

- Q.16 List 4 In predominant challenges encountered by artificial intelligence (AI)? (CO2)
- Q.17 What constitutes common-sense knowledge? Give its significance? (CO1)
- Q.18 List 4 applications of ANN? (CO3)
- Q.19 Compare Single layer and multilayer ANN?(CO3)
- Q.20 Explain various components of Natural Language Processing? (CO5)
- Q.21 Define computer vision and illustrate its synergistic relationship with NLP? (CO5)
- Q.22 List characteristics of Artificial Neural Network? (CO3)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Artificial Intelligence may have considerable Ethical and Social effects. Analyze? (CO1)
- Q.24 List various sectors which may be benefitted from the use of AI? Explain any two applications in detail with the help of flow chart/block diagram? (CO2)
- Q.25 Compare machine learning and deep learning? List various applications for each? (CO4)

(80) (4) 223824

No. of Printed Pages : 4
Roll No.

223824

2nd Year / Artificial Intelligence & Machine Learning Subject : Fundamentals of Artificial Intelligence

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 What aspect of artificial intelligence poses a challenge in terms of handling everyday knowledge and reasoning tasks? (CO1)
- a) Real-time requirements
 - b) Brittleness
 - c) Scalability
 - d) Common-Sense knowledge
- Q.2 Which of the following applications of AI is least likely to involve real-time decision making?(CO2)
- a) Self-driving cars
 - b) Personalized learning materials for systems?
 - c) Fraud detection in Banking.
 - d) Robotic surgery systems

(1) 223824

Q.3 Which of the following is not considered a security-relevant property of AI systems? (CO1)

- a) Explainability b) Transparency
- c) Robustness d) Friendliness

Q.4 Least suitable language for AI programming is (CO1)

- a) Python b) R
- c) Basic d) MATLAB

Q.5 What is the primary characteristic of deep fake technology? (CO2)

- a) Making realistic fake images
- b) Enhancing cyber security
- c) Improving NLP
- d) Automating routine administrative tasks

Q.6 Which of the following is NOT a component of Natural Language Processing (NLP)? (CO5)

- a) Phonological analysis
- b) Syntax analysis
- c) Morphological analysis
- d) Semantic analysis

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Expand ML?(CO4)

Q.8 Define Unsupervised Learning?(CO3)

Q.9 Give types of ANN Activation functions?(CO3)

Q.10 Give one application of AI in transportation sector? (Co1)

Q.11 What is Logic-Based Learning? (CO3)

Q.12 What do you mean by intelligence? (CO1)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Outline the primary objectives of artificial intelligence (AI)? (CO2)

Q.14 Machine Intelligence can complement Human Intelligence. Explain with example? (CO1)

Q.15 Will AI ever achieve authentic common-sense reasoning? Provide an explanation. (CO2)