

23762

M.Tech. (Artificial Intelligence and Data Science)
3rd Semester, Examination, December-2022

NEURAL NETWORK AND DEEP LEARNING
Paper-22MTADC2

Time allowed : 3 hours] *[Maximum marks : 100*

Note: Attempt five questions in all, selecting one question from each unit. Question no. 1 is compulsory.

1. Write short note on following: 20
 - (i) Thresholding logic
 - (ii) Deep Learning
 - (iii) RBM
 - (iv) Deep Q-Network

Unit-I

2. Describe the following: 20
 - (i) Linear separability
 - (ii) Feed forward Networks
3. Give a complete description about Deep Learning.

Unit-II

4. Explain the following: 20
 - (i) Adadelta Optimizer
 - (ii) Rmsprop Optimizer

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5. Describe the following: 20
- (i) Bidirectional RNN's
 - (ii) LSTM

Unit-III

6. What do you understand by convolutional Neural Networks. 20
7. Describe the following: 20
- (i) Denoising Autoencoders
 - (ii) Regularized Autoencoders.

Unit-IV

8. Describe in detail about DRL and its application. 20
9. Explain the following:
- (i) Model Based RL
 - (ii) Digging Deeper into Q function.