



# B.K. BIRLA CENTRE FOR EDUCATION

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



ANNUAL EXAMINATION : 2025-26

Set -01

## ARTIFICIAL INTELLIGENCE – MARKING SCHEME

Class : VIII

Date : 16-03-2026

Admission No.:

Duration : 2 Hrs

Max. Marks : 50

Roll No.:

### General Instructions:

Try to attempt all questions as per given order.

All questions are compulsory.

The Question Paper is divided into Three sections Section A to C.

- Section A : This section has 05 questions. Do as per the instructions given.
- Section B has 8 questions attempt 7 and carry 2 marks each.
- Section C has 6 questions attempt 4 and carry 3 marks each.

### SECTION A: OBJECTIVE TYPE QUESTIONS

#### Q.(1) Multiple Choice Questions: (Any 6)

(6 x 1 = 6)

1. What is object detection?

- A. Removing objects from photos                      B. Finding and identifying objects in images\*  
C. Drawing objects    D. Colouring images

2. Computer Vision is mainly related to which type of data?

- A. Audio                      B. Text                      C. Images and Videos \*                      D. Numbers only

3. Sentiment analysis is used to:

- A. Edit photos                      B. Detect emotions in text \*                      C. Record videos                      D. Print documents

4. The US spacecraft Mariner 2 made history on Dec 14,1962 when it successfully completed a flyby of:

- A. Mars                      B. Sun                      C. Mercury                      D. Venus \*

5. Which of the following is an example of a humanoid robot?

- A. Roomba                      B. Pepper \*                      C. Alexa                      D. Tesla

6. Which attribute specifies the URL of the linked resource?

- A. link                      B. href \*                      C. src                      D. alt

7. What does concatenation mean in Python?

- A. Dividing data                      B. Joining two values together\*  
C. Deleting data                      D. Printing data

8. What will be the output?

```
name = "Riya"
```

```
print("Hello " + name)
```

- A. Hello Riya \*                      B. Hello+Riya                      C. Riya Hello                      D. Error

#### Q.(2) Fill in the blanks: (Any 6)

(6 x 1 = 6)

1. There is no \_\_\_\_\_ in a self driven car. (human)

2. \_\_\_\_\_ is a branch of AI that deals with the interaction between computers and humans. (NLP)
3. \_\_\_\_\_ bots works around a script which is programmed in them. (script)
4. \_\_\_\_\_ is an artificially intelligence robot toy with a strong personality and range of emotions. (cozmo)
5. The \_\_\_\_\_ tag defines a container for external content. (embed)
6. \_\_\_\_\_ attribute specifies whether to automatically start playing the audio and video. (autoplay)
7. Strings are written inside \_\_\_\_\_. (quotes)
8. The block that runs when condition is False is \_\_\_\_\_. (else)

**Q.(3) Match the following:**

**(6 x 1 = 6)**

Column A	Column B
1. Computer Vision	1. Vacuum cleaner robot – 3
2. Sentiment Analysis	2. Humanoid robot - 4
3. Roomba	3. Anchor Tag – 5
4. ASIMO	4. Second Domain -1
5. <a>	5. NLP – 2
6. abs ()	6. Loop – 7
7. While	7. Returns absolute value - 6

**Q.(4) State True or False:**

**(6 x 1 = 6)**

1. Face recognition is an example of Computer Vision. T
2. NLP is used in spam email detection. T
3. Vacuum cleaning robots are humanoid robots. F
4. else runs when the if condition is False. T
5. break stops the loop immediately. T
6. while False: loop will run. F

**Q.(3) Answer any 7 out of the given 8 questions**

**(7 x 2 = 14)**

1. Differentiate between RGB and Greyscale image.

Ans: **RGB images**- All the images that we see around us are coloured images. These images are made up of three primary colours Red, Green and Blue.

All the colours that are present can be made by combining different intensities of Red, Green and Blue.

**Grayscale Image**- The grayscale image contains only shade of gray and no colour.

The darkest possible shade is black, which is the total absence of colour or zero value of pixels.

The lightest possible shade is white, which is the total presence of colour or 255 value of pixels.

2. What is Script bot?

Ans: A **Script bot** is a type of **software bot** that runs **pre-written scripts (instructions)** to automatically perform tasks without human involvement.

3. Robots for education are intended for use in classrooms and other learning environments.

Justify the statement by giving a few points.

- Ans: They make learning interactive and fun.
- Help in teaching coding and robotics.
- Encourage creativity and problem-solving among students.

4. What is a humanoid robot?

A humanoid robot is a robot designed to resemble and imitate human body structure and behavior.

**Characteristics:**

- Has a head, arms, and sometimes legs like humans.
- Can walk, talk, and interact socially.
- Uses AI for communication and learning.
- Equipped with sensors (vision, touch, sound).

5. Differentiate between `<a>` as an anchor and `<a>` as a link.

- **`<a>` as an anchor:**  
It creates a *bookmark* within the same page to jump to a specific location.  
Example: `<a name="top"></a>`
- **`<a>` as a link:**  
It creates a clickable hyperlink to another page or website.  
Example: `<a href="page.html">Go to Page</a>`

6. Correct the code:

- a. `<a www.google.com>Google</a>`      Ans: `<a href="www.google.com">Google</a>`  
b. `<audio control>`      `<audio controls>`  
    `<source src="song.mp3">`  
    `</audio>`

7. What is String?

Ans: A **String** is a **sequence of characters** (letters, numbers, symbols, or spaces) written inside quotation marks.

8. What is Selection statements?

Ans: **Selection statements** are decision-making statements in programming. They allow the program to **choose between different actions** based on a condition.

**Q.(4) Answer any 4 out of the given 6 questions** **(3 x 4 = 12)**

1. Explain :      a. Google translate app      b. Face lock app

Ans:

The **Google Translate** app is an AI-based application that translates text, speech, or images from one language to another. It uses **Artificial Intelligence and Machine Learning** to understand one language and convert it into another.

A **Face Lock App** is a security app that unlocks a phone or device using face recognition. It uses **Artificial Intelligence and Computer Vision** to recognize facial features.

2. Finding life on extra-terrestrial worlds may one day be made possible by artificial intelligence. How are robots helping in this?

- Ans: AI-powered robots collect and analyze data from other planets.
- They can work in harsh environments where humans cannot go.
- Example: Mars rovers like *Perseverance* and *Curiosity*.

3. State some identification rules of an industrial robot.

Ans:

- Usually fixed at one place in factories.
- Performs repetitive tasks like welding, painting, assembling.
- High precision and speed.
- Designed for heavy-duty manufacturing.

4. Explain the attribute: a. HREF                      b. Target

Ans: **HREF** stands for **Hypertext Reference**.

It is used to **specify the URL (address)** of the webpage or file that the link will open.

```
<a href="https://www.google.com">Visit Google</a>
```

The **Target** attribute tells the browser **where to open the linked page**.

```
<a href="https://www.google.com" target="_blank">Open Google</a>
```

5. Explain the concept of traversing a string in Python with example.

**Traversing a string** means accessing each character of the string one by one.

**Example:**

```
s = "Python"
for ch in s:
    print(ch)
```

6. Write a program to print tables of a given number.

Ans:

```
# Take input from user
```

```
num = int(input("Enter a number: "))
```

```
# Print table from 1 to 10
```

```
for i in range(1, 11):
```

```
    print(num, "x", i, "=", num * i)
```

**\*\*\* All the best !!! \*\*\***