

PIMPRI CHINCHWAD EDUCATION TRUST'S
PIMPRI CHINCHWAD COLLEGE OF ENGINEERING
 Sector No. 26, Pradhikaran, Nigdi, Pune - 411044

Department Of Information Technology

Year and Course TY Btech PRN No.: 123B1F001

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| Sr. No. | Title | Page No. | Date | Signature | Remarks |
|---------|---|----------|---------|--------------------|---------|
| 1 | Implement merge sort to efficiently organise large scale orders based on timestamp. | — | 11/7/25 | <i>[Signature]</i> | ① |
| 2 | Implement Quicksort to enhance personalised movie ranking and improve responsiveness. | — | 25/7/25 | <i>[Signature]</i> | ② |
| 3 | Emergency Relief supply optimization implement the fractional knapsack algorithm to maximize utility value within given weight constraints. | — | 8/8/25 | <i>[Signature]</i> | ③ |

This is certify that Shri. Aapita Rahul Patki has carried out the above mentioned DAA Practicals / Term Work in the Information Technology Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date : 5/11/25

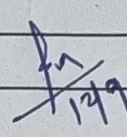
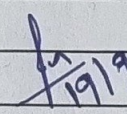
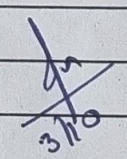
[Signature]
 Subject Incharge
 Pimpri Chinchwad College of Engineering, Pune - 44
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Pimpri-Chinchwad College of Engineering
Sect. 26, Pradhikaran, Nigdi, Pune-411044
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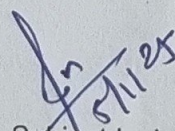
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| 4 | Smart traffic Management Implement Dijkstra's algorithm to determine the optimal ambulance route under dynamic traffic conditions. | — | 22/8/25 |  | ② |
| 5 | Optimal delivery Routing Implement DP to identify cost effective delivery paths | — | 12/9/25 |  | ② |
| 6 | Disaster Relief Resource Allocation - use 0/1 Knapsack approach to optimize essential supply allocation within capacity limits | — | 19/9/25 |  | V. mod. |

This is certify that Shri. Arpita Rahul Patki has carried out the
 above mentioned DAA Practicals / Term Work
 in the IT Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date : 5/11/25

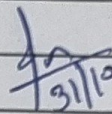
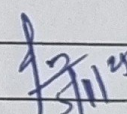

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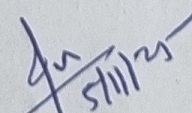
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| 7 | University Exam timetable scheduling Implement Graph colouring techniques to generate conflict free and efficient timetable. | - | 31/10/25 |  | ① |
| 8 | Delivery Route Optimization - apply the branch and bound algorithm to determine the least cost delivery route across cities. | - | 31/10/25 |  | ① |

This is certify that Shri. Arpita Rahul Patki has carried out the
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