

School of Computing Science and Engineering Bachelor of Technology in Computer Science and Engineering

Semester End Examination - Nov 2023

Duration: 180 Minutes Max Marks: 100

Sem VII - BTCS9608 - Deep Learning

General Instructions Answer to the specific question asked Draw neat, labelled diagrams wherever necessary Approved data hand books are allowed subject to verification by the Invigilator

| 1) | List the components in structure of a biological neural network. | K1 (2) |
|-----|--|---------|
| 2) | List the differences between deep learning and machine learning. | K2 (4) |
| 3) | Outline the difference between LSTM and gated recurrent units. | K2 (6) |
| 4) | Build an ANN-based recommendation system for an online shopping platform. | K3 (9) |
| 5) | Develop the working cycle of Single Layer Perceptron Model | K3 (9) |
| 6) | Assess the architecture of pre trained CNN Models. | K5 (10) |
| 7) | Analyze the popular datasets available on public domain. | K4 (12) |
| 8) | Elaborate how Amazon is able to recommend other things to buy. How does the Recommendation Engine work? | K5 (15) |
| 9) | Explain how a system can play a game of chess using Reinforcement Learning. | K5 (15) |
| 10) | Imagine the ANN neural network shown in the figure below. Using the signmoid activation function compute the values of H1, H2, y1, y2 and Mean Square Error (MSR). | K6 (18) |

