



B.K. BIRLA CENTRE FOR EDUCATION

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



PERIODIC TEST I 2026-27

ARTIFICIAL INTELLIGENCE – SET – 1 MARKING SCHEME/ ANSWER KEY

Class : VII

Date :

Admission No.:

Duration : 1 Hrs

Max. Marks : 25

Roll No.:

SECTION – A

Q1. Choose the correct answer from the given options (6x1 = 6) A. What does NLP stand for? **Answer: b) Natural Language Processing**

B. Which of the following is an example of NLP in daily life? **Answer: b) Using Google Translate**

C. A Chatbot is a software that simulates a _____ with a user. **Answer: b) conversation**

D. Which type of Chatbot is easy to make and works around a pre-programmed script? **Answer: b) Script-bot**

E. When your phone guesses the next word you want to type, it is using which NLP feature? **Answer: c) Predictive Text**

F. Data that has been processed and organized to give it meaning and context is called: **Answer: c) Information**

Q2. Fill in the blanks (5x1 = 5) A. **Data Visualization** is the process of representing data in charts, graphs, and maps. B. An **Active** data footprint refers to data that is deliberately shared by a user through online forms or social media profiles. C. **ELIZA** is one of the earliest chatbots ever created, dating back to 1964. D. **ChatGPT** (or Gemini, Siri, Alexa) is an example of an AI chatbot. E. Computers understand the language of **binary** (or 0s and 1s).

SECTION – B: Short Answer Questions

Q3. What is NLP? Mention any two real-world applications of NLP. (2 Marks) **Answer:** Natural Language Processing (NLP) is a branch of Artificial Intelligence that helps computers understand, interpret, and respond to human language (both text and voice). *Real-world applications (Any two):*

- Voice assistants like Siri or Alexa
- Language translation apps like Google Translate
- Spam filters in email

Q4. What is the difference between a Script-bot and a Smart-bot? (Give two points each) (2 Marks) Answer: Script-bot:

1. Follows pre-programmed rules and a strict script.
2. Cannot learn from past conversations and only answers specific questions. **Smart-bot:**
3. Uses Artificial Intelligence and Machine Learning to understand natural language.
4. Learns from past conversations and can handle complex, unpredictable questions.

Q5. What is Data Visualization? Mention two types of charts used in data visualization. (2 Marks) Answer: Data Visualization is the process of displaying data and information in a graphical or visual format so it is easier to understand and spot trends. *Types of charts (Any two):* Bar charts, Pie charts, Line graphs, or Scatter plots.

Q6. What is Computer vision? Mention its one use. (2 Marks) Answer: Computer Vision is a field of AI that enables computers to "see," identify, and understand objects in digital images and videos, much like human eyes do. *Use (Any one):* Face unlock features on smartphones, self-driving cars reading traffic signs, or medical image analysis.

SECTION – C: Long Answer Questions

Q7. Explain any 3 uses of NLP in daily tasks. (3 Marks) Answer:

1. **Predictive Text and Autocorrect:** When typing on a smartphone, NLP analyzes the context to predict the next word or correct spelling mistakes automatically.
2. **Voice Assistants:** NLP allows AI assistants like Alexa or Google Assistant to understand spoken commands, answer questions, and perform tasks like setting alarms.
3. **Language Translation:** NLP powers tools like Google Translate to read text or listen to speech in one language and accurately convert it into another language in real-time.

Q8. What is the difference between Data and Information? (Give 3 points each) (3 Marks) Answer: Data:

1. Data consists of raw, unorganized facts, numbers, and symbols.
2. It does not have any specific meaning or context on its own.
3. *Example:* A list of numbers like "45, 60, 75" or a name like "Rahul".

Information:

1. Information is data that has been processed, organized, and structured.
2. It provides clear meaning, context, and is useful for decision-making.
3. *Example:* A report card stating, "Rahul scored 75 marks in Computer Science."