

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (AI & DS) (Sem.-6)

DEEP LEARNING

Subject Code : BTCS 704-18

M.Code : 93966

Date of Examination : 28-11-2025

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) Ovefitting
- b) Bias
- c) Parameter Penalties
- d) Data Augmentation
- e) Convolution Function
- f) Deep Recurrent Network
- g) Encoder-Decoder
- h) Machine Learning
- i) Sequence Modeling
- j) Sigmoid Belief Networks

SECTION - B

2. What is the role of stochastic gradient decent? Give suitable example.
3. Discuss any two application areas of computational graphs.
4. What is the role of activation functions in convolution networks?
5. Explain the significance of deep boltzmann machines.
6. What are the various advantages and disadvantages of recurrent neural networks?

SECTION - C

7. Explain the deep belief networks in detail.
8. Explain the dropout and adversarial training and optimization.
9. Discuss the various challenges while implementing deep generative models.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.