| (a) Skills                        | (b) Formulae                          | (c) Instructions         | (d) All of these                      |
| ` '                               | ulation (process) is represe          | • •                      | (d) Thi of these                      |
| (a) A rectangle                   |                                       | (c) A Parallelogram      | (d) A circle                          |
| II. Classify the inputs a a seed. | nd outputs from the belo              | w mentioned list for     | growing a fruit tree from (3 X 1 = 3) |
| (i) Water                         | (ii) Sunshine                         | (iii) F                  | ruit                                  |
| Ans.:                             |                                       |                          |                                       |
| (i) Water = Inpu                  | t                                     |                          |                                       |
| (ii) Sunshine = Ir                | put                                   |                          |                                       |
| (iii) Fruit = Outpu               | t                                     |                          |                                       |
| III. Short Answer Type            | Questions :                           |                          | $(4 \times 2 = 8)$                    |
| (1) Explain the IPO cycle         | e with diagram.                       |                          |                                       |

Ans: It is termed as Input – Processing - Output. A computer receives data as input, stores it and

# Input-Process-Output Cycle (IPO cycle)



(2) Explain any two characteristics of a computer.

### Ans:

- (i) Speed: Computer can perform calculations and process information much faster than humans.
- (ii) Storage: It has large storage capacity.
- (iii) Accuracy
- (iv) Diligence
- (v) Reliability
- (vi) Versatility

### (3) Explain an algorithm using an example.

**Ans :** An algorithm is a step by step procedure of solving a problem. It is commonly used for data processing, calculation and other related computer and mathematical operations.

## Example of Algorithm:

Step 1 : Take the ingredients

Step 2 : Mix ingredients

Step 3: Pour ingredients mixture into a pan

Step 4: Put it in an oven

Step 5 : Bake until ready

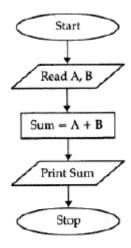
Step 6: If ready, remove

Step 7: Let it cool

Step 8: Serve

(4) Draw Flowchart to find the sum of two numbers.

#### Ans.:



## **IV. Long Answer Type Questions:**

 $(2 \times 3 = 6)$ 

- (1) Write the use of the following devices:
  - (a) Webcam

- (b) Microphone
- (c) Digital camera

#### Ans:

- (a) Webcam: It is an input device which transmit pictures over the internet. It is used for video conferencing, and recording images.
- **(b)** Microphone : It is used to record sounds using the computer. It is used for video conferencing.
- (c) Digital Camera: It is a camera that produces digital images that can be stored on a computer, displayed on a screen and can be printed.
- (2) Differentiate between an Algorithm and Flowchart.

#### Ans:

| Algorithm                               | Flowchart                                    |  |
|---|--|--|
| 1. It is a step by step solution to the | 1. It is also a step by step solution to the |  |
| problem                                 | problem but in the pictorial form            |  |
| 2. In it, we use simple English         | 2. In it, we use a special symbol like an    |  |
|   | input, or output box                         |  |
| 3. The algorithm provides either to the | .3. It provides a better understanding of    |  |
| computer or to a human being an         | existing and prepared methods and            |  |
| unambiguous instruction to solve a      | procedures and systems.                      |  |
| problem.                                |  |  |

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