

- 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)

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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)
- Real-time requirements
 - Brittlenss
 - Scalability
 - Common-Sense knowledge
- Q.2 Which of he following applications of AI is least likely to involve real - time decision making ?(CO2)
- Self-driving cars
 - Personalized learning materials for systems ?
 - Fraud detection in Banking.
 - Robotic surgery systems

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

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

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)