

# **Artificial Intelligence**

## **Assignment – I | Unit – I (New Syllabus - PU)**

### **1.1 Intelligence**

1. What is Intelligence?
2. What are the main types of intelligence? Provide examples for each.
3. Describe the components of intelligence and how they contribute to intelligent behavior.

### **1.2 Artificial Intelligence**

4. What is Artificial Intelligence?
5. Explain the important objectives of AI with examples.
6. Briefly discuss the history of AI and its significant achievements.
7. Discuss the primary foundations of AI and their importance to the field.
8. List and explain the four main approaches to AI:
  - o a. Acting Humanly
  - o b. Thinking Humanly
  - o c. Thinking Rationally
  - o d. Acting Rationally
9. Describe "Thinking Humanly" and provide a real-world application of this approach in AI.
10. Explain "Acting Rationally" and discuss how it differs from "Acting Humanly."
11. What are the potential risks associated with the advancement of AI?
12. Outline some of the primary benefits AI could bring to society.

### **1.3 Ethics and Societal Implications**

13. What are some ethical implications associated with the development of AI?
14. How does AI impact employment and the nature of work?
15. Discuss the effects of AI on privacy and data security. Provide examples.
16. Describe how AI could lead to work automation and potential job displacement.
17. Why is it necessary to establish regulations for AI? Provide examples of existing or proposed regulations.
18. Explain how AI could influence decision-making processes in critical sectors like healthcare or finance.
19. What role does the government play in addressing ethical and societal challenges related to AI?
20. Identify and discuss key areas where governance and ethical standards are essential for AI.
21. How might AI reshape societal norms, particularly around work and automation?
22. Discuss the concept of "AI for good" and provide examples of positive societal impacts of AI.
23. How could the risks of AI potentially outweigh its benefits? Discuss with examples.