Code: **21P61602** **SR21** **SET-3**

SRINIVASA INSTITUTE OF ENGINEERING AND TECHNOLOGY

UGC – Autonomous Institution

III B.Tech II Semester II MID Examinations, MAY – 2025

DEEP LEARNING

AIML

Time: **20 Mins**	Max. Marks:**20**			Date: **01-05.2025**
Roll No:	Sign of the Student:			Marks Obtained:
Name:	Sign of invigilator:			Sign of Valuator:
CO	CO 3	CO 4	CO 5	Marks Obtained:
UNIT	III	IV	V	Total Marks

1. What restriction is imposed in a Restricted Boltzmann Machine (RBM)? **[ ]**

A) No bias nodes

B) No connections between visible and hidden layers

C) No intra-layer connections

D) Limited number of neurons

2. Which learning algorithm is commonly used to train RBMs? **[ ]**

A) Backpropagation

B) Contrastive Divergence

C) Adam

D) Genetic Algorithm

3. What is a Deep Belief Network (DBN)? **[ ]**

A) A single-layer neural network

B) A stack of Autoencoders

C) A stack of RBMs

D) A type of CNN

4. In GANs, what is the goal of the Generator? **[ ]**

A) Classify input data

B) Distinguish real from fake data

C) Generate fake data that looks real

D) Evaluate model loss

5. What is the Discriminator trained to do in GANs? **[ ]**

A) Generate data

B) Compress data

C) Classify text

D) Identify fake data from real

6. Which of the following is NOT a component of Deep Reinforcement Learning?[ ]

A) Policy

B) Reward

C) Encoding layer

D) Environment

7. What is the “exploration vs exploitation” trade-off in reinforcement learning?[ ]

A) Choosing the best loss function

B) Balancing new actions vs known rewards

C) Selecting batch sizes

D) Optimizing memory usage

8. Which type of neural network is typically used in Deep Q-Learning? [ ]

A) Recurrent Neural Network

B) Feedforward Neural Network

C) Autoencoder

D) GAN

9. What makes DBNs “deep”? [ ]

A) Use of dropout

B) Multiple layers of RBMs

C) Long sequences

D) Kernel operations

10. In the context of NLP, what does "embedding" refer to? [ ]

A) Compressing images

B) Plotting graphs

C) Representing words as vectors

D) Combining layers

11. What method is used in PyTorch to move tensors to a GPU? [ ]

A) .move()

B) .cuda()

C) .gpu()

D) .to_gpu()

12. Which PyTorch module is used to define layers in a neural network? [ ]

A) torch.nn

B) torch.utils

C) torch.data

D) torch.model

13. What does ReLU stand for? **[ ]**

A) Rectified Linear Unit

B) Recursive Learning Unit

C) Random Linear Update

D) Rational Layer Unit

14. What layer is typically used to reduce dimensionality in CNNs? **[ ]**

A) Dense layer

B) Dropout layer

C) Flatten layer

D) Pooling layer

15. In PyTorch, which function is commonly used to train a model? **[ ]**

A) fit()

B) train()

C) compile()

D) learn()

16. Which of these is NOT a PyTorch tensor operation? **[ ]**

A) .reshape()

B) .add()

C) .divide()

D) .table()

17. What does backpropagation update during training? **[ ]**

A) Input data

B) Hidden state

C) Loss

D) Weights

18. What is the role of loss functions in CNN or RNN models? **[ ]**

A) Normalize inputs

B) Visualize layers

C) Measure model error

D) Set batch size

19. What kind of data is a CNN not typically used for? **[ ]**

A) Images

B) Videos

C) Audio

D) Tabular data

20. In PyTorch, which optimizer is commonly used for training CNNs and RNNs? [ ]

A) SGD

B) RMSProp

C) Adam

D) Adagrad