

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 'IT' PRN No.: 123B1F035

## INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
1.	Implement Merge sort to efficiently organize large scale orders based on timestamp (Divide & conquer)	-	07/7/25	<del>fn</del> 11/17	Ⓢ
2.	Implement Quick sort to enhance personalized movie ranking & improve response (Divide & conquer)	-	21/07/25	<del>fn</del> 11/18	Ⓢ
3.	Emergency Relief supply Optimization-Implement the Fractional Knapsack algorithm to max utility value within given weight (Greedy Algorithm)	-	04/08/25	<del>fn</del> 11/18	Ⓢ
4.	Smart Traffic Management Implement Dijkstra's Algo to determine optimal ambulance route under dynamic cond <sup>n</sup> (Greedy Algorithm)	-	24/08/25	<del>fn</del> 11/19/25	Ⓢ

This is certify that Sri. Shruti Vasant Rao Jadhav has carried out the above mentioned Design Analysis & Algorithm Practicals / Term Work in the IT Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date : 03/11/25

~~fn~~  
31/11/25  
 Subject Incharge  
 Pimpri Chinchwad College of Engineering, Pune - 44  
**H.O.D. Information Technology**  
**Pimpri Chinchwad College of Engineering**  
 Sector 26, Pradhikaran, Nigdi, Pune - 411044

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 'IT' PRN No.: 12381F035

## INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
5.	Optimal Delivery Routing Implement DP to identify cost effective delivery path (Dynamic Programming)	—	25/08/25	<del>An</del> 15/9/25	Ⓢ
6.	Disaster Relief Resources Allocation - use 0/1 knapsack approach to optimize essential supply allocation capacity (Dynamic Programming)	—	02/09/25	<del>An</del> 16/10	Ⓢ
7.	University Exam Timetable Scheduling - Implement Graph colouring techniques to generate conflict free timetables (Greedy / Backtracking)	—	15/09/25	<del>An</del> 15/10/25	Ⓢ
8.	Delivery Route Optimization - apply the branch & bound algorithm to determine least cost delivery route across cities. (Branch & Bound)	—	06/10/25	<del>An</del> 31/11/25	Ⓢ

This is certify that Shri. Shruti Vasantran Tadhar has carried out the  
 above mentioned Design Analysis & Algorithm Practicals / Term Work  
 in the IT Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date : 03/11/25

~~An~~  
31/11/25

Subject Incharge  
 Pimpri Chinchwad College of Engineering, Pune - 44

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