



B.K. BIRLA CENTRE FOR EDUCATION

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

Term – I Examination : 2026-27 Artificial Intelligence – Set 1

Class: VII

Time : 2 hr.

Date: 12-09-2026

Max Marks: 50

General Instructions:

The Question Paper is divided into three sections Section A to D.

- Section A has 26 questions, out of which 22 has to attempt and carries 1 mark each.
- Section B has 11 questions, out of which 6 has to attempt and carries 2 marks each.
- Section C has 8 question, out of which 4 has to attempt and carries 3 marks each.
- Section D has 3 questions, out of which 1 has to attempt and carries 4 marks.

Section A – Objective Type Questions

Q1. Choose and write the correct answer. Answer any ten questions.

[10 X 1 = 10]

1. What does a "longer arrow" in a system map usually signify?
a) A stronger connection b) A time delay for a change to happen
c) A physical distance d) An unimportant relationship
2. The robot that received citizenship is _____, a humanoid robot.
a) Vayapura b) Shakey c) Sophia d) ASIMO
3. The first true robot toy was _____
a) ELIZA b) Liliput c) Aibo d) Epsom
4. What is the primary purpose of a "Negative Feedback Loop" in a system?
a) To amplify changes and cause exponential growth or decline
b) To dampen change and maintain stability
c) To represent a broken relationship that has no impact on other components
d) To indicate that an increase in one element always leads to an increase in another
5. _____ is a heavy metal used as fuel in nuclear reactors and is a non-renewable resource that provides a large amount of energy.
a) Platinum b) Aluminium c) Uranium d) Iron
6. Which of the following is not a minerals:
a) Iron b) Copper c) Coal d) Aluminium
7. The Sustainable Development Goals (SDGs) were established by the United Nations in which year?
a) 2005 b) 2010 c) 2015 d) 2020
8. When you tell a smart speaker "Please turn off the lights" or "Lights off, please," and it performs the same action, this demonstrates NLP's ability to understand what?
(a) Only direct, exact commands.
(b) The specific sound frequencies of your voice.

- (c) The "intent" behind your command, regardless of exact phrasing.
 (d) The numerical representation of your speech.
9. What are DeepFake Videos?
- An advanced 3D videos
 - A video game simulation
 - A Video with CGI effects
 - A video where someone's face is swapped with another.
10. Transparency means:
- A publically accessible data
 - Clean and error free data
 - An open-source coded data
 - Easy to understand the data to non-technical person.
11. What is the specific source of Wind energy?
- Differences in atmospheric pressure.
 - The rotation of mechanical wind turbines.
 - Heat rising from the Earth's core.
 - The natural water cycle of evaporation and condensation.
12. _____ is the domain of AI where Gmail inbox automatically sort the promotional and social emails.
- Statistical Data
 - NLP
 - Computer Vision
 - Data Science
13. Which of the following is an example of "Structured data"?
- A Facebook post containing text, picture, and video.
 - Satellite imagery.
 - Names, dates, addresses, and credit card numbers.
 - Mobile activity.
14. What are data footprints?
- The physical tracks left by people in the real world.
 - The marks left on paper after printing data.
 - The colour footprint on chart paper
 - The traces left by an individual online activities like posts, likes or dislikes.

Q2. True or False

[6 X 1 = 6]

- Legendary science fiction writer Isaac Asimov wrote the short story 'Liar'.
- An interconnected set of components that works together as a whole to achieve common goal is called system.
- Precious metals like gold, silver and platinum are man-made resources.
- AI generated images and videos has widely played a role in the 2016 US Presidential elections by spreading political propaganda.
- Pie charts are highly useful for tracking changes over time.
- Sentiment Analysis are also called as opinion mining.

Q3. Assertion and Reasoning

[6 X 1 = 6]

Directions: Choose the correct option from the following:

- (a) Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A).
 - (b) Both Assertion (A) and Reason (R) are true, but Reason (R) is NOT the correct explanation of Assertion (A).
 - (c) Assertion (A) is true, but Reason (R) is false.
 - (d) Both Assertion (A) and Reason (R) are false.
- i. **Assertion (A):** The word "robot" made its first appearance in Karel Capek's play *R.U.R.*
Reason (R): The term is derived from the Czech word *robota*, which means "forced labor."
 - ii. **Assertion (A):** Systems Thinking focuses on understanding problems by looking at the entire system rather than breaking it into isolated parts.
Reason (R): It emphasizes the interconnectedness of components and recognizes that changes in one part can have ripple effects throughout the entire system.
 - iii. **Assertion (A):** Protecting the planet through sustainable living helps reduce pollution and combat climate change.
Reason (R): Using too many non-renewable resources, like fossil fuels, can cause environmental damage that harms the Earth
 - iv. **Assertion (A):** Passive data is collected automatically through tracking technologies like cookies and IP addresses.
Reason (R): Passive data footprints are only created when a user fills out an online form.
 - v. **Assertion (A):** Grammar and spell checkers like Grammarly use NLP to identify misspelled words and suggest grammatical improvements.
Reason (R): These tools simply compare typed words against a dictionary without understanding sentence structure or meaning.
 - vi. **Assertion (A):** Facial recognition systems are designed to be intentionally unfair to people with darker skin tones to reflect the personal opinions of the programmers.
Reason (R): AI bias happens when the machine is not working as per given task.

Section B – Short Answer Questions

Q4. Write the following questions answer in 3-4 sentences. Write any six answers. [6 X 2 = 12]

1. What is the use of data related to making online games work?
2. What is the importance of data visualisation?
3. Describe Eliza and Mitsuku.
4. Describe video subtitles and captioning.
5. How the chatbot Tay went wrong?
6. Why SDG is necessary for all the different groups to work together to achieve the global goals?
7. Define the term 'Sustainability'. Why it is crucial for ensuring future generations have the resources they need?
8. Define the term 'Ethics in AI'. Why it is important to implement it?
9. Describe the symbols used in creating a system map.
10. Define robotics.
11. What is system thinking?

Section C – Long Answer Questions

Q5. Answer any four from the following questions in 5-6 sentences.

[4 X 3 = 12]

1. What is NLP? How it works?

2. Explain any three types of data?
3. Write any three strategies for using computer vision ethically.
4. Explain SDG Wedding cake with the help of three broad categories.
5. What are natural resources? Write three key reasons to use them sustainably.
6. Describe feedback loops in a system map.
7. Mention and explain three laws of robotics.
8. Differentiate between Third and Fifth generation of Robots.

Section D – Application Based/Picture Based Questions

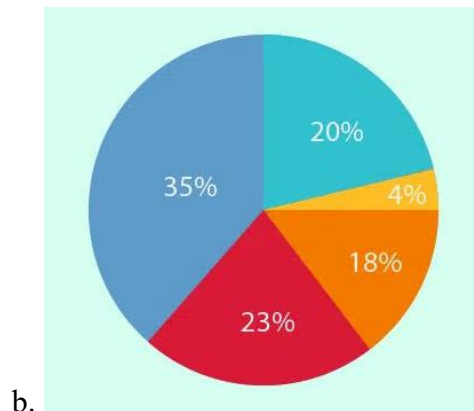
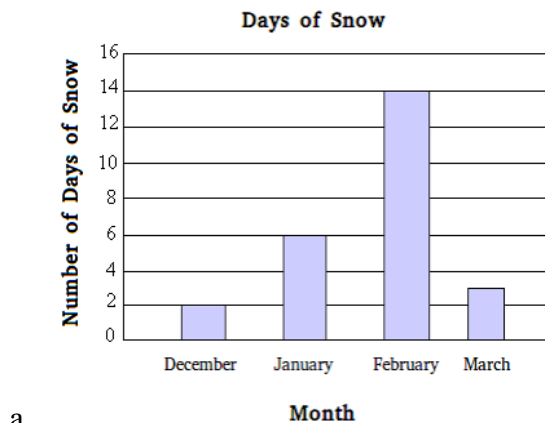
Q6. Do as directed. Attempt any one complete question.

[1 X 4 = 4]

1. Identify the following robot image and write their name and their use in real world:



2. Identify the type of data visualization and explain them:



3. Identify the following image and explain how NLP works in it?



