



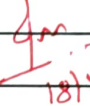
PIMPRI CHINCHWAD EDUCATION TRUST'S  
**PIMPRI CHINCHWAD COLLEGE OF ENGINEERING**

Sector No. 26, Pradhikaran, Nigdi, Pune - 411044

Department Of Information Technology


Year and Course TY Btech PRN No.: 12381f021

## INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
1.	Implement Merge Sort to efficiently organize large scale orders based on timestamp (Divide and Conquer)	—	7/7/25		V. Good
2.	Implement Quick Sort to enhance personalized movie ranking and improve responsiveness (Divide and Conquer)	—	21/7/25		V. Good
3.	Emergency Relief Supply Optimization - Implement the Fractional Knapsack algorithm to maximize utility value within given weight constraints (Using greedy approach fractional knapsack)	—	4/8/25		V. Good

This is certify that Shri. Shreyash S. Desai has carried out the above mentioned Design and Analysis of Algorithms Lab Practicals / Term Work in the I. T. Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date : 03/11/25

  
Subject Incharge  
Pimpri Chinchwad College of Engineering, Pune - 44

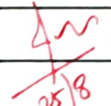
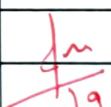
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Sr. No.	Title	Page No.	Date	Signature	Remarks
4.	Smart Traffic Management: Implement Dijkstra's algorithm to determine the optimal ambulance route under dynamic traffic conditions & (Dijkstra's Algorithm)	-	24/8/25		V. Good
5.	Optimal Delivery Routing: Implement DP to identify cost effective delivery path (Dynamic Programming)	-	25/8/25	8/9	V. Good
6.	Disaster Relief Resource Allocation. Use 0/1 knapsack approach to optimize essential supply allocation within capacity limits (Dynamic Programming)	-	21/9/25		V. Good

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Sr. No.	Title	Page No.	Date	Signature	Remarks
7.	University Exam timetable scheduling : Implement Graph colouring techniques to generate conflict free and efficient timetables (Greedy optimization)	-	15/9/25	<del>dm</del> 29/9	Good
8.	Delivery Route optimization: Apply the Branch and Bound algorithm to determine the least cost delivery route across cities (Branch and Bound)	-	6/10/25	<del>dm</del> 13/10	Good

Date : 08/11/25

  
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