

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 B.Tech

PRN No.: 124B2F003

INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
1.	Implement Merge Sort to efficiently organize large scale orders based on timestamp (Divide & Conquer).	-	09/07/25	JG/8	①
2.	Implement Quick sort to enhance personalized movie ranking & improve responsiveness (Divide & Conquer).	-	23/07/25	JG/8	②
3.	Emergency Relief Supply optimization : Implement the fractional knapsack algorithm to maximize utility value within given weight constraint (Greedy Approach).	-	06/08/25	JG/8 20/8	③
4.	Smart traffic Management: Implement Dijkstra algorithm to determine the optimal ambulance route under dynamic traffic conditions (Greedy Approach)	-	20/08/25	JG/8 10/9	④

This is certify that Shri. Shreyas Suresh Shinde

has carried out the

above mentioned Design Analysis & Algorithm Lab. Practicals / Term Work in the Information Technology Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date : 05/11/25

JG/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
 Head of Department
 Pimpri Chinchwad College of Engineering, Pune - 44

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 B.Tech

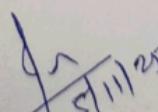
PRN No.: 124B2F003

INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
5.	Optimal Delivery Routing: Implement DP to identify cost effective delivery paths. (Dynamic Programming)	-	10/09/25	✓ 24/10	①
6.	Disaster Relief Resource Allocation: use 0/1 knapsack approach to optimization essential supply allocation within capacity limit (Dynamic Prog.)	-	24/09/25	✓ 24/10	②
7.	University exam timetable scheduling. Implement Graph coloring tech. to generate conflict free & efficient timetable (Backtracking)	-	01/10/25	✓ 24/10	③
8.	Delivery Route Optimization apply the branch & bound Algorithm to determine the least cost delivery Route across cities (Branch & Bound).	-	08/10/25	✓ 24/11	④

This is certify that Shri. Shreyas Suresh Shinde. 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 : 05/11/25


 Subject Incharge Head of Department
 Pimpri Chinchwad College of Engineering
 Sect. 26, Pradhikaran, Nigdi, Pune-411044
 Pimpri Chinchwad College of Engineering, Pune - 44

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