# Chapter-11

## AI Domains and Robots

### Section A: Fill in the Blanks

1. _____ is a field of AI that focuses on teaching computers to understand and generate human language.
2. _____ refers to massive and complex datasets that are too large to be processed by traditional tools.
3. _____ is a branch of AI that allows computers to interpret and understand visual information.
4. _____ is a type of robot that can execute tasks with little or no human intervention.
5. _____ is the process of breaking down text data into components like words and phrases in NLP.

### Section B: True or False

1. NLP is used in virtual assistants like Siri and Alexa. **(True/False)**
2. Big Data only refers to the volume of data and not its variety or velocity. **(True/False)**
3. Computer Vision is used in self-driving cars to detect pedestrians. **(True/False)**
4. AI cannot be used in healthcare for disease diagnosis. **(True/False)**
5. Robots in AI can make autonomous decisions based on their environment. **(True/False)**

### Section D: Multiple Choice Questions

1. Which of the following is NOT a component of NLP?
   a) Sentiment Analysis
   b) Language Translation

c) Object Detection

d) Speech Recognition

2. What is the primary purpose of **Big Data** in AI?

a) To create virtual assistants

b) To train AI algorithms and identify patterns

c) To design robots

d) To analyze visual information

3. Which of the following is a real-world application of **Computer Vision**?

a) Language Translation

b) Facial Recognition

c) Sentiment Analysis

d) Data Analysis

4. Which of the following is a key advantage of AI?

a) Automation

b) Data Analysis

c) Personalization

d) All of the above

5. Which of the following is a type of robot in AI?

a) Android

b) Telechir

c) Industrial Robot

d) All of the above

6. What is the main function of **NLP algorithms**?

a) To analyze visual information

b) To process and understand human language

c) To automate repetitive tasks

d) To design robots

7. Which of the following is NOT a characteristic of an intelligent robot?

a) Ability to make autonomous decisions

b) Ability to learn and adapt to new situations

c) Ability to perform repetitive tasks without learning

d) Ability to process environmental information

8. Which of the following is used in **Computer Vision** to improve visual recognition?

a) Deep Learning

b) Sentiment Analysis

c) Language Translation

d) Big Data