

Code:: 21P61602

SR21

SET-2

**SRINIVASA INSTITUTE OF ENGINEERING AND TECHNOLOGY**

UGC – Autonomous Institution

**III B.Tech II Semester I MID Examinations, FEBRUARY – 2025**

**DEEP LEARNING**

**AIML**

Time : 20 Mins	Max. Marks:20			Date: 24-02.2025
Roll No:	Sign of the Student:			Marks Obtained:
Name:	Sign of invigilator:			Sign of Valuator:
CO	CO 1	CO 2	CO 3	Marks Obtained:
UNIT	I	II	III	Total Marks

**1. Why do we need AI?**

[   ]

- a) To replace human workers
- b) To solve complex problems and automate tasks
- c) To create more entertaining movies
- d) To make robots that can do everything humans can

**2. Which of the following is a benefit of AI?**

[   ]

- a) It can lead to job losses
- b) It can be expensive to develop
- c) It can improve decision-making
- d) It can be biased

**3. What is supervised learning?**

[   ]

- a) Learning from labeled data
- b) Learning from unlabeled data
- c) Learning by trial and error
- d) Learning without any data

**4. What is unsupervised learning?**

[   ]

- a) Learning from labeled data
- b) Learning from unlabeled data
- c) Learning by trial and error
- d) Learning without any data

**5. What is reinforcement learning?**

[   ]

- a) Learning from labeled data
- b) Learning from unlabeled data
- c) Learning by trial and error
- d) Learning without any data

**6. Which type of machine learning is used for spam filtering?**

[   ]

- a) Supervised learning
- b) Unsupervised learning
- c) Reinforcement learning
- d) None of the above

**7. Which type of machine learning is used for customer segmentation?** [   ]

- a) Supervised learning                      b) Unsupervised learning
- c) Reinforcement learning                d) None of the above

**8. What is a probabilistic model?** [   ]

- a) A model that makes predictions with certainty
- b) A model that uses probability to handle uncertainty
- c) A model that can only predict two outcomes
- d) A model that is not used in real-world applications

**9. What is a perceptron?** [   ]

- a) A type of deep learning model                      b) An early neural network
- c) A type of machine learning algorithm                d) A type of robot

**10. What is a decision tree?** [   ]

- a) A flowchart-like structure for making decisions
- b) A type of neural network
- c) A type of machine learning algorithm                d) A type of robot

**11. Which of the following is a challenge in Deep Learning?** [   ]

- a) Data availability                      b) Computational resources
- c) Interpretability                      d) All of the above

**12. Which of the following is an advantage of Deep Learning?** [   ]

- a) High accuracy                      b) Automated feature engineering
- c) Scalability                      d) All of the above

**13. Which of the following is a disadvantage of Deep Learning?** [   ]

- a) High computational requirements                      b) Need for large labeled datasets
- c) Interpretability issues                      d) All of the above

**14. What is the role of Deep Learning in computer vision?** [   ]

- a) To enable machines to understand and interpret visual data
- b) To process and generate human language
- c) To train robots to perform physical tasks                d) To analyze financial markets

**15. What is the role of Deep Learning in natural language processing (NLP)?** [   ]

- a) To enable machines to understand and generate human language
- b) To process and interpret visual data
- c) To train robots to perform physical tasks
- d) To analyze financial markets

**16. What is the role of Deep Learning in reinforcement learning?** [   ]

- a) To train agents to take actions in an environment to maximize a reward
- b) To process and interpret visual data
- c) To enable machines to understand and generate human language
- d) To analyze financial markets

**17. Which Deep Learning network is known for its ability to handle long-term dependencies in sequential data?** [   ]

- a) LSTM (Long Short-Term Memory)
- b) CNN (Convolutional Neural Network)
- c) FNN (Feedforward Neural Network)
- d) Autoencoder

**18. Which Deep Learning network uses attention mechanisms to process sequential data more efficiently?** [   ]

- a) Transformer Network
- b) RNN (Recurrent Neural Network)
- c) CNN (Convolutional Neural Network)
- d) Autoencoder

**19. What is the purpose of a Self-Organizing Map (SOM)?** [   ]

- a) To classify images
- b) To generate new data
- c) To cluster and visualize high-dimensional data
- d) To control robots

**20. What is the main goal of a Capsule Network (CapsNet)?** [   ]

- a) To improve image classification accuracy
- b) To generate realistic images
- c) To handle spatial hierarchies better than CNNs
- d) To compress data