

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 1 = 10$ marks)

Answer any TEN questions.

1. Define the term neural network.
2. What is perceptron?
3. What is optimization process in deep learning?
4. Compare deep neural network and convolution neural network.
5. Comment on RMSProp.
6. What is convolution neural network?
7. Mention the significance of AlexNet.
8. What is CNN visualization?
9. Define encoder.
10. State the advantages of bidirectional RNN.
11. Why sigmoid used in deep learning?
12. Define speech recognition.

PART B — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

13. Explain the types of activation function.
14. Write about performance of back propagation learning.
15. Elaborate note on empirical risk minimization.
16. Interpret the Adam algorithm for optimization.
17. How do you visualize the CNN weight? Discuss.
18. Prepare the sequence to sequence architecture.
19. Explain the application of natural language processing.

PART C — ($4 \times 10 = 40$ marks)

Answer any FOUR questions.

20. Explain about single layer feed forward neural network.
21. Describe the concept of pattern classification using perceptron.
22. Illustrate the convolution neural network architecture.

23. Explain the concept of bidirectional recurrent neural network.
 24. Discuss the recurrent neural network in detail.
 25. Interpret the stochastic encoder and decoder in detail.
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