



# B. K. BIRLA CENTRE FOR EDUCATION, PUNE

(SENIOR SECONDARY CO-ED DAY CUM RESIDENTIAL SCHOOL, AFFILIATED TO CBSE NEW DELHI)

**MID TERM EXAM (2024-25)**

**ARTIFICIAL INTELLIGENCE**



**Class : VII**

**Date : 26-09-2024**

**Duration : 2 Hours**

**Max. Marks: 50**

### **General Instructions:**

1. Please read the instructions carefully.
2. This Question Paper consists of 48 questions in three sections: Section A, Section B & Section C
3. Section A has Objective type questions (MCQ, Fill in the blanks) whereas Section B contains Short questions & Section C contains long questions.
4. All questions of a particular section must be attempted in the correct order as per instructions.
5. **SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):**
  - i. This section has 02 types of questions. MCQ & Fill in the blanks.
  - 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&C – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**
  - i. This section has 18 questions.
  - ii. A candidate has to do 7 questions from Section B & 4 questions from section C
  - iii. Do as per the instructions given.
  - iv. Marks allotted are mentioned against each question/part.

## **Section-A**

### **A. Multiple Choice Question.(Answer any 12 of 15)**

**12 x 1 = 12 Marks**

1. What are a type of robot which use treads or caterpillar tracks instead of wheels?  
a. Legged robot                      b. Hilly robot                      c. Tracked robot                      d. Bio inspired robot
2. An.....robot is a system cable of sustained flight with no direct human control and able to perform a specific task.  
a. Ground robot                      b. aerial robot                      c. underwater robot                      d. Land robot
3. Which of the following robot refers to aerial vehicle that receives remote commands from a pilot or relies of software for autonomous flight.  
a. Flight                      b. aerial robot                      c. drone                      d. airplane
4. ....are a type of mobile robot which use articulated limbs, such as leg mechanisms to provide locomotion.  
a. Legged robot                      b. Hilly robot                      c. Tracked robot                      d. Bio inspired robot
5. An .....is a robot that travels underwater without requiring continuous input from an operator.  
a. Unmanned water vehicle  
b. Unmanned ground vehicle  
c. Unmanned underwater vehicle  
d. Autonomous underwater vehicle
6. In 1921, the word 'Robot' was first used by.....  
a. Karel kapec                      b. James Maxwell                      c. Peter Corke                      d. C F Gauss

7. Sophia a humanoid robot dubbed the first.....is created by Hanson Robotics.
  - a. Robot alien
  - b. Robot writer
  - c. robot artist
  - d. Robot citizen
8. Which of the following is the first robot to use AI?
  - a. Sophia
  - b. ASIMO
  - c. Shakey
  - d. Vayuputra
9. To be called a robot, a system should be able to do one or all of the following.
  - a. Move around
  - b. Sense the environment
  - c. Display Intelligent behaviour
  - d. All of the above
10. In 1942, the word 'Robotics' was used by the science fiction writer.....
  - a. Daniel Adams
  - b. Edwin Abott
  - c. Isaac Asimov
  - d. Alan Burt Akens
11. With what segment of human endeavour is the term "Video Assistance Referring" related?
  - a. Education
  - b. Sports
  - c. Agriculture
  - d. law enforcement
12. Which technology allows us to try on dresses without actually putting them on?
  - a. Fashion technology
  - b. Fashion mirror technology
  - c. Dress technology
  - d. Rapid technology
13. Which of the following is a humanoid robot that talks, moves and teaches children everything from literacy to computer programming.
  - a. Cram 101
  - b. Penny
  - c. Nao
  - d. Sophia
14. Which of the following app is used to turn any textbook into a smart study guide.
  - a. Cram001
  - b. Cram002
  - c. Cram101
  - d. Cram 102
15. ....is working on a robotic unit, called DRU, which will deliver foods and drinks via the best optimized path.
  - a. Amazon
  - b. Flipkat
  - c. Bigbasket
  - d. Dominos

**B. Fill in the blanks.(Answer any 12 of 15)**

**12 x 1 = 12 Marks**

16. The standard of behaviour our society accepts is called.....
17. Deep Fake are.....generated video or audio content with an intent or device.
18. An Uber .....SUV struck and killed a female pedestrian in Tempe, Arizona.
19. The acronym of "Tay" is .....
20. In June 2005, a .....at a hospital in Philadelphia malfunctioned during prostate surgery.
21. ....is a free PowerPoint plug-in that develops subtitles in real time of what the teacher is saying.
22. ....is a robot server created by Bear Robotics that can assist human servers, using sensors to navigate crowded restaurants.
23. ....is the full form of "ART"

24. Full form of 'BARC' is .....
25. Farmers in.....have mobile –phone based tools to track the images of crops and their infections.
26. People who are strong in .....intelligence are able to use words well, both when writing and speaking.
27. According to Gardner, individuals who are high in .....intelligence are more in tune with nature.
28. John McCarthy is the father of.....
29. Those who have high .....intelligence are said to be good at body movement, performing actions, and physical control.
30. Human Intelligence has a high error rate compared to an .....system.

## Section-B

### **C. Short Answer Type Questions.(Answer any 7 of 10)**

**7 x 2 = 14 Marks**

31. Expand any two the following short forms.
  - a. AUV
  - b. ASW
  - c. UUV
32. Describe the various types of land based robots.
33. Define Robotics.
34. Explain the three laws of Robotics.
35. Give any three examples of AI usages in sports.
36. Describe the robot Nao, a humanoid robot.
37. Define Ethics. Why Ethics are important in our life.
38. Why did the AI Chat bot by Microsoft close down after some hours of operation?
39. Who is known as the father of AI? What was the definition given by this person?
40. What do you mean by Turing Test? Explain the term.

## Section-C

### **D. Long Answer Type Questions (Answer any 4 of 8)**

**4 x 3 = 12 Marks**

41. Define intelligence and explain the various types of intelligence.
42. Write two advantages and disadvantages of Artificial Intelligence.
43. Discuss the use of AI in the field of : (a) Transport      (b) Literature
44. A hospital shares the details of the patients with an insurance company. Answer from the Ethical as well as Unethical point of view.
45. Give any three examples of chat bot where chat bot gone wrong.
46. Write the short notes on the following: (a) Cram101 apps      (b) DRU Robots
47. Describe the various generations of Robots with appropriate example.
48. Differentiate between manual and autonomous robot.

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