



II SEMESTER M.C.A

SUBJECT: DATA STRUCTURES & ALGORITHMS [MCA 4252]

Assignment 4 (05/06/2021)

Time: 15 minutes

MAX. MARKS: 05

Instructions to Candidates: Hand written answers with Name, Registration number, Page number (in case of more than one sheet) & Signature on every sheet.

1.	<p>Perform deletion of the following keys from the given B-Tree of order 5. Draw the resultant tree after each delete operation.</p> <ol style="list-style-type: none">Delete 80Delete 180Delete 160Delete 40 <pre>graph TD Root["100"] --> I1["30 60"] Root --> I2["130 180"] I1 --> L1["10 20"] I1 --> L2["40 50"] I1 --> L3["70 80 90"] I2 --> L4["110 120"] I2 --> L5["140 160"] I2 --> L6["190 200 210 240"]</pre>	2
2.	<p>Construct a max heap with the given set of values: 30, 55, 50, 45, 25, 65, 60, 40. <i>Hint: Initialization of max heap.</i></p>	3
