

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VI CS&E-A&M : WINTER: 2025
SUBJECT: DEEP LEARNING

Day : Thursday
Date : 20/11/2025

W-23971-2025

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data if necessary.
- 4) Draw neat diagram **WHEREVER** necessary

- Q.1** Illustrate how to build machine learning model. (10)
OR
Explain gradient descent and its types in details. (10)
- Q.2** Differentiate between machine learning and deep learning. (10)
OR
Define unsupervised learning. Write short note on width and depth of Neural Networks. (10)
- Q.3** Explain the architecture of RESNET and ALEXNET. (10)
OR
Explain the concept of following terms: (10)
i) Pooling in CNN iv) Strides in CNN
ii) Flattening in CNN v) Dense Layer in CNN
iii) Convolutional Layer
- Q.4** What is transfer learning techniques explain in details. (10)
OR
Explain the architecture of DENSE NET in details. (10)
- Q.5** Explain LSTM architecture in details. (10)
OR
Is bidirectional RNN is better than RNN. When to used bidirectional RNN. (10)
- Q.6** Write short notes: (10)
a) Deep Belief Network
b) Contractive Auto encoders
OR
Explain encoders decoder and its types in details. (10)

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