

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

Department Of Information Technology

Year and Course BTech IT TY PRN No.: 123B1F046

## INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
1.	Implement Merge Sort to efficiently organize large scale orders based on timestamp (Divide & Conquer)	-	08/07/25	<u>dm</u> 5/8	(C)
2.	Implement Quick Sort to enhance personalized movie ranking & improve responsive (Divide & Conquer)	-	22/07/25	<u>dm</u> 5/8	Very Good (C)
3.	Emergency Relief Supply Optimization - Implement the Fractional knapsack algorithm to max utility value within given weight (Greedy Algorithm)	-	05/08/25	<u>dm</u> 19/8	Very Good (C)
4.	Smart Traffic Management Implement Dijkstra's Algo to determine optimal ambulance route under dynamic condition (Greedy Algorithm)	-	19/08/25	<u>dm</u> 23/9	Very Good

This is certify that Shri. Saloni Vijay Khandelwal has carried out the above mentioned Design Analysis & Algorithm Practicals / Term Work in the Information Technology Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date : 04/11/25

dm  
4/11/25  
Subject Incharge  
Pimpri Chinchwad College of Engineering, Pune - 44

**H.O.D. Information Technology**  
 Pimpri-Chinchwad College of Engineering  
 Sect. 26, Nigdi, Pune-411044  
 Head of Department



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Sr. No.	Title	Page No.	Date	Signature	Remarks
5.	Optimal Delivery Routing Implement DP to identify cost effective delivery path. (Dynamic Programming)	-	02/09/25	<u>for</u> 30/9	Very Good
6.	Disaster Relief Resources Allocation. Use 0/1 knapsack approach to optimize essential supply allocation capacity. (Dynamic Programming)	-	23/09/25	<u>for</u> 14/10	Very Good
7.	University Exam Timetable Scheduling. Implement Graph Colouring techniques to generate conflicts free timetables. (Greedy / Backtracking)	-	30/9/25	<u>for</u> 14/10	Very Good
8.	Delivery Route Optimization- apply the branch & bound algorithm to determine least cost delivery route across cities (Branch & Bound)	-	14/10/25	<u>for</u> 4/11/25	Very Good.

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