



# B.K. BIRLA CENTRE FOR EDUCATION

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

## ANNUAL EXAMINATION 2025-26 ARTIFICIAL INTELLIGENCE (SET 01)

Class: VI

Date: 18-03-2026

Name: .....

Duration: 2 hrs.

Max Marks: 50

Exam No. :

### General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of 19 questions in two sections: Section A & Section B.
3. Section A has Objective type questions (MCQ, Fill in the blanks, Match the following) 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 (24 MARKS):**
  - i. This section has 03 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 (26 MARKS):**
  - i. This section has 16 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.

## MARKING SCHEME

### SECTION A: OBJECTIVE TYPE QUESTIONS

#### I. Multiple Choice Questions: (Answer any twelve)

(12 X 1 = 12)

- (1) An algorithm is a set of step by step
 

(a) Skills	(b) Formulae	(c) Instructions	(d) All of these
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- (2) In a flowchart, a calculation (process) is represented by
 

(a) A rectangle	(b) A rhombus	(c) A parallelogram	(d) A circle
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- (3) Which one of the following is not a characteristics of a good algorithm ?
 

(a) Finiteness	(b) Effectiveness	(c) Ambiguity	(d) Feasibility
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- (4) Which of the following animals is known to be able to mimic human words ?
 

(a) Dolphins	(b) Tiger	(c) Dogs	(d) Parrots
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- (5) Which of the following is not a sign of Intelligence ?
 

(a) Solve problems	(b) Creating a poem
(c) Writing an original story	(d) Taking bath
- (6) ..... is your on the go encyclopedia.

(a) **Amazon Echo**      (b) Netflix      (c) Amazon Prime      (d) Amazon Go

(7) AI assistant by Google, which can place human like calls to make appointments is called

- (a) Google Cardboard      (b) Google Chrome  
(c) **Google Duplex**      (d) Google Remnant

(8) What is the function of the “when green flag clicked” command block ?

- (a) Points sprite in the specified direction      (b) If condition is true, runs the blocks inside  
(c) **Runs the script**      (d) None of these

(9) A code block that controls sprite placement, direction, rotation and movement is known as a ..... block.

- (a) Sensing      (b) **Motion**      (c) Looks      (d) Control

(10) How do you create code in Scratch ?

- (a) **Snap block together**      (b) Write code in the editor  
(c) Draw blocks in the editor      (d) Copy and paste code

(11) In Scratch which blocks are blue ?

- (a) **Motion**      (b) Looks      (c) Control      (d) Sensing

(12) ..... opens web browsers in such a way that it will not track your activities on the internet.

- (a) Proxy      (b) VPN      (c) **Incognito Browsing**      (d) Safe browsing

(13) ..... is a type of cybercrime that uses the internet and technology to harass or stalk a person.

- (a) Cyber Harassing      (b) Cyber Targeting  
(c) **Cyberstalking**      (d) Cyberbullying

(14) What are the advantages of robots ?

- (a) Saving companies' time      (b) Increased profitability  
(c) Higher quality      (d) **All of the above**

(15) Robot is a .....

- (a) Multi functional manipulator      (b) Programmable  
(c) **Both a and b**      (d) None of these

## II. State True/False : (Answer any eight)

(8 X 1 = 8)

- (1) True
- (2) False
- (3) True
- (4) True
- (5) False
- (6) True
- (7) False
- (8) False
- (9) True
- (10) True

## III. Fill in the blanks. (Answer any four)

(4 X 1 = 4)

- (1) Google glass
- (2) Virtual
- (3) Dulux Visualizer
- (4) IKEA Place
- (5) Filters

## SECTION B: SUBJECTIVE TYPE QUESTIONS

### IV. Short Answer Type Questions: (Answer any seven)

(7 X 2 = 14)

(1) 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

(2) Differentiate between an Algorithm and Flowchart.

**Ans. :**

Algorithm	Flowchart
1. It is a step by step solution to the problem	1. It is also a step by step solution to the 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 computer or to a human being an unambiguous instruction to solve a problem.	3. It provides a better understanding of existing and prepared methods and procedures and systems.

(3) Give any four examples of display of intelligence in the animal world i.e. apart from humans.

**Ans. :**

Three examples of display of intelligence in the animal are :

- (i) Parrots can exactly mimic the words.
- (ii) Elephants are good at team work.
- (iii) Dolphins can identify themselves in the mirror.

(4) Define : (a) Human Intelligence                      (b) Artificial Intelligence

**Ans. :**

**Human Intelligence :** It is a mental quality, that consists of the abilities to learn from experience, adapt to new situations, understand and handle abstract concepts, and use knowledge to manipulate one's environment.

**Artificial Intelligence :** The ability to learn and understand, to solve problems and to make decisions.

(5) Write and explain any two examples of the use of Artificial Intelligence in ‘Smart Homes’.

**Ans. :**

Control everything at your fingertips

Run personalised schedules

Talk to your home or make it talk

Intelligent Security

Talk to your guests from anywhere

Ask almost anything and everything

Smoke and Temperature sensing

(6) Explain block coding.

**Ans. :**

Block based coding uses “blocks” of code which can be dragged and dropped onto a work environment and pieced together to make meaningful programs.

(7) Explain what the Looks block in Scratch does ?

**Ans. :**

In Scratch, the "Looks" blocks control how sprites (characters or objects) appear on the stage. These blocks allow you to change the sprite's appearance, display messages, and manage visual effects.

(8) What is a cyber crime ? Explain at least two types of cybercrimes.

**Ans. :**

It can be defined as a crime done by the internet to cause an immeasurable loss to the individual, organization or the government.

**Types of Cyber Crimes :**

**Cyberbullying :** It is the use of technology to harass, threaten, embarrass or target another person.

**Cyberstalking :**

**Phishing :**

**Identity Theft :** Identity theft is when someone illegally poses as you. It is when someone uses your personal data to impersonate you.

(9) What is a Robot ? Write and explain any two characteristics of a Robot.

**Ans. :**

A computerized device that can react to information from its environment or from humans is referred to as a robot.

Sensors :

Movement : a robot must be able to navigate its surroundings.

Energy : a robot must be self sufficient in terms of energy.

Perception :

Cognition :

Low level control :

(10) Define : (a) Augmented Reality

(b) Virtual Reality

**Ans. :**

(a) **Augmented Reality** : A technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view.

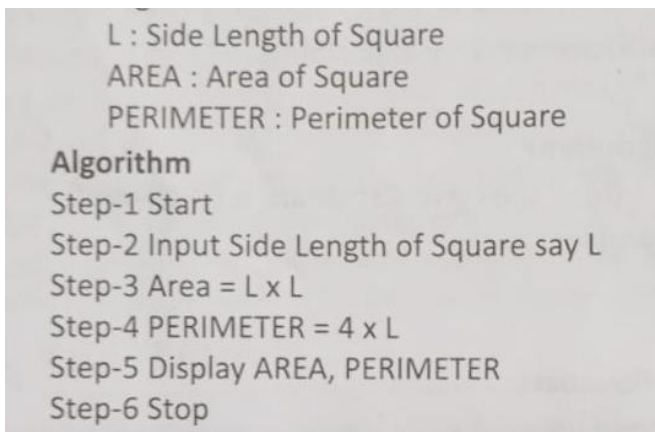
(b) **Virtual Reality** : Virtual Reality (VR), the use of computer modelling and simulation that enables a person to interact with an artificial three-dimension (3-D) visual or other sensory environment.

**V. Long Answer Type Questions : (Answer any four)**

**(4 X 3 = 12)**

(1) Write an algorithm and draw flowchart to find and display area and perimeter of Square.

**Ans. :**



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L : Side Length of Square
AREA : Area of Square
PERIMETER : Perimeter of Square

Algorithm
Step-1 Start
Step-2 Input Side Length of Square say L
Step-3 Area = L x L
Step-4 PERIMETER = 4 x L
Step-5 Display AREA, PERIMETER
Step-6 Stop
```

(2) Write and explain any three features of Intelligence.

**Ans. :**

- (a) Handling incomplete data
- (b) Handling contradictory data
- (c) Handling uncertain data
- (d) Handling heuristics
- (e) Ability to learn

(3) Describe Amazon Echo.

**Ans. :**

Amazon Echo is your on-the-go encyclopedia. Amazon Echo is a smart speakers developed by Amazon. It can perform a wide range of tasks through voice commands. Its features and functionality:

1. Design and Hardware
2. Alexa Voice Assistant

3. Smart Home Integration
4. Entertainment and Media
5. Information and Productivity
6. Communication
7. Alexa Skills
8. Privacy and Security
9. Ecosystem and Integration

Amazon Echo is a versatile smart speaker that acts as a central hub for home automation, entertainment, communication, and information. With its powerful Alexa voice assistant, it offers a convenient way to interact with technology and manage daily tasks through simple voice commands.

(4) Describe the three major commands in the Events Block.

**Ans. :**

1. **When the green flag is clicked :** The project will begin when the green flag is clicked.
2. **When the space key is pressed :** The project will begin when the space bar is pressed.
3. **When sprite 1 is clicked :** The project will begin when the sprite is clicked.

(5) Different security measures should be followed to be safe from the dreadful act of cyber crime. Mention any six security measures.

**Ans. :**

- Strong password should be used.
- Use antivirus programmes to keep the system free of malware.
- Try to avoid opening websites which are not secure.
- Don't provide your personal information to any unknown person.
- Don't download software or other files from every website.
- Continuously update the system
- Be vigilant to avoid identity thefts
- Maintain privacy settings over social media.

(6) Differentiate between a Robot and a Machine.

	Robots	Machine
Anatomy	It don't require human intervention	It require human control
Sensory Input	It has several sensory parts	It don't have
Design and Development	It is more difficult	Not so difficult
Software	It require software to work	No software is required

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