



MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

VII SEMESTER B. TECH (COMPUTER SCIENCE AND ENGINEERING)
MAKE-UP EXAMINATIONS, FEBRUARY 2022 (POE)
SUBJECT: PE-VII DEEP LEARNING (CSE 4064)
REVISED CREDIT SYSTEM

Date: 22-02-2022

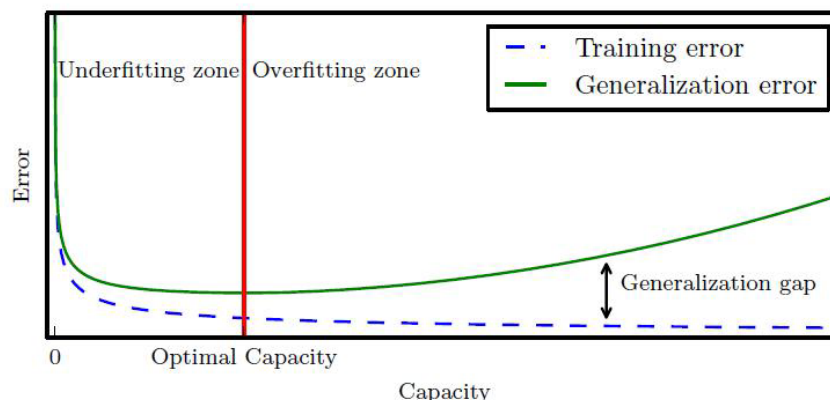
Time: 2:20 PM to 3:35 PM

MAX. MARKS: 20

Note: Answer ALL the questions. Assume any missing data

PART-B

- 1A. You are given the task of machine translation where a source language needs to be translated to a destination language. The languages are highly similar, and a mapping of word-to-word can be assumed but with different order. Suggest a Recurrent Neural Network (RNN) architecture suitable for this task. Give a detailed unfolded version of the RNN with justification. 5
- 1B. Differentiate between model parameters and hyper-parameters. Give examples. 3
- 1C. Compare ensemble methods and dropout. 2
- 2A. What is parameter sharing? Illustrate parameter sharing in Convolutional Neural Network. 4
- 2B. Interpret the following graph. How is it related to bias and variance? 4



- 2C. Which regularization method leads to weight sparsity? Justify your answer. 2