B.K. BIRLA CENTRE FOR EDUCATION

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

POST MID TERM 2025-26

ARTIFICIAL INTELLIGENCE – MARKING SCHEME (417)

Class : IX   **Duration : 1 Hrs**
Date   : 07-01-2026   **Max. Marks : 25**
Admission No.:   **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 has 11 questions attempt 11 and carry 1 mark each.
- Section B has 6 questions attempt only 4 and carry 2 marks each.
- Section C has 4 questions attempt only 2 and carry 3 marks each.

Section-A

1. Which of the following symbols is used in flowcharts to take input from the user?   1
   a. Diamond   b. Rectangle   c. Oval   d. Parallelogram *

2. Which of the following is a valid logical operator?   1
   a. and *   b. !=   c. +   d. >=

3. Which of the following is a data type that has two built-in values True or False?   1
   a. Boolean *   b. Numbers   c. Integer   d. String

4. If L1 = ['O', 'R', 'A', 'N', 'G', 'E'l, then which of the following will be the output of the given statement?   1
   print (L1 [:: -1])
   a. Prints the list as it is   b. Prints the list in reverse order *
   c. Prints the last element of the list   d. Prints the first element of the list

5. What will be the output of the following code?   1
   if (True) :
        print ("Hello")
   else:
        print ("Hi")
   a. Hello *   b. Hello Hi   c. Hi   d. Nothing will print

6. What letter will be printed on the screen after running this code: 1
   city = "Exeter"
   letter = city[3]
   print (letter)
   a. E   b. x   c. t *   d. Nothing prints

7. What does Fourth Partner Energy, which is one of the famous Green Projects of India, focuses?   1
    a. To make solar energy accessible *   b. To make bio-gas accessible
    c. To make wind energy accessible   d. To make nuclear power accessible

8. Which of the following is supported by Waste Management?   1
    a. Disposal of waste b. Too much waste generated needs to be managed
    c. Reduce, Reuse, Repurpose, Refuse and Recycle *
    d. Proper collection of waste of all types in one place

9. Since when Environmentally Sustainable development has become the main goal of all the countries across the globe?   1
    a. All Nations Summit in 2000 b. All Nations Conference in 1998
    c. America Conference in 1998 d. UN Conference on Environment and Development (UNCED) in 1992 *

10. The term "Green economy was first coined by which of the following?   1
    a. Government of India   b. Government of United Kingdom *
    c. Government of America   d. Government of China

11. Which of the following is used to conserve our natural resources?
    a. Furniture Conservation   b. Water Conservation *
    c. Money Conservation   d. Clothes Conservation

SECTION - B

12 What is Green Skill Development Programme?   2
    Ans: The **Green Skill Development Programme** is an initiative by the **Government of India** to train young people in skills that help protect the environment.
    It teaches eco-friendly job skills such as: Waste management Water conservation Pollution monitoring Organic farming Renewable energy technologies. The aim is to create a workforce that can work in green industries and support sustainable development.

13 What is Global Warming?   2
    Ans: Global warming refers to the increase in the average temperature of the Earth's atmosphere mainly due to greenhouse gases (carbon dioxide, CFC's) produced by a lot of human activities.

14 What do you understand by the term Eco System?   2
    Ans: An ecosystem is defined as a community where living and non-living things interact with each other and their surrounding environment to form a balanced system.

15 What is the use of sort( ) function of a list?   2
    Ans: The sort() function is used to arrange the elements of a list in ascending or descending order

16 Why are flowcharts are more preferred than algorithms?   2
    Ans: Flowcharts are more preferred because they are visual, easier to understand, and clearly show the flow of the program using symbols.

17 What is the difference between pop ( ) and remove( ) functions?   2
    Ans: The pop() function removes an element by index and returns it, while remove() deletes the first matching value from the list

SECTION – C

18   Explain the main causes of soil pollution? (any three)   3

Ans: Here are four main causes of soil pollution:

• Industrial Waste – Factories release harmful chemicals and heavy metals into the soil, making it toxic.

• Agricultural Chemicals – Excessive use of pesticides and fertilizers contaminates the soil and reduces its fertility.

• Plastic and Waste Dumping – Non-biodegradable waste like plastic and electronic waste pollutes the soil.

• Deforestation – Cutting down trees removes natural protection, making the soil prone to erosion and pollution.

19   Explain any three social benefits of the Green Economy.   3

Ans: Social benefits of green economy are:
• It improves the health and well-being of the society which increase the productivity of the country and reduce the costs of health care.
• It improves livelihood status and poverty rate.
• It reduces environment related health problems.

20   Give three difference between an algorithm and a flowchart.   3

Algorithm	Flowchart
It is a step-by-step textual approach to solve a problem.	It is a graphical representation of a algorithm.
It can be written in natural language, pseudocode, or code.	It uses standardised symbols and shapes.
Difficult to represent branching and looping.	Easily represents branching and looping through symbols.

Ans:

21   Write a program, Input three angles and check whether they form a tringle or not.

Ans:

```
a = int(input("Enter first angle: "))

b = int(input("Enter second angle: "))

c = int(input("Enter third angle: "))

if a + b + c == 180:

print("The angles form a triangle.")

else:

print("The angles do not form a triangle.")
```