



# INDIAN SCHOOL AL WADI AL KABIR

**Class: IX**

**Department: Computer Science**

**Date:29-04-2024**

**Worksheet No: 1**

## **ARTIFICIAL INTELLIGENCE**

### **CHAPTER 1: INTRODUCTION TO ARTIFICIAL INTELLIGENCE**

**a. FILL IN THE BLANKS:**

1. \_\_\_\_\_ and \_\_\_\_\_ are AI based applications that help us in navigation.
2. \_\_\_\_\_ is the father of Artificial intelligence?
3. With reference to AI domain, expansion of CV is: \_\_\_\_\_
4. The \_\_\_\_\_ Sustainable Development Goals (SDGs) were launched at the United Nations Sustainable Development Summit in New York in the year 2015, forming the 2030 Agenda for Sustainable Development.
5. 2.37 billion people are without food or unable to eat a healthy balanced diet on a regular basis. The Sustainable Development Goal to solve this problem is \_\_\_\_\_.

**b. SELECT THE CORRECT OPTION:**

6. An application lets you search what you see, get things done faster and understand the world around you – using just your camera or a photo. Which domain does this app belong to?
  - a) Natural Language Processing
  - b) Data Sciences
  - c) Computer Vision
  - d) Artificial Language Processing
7. Which of these an ethical concern for humans
  - a. Data privacy
  - b. Moral Issues
  - c. AI bias
  - d. All the above
8. Smart assistants such as Alexa, Siri are the examples of
  - (a) Natural Language processing
  - (b) Data Science
  - (c) Machine Learning
  - (d) Computer Vision

9. Which one of the following is an application of AI?
- Remote controlled Drone
  - Self-Driving Car
  - Self-Service Kiosk
  - Self-Watering Plant System
10. Search engines not only predict what popular searches may apply to your query as you start typing, but it looks at the whole picture and recognizes what you're trying to say rather than the exact search words. This is an example of
- Computer Vision
  - Data Sciences
  - Natural Language Processing
  - Natural Language Understanding

**c. GIVE ANSWER IN ONE WORD:**

11. Who coined the word Artificial Intelligence?
12. When you search for 'Doctor' on a search website, the results for Doctor images might mostly come up as 'male'. Whereas for 'Nurse' most results would be 'female'. What does this depict?
13. With so many people using electricity on a daily basis—whether it is to charge their cell phones or to use their TV—a lot of cables (made of plastic) must be used. Plastic destroys our ecosystem, yet we continue to produce it. Indispensable as it may seem, it has an adverse effect on the environment. The manufacturing of plastic is not exactly ecofriendly. With a little help from modern technology Elsa discovered a way to help curb our plastic problem. She used banana peels as the main ingredient to make bio-plastics. Which of the Sustainable Development Goal does this scenario relate to?
14. Name the field which is enabling computers to identify and process images like humans do.
15. AI ethics is a blanket term used for dealing with all the ethical issues related to AI. (True/False)

**d. ANSWER IN DETAIL (2 MARK QUESTIONS):**

16. Define Artificial Intelligence.
17. Mention four examples of artificially intelligent applications in our smartphones.
18. Explain AI Bias with example.
19. How can AI help in life below water SDG?
20. How do machines become artificially intelligent?

**e. ANSWER IN DETAIL (4 MARK QUESTIONS):**

21. Explain how AI works in the following areas:
- Google Search Engine
  - E-commerce websites
22. Explain AI Domains Data and Computer Vision with examples.
23. Explain any two advantages of implementing smart schools.
24. What skills do we need to get a job in artificial intelligence?
25. Explain how AI projects impact on SDG8, SDG9, SDG10 and SDG11

