

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 IT A3 - DAFT Lab PRN No.: 123B1F051

## INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
1.	Implement Merge Sort to efficiently organize large scale orders based on time stamp. ( <del>divide &amp; conquer</del> )	-	8/7/25	Jr 19/8	(C)
2.	Implement quicksort to enhance personalized movie ranking & improve responsiveness (divide & conquer)	-	22/7/25	Jr 19/8	(C)
3.	Emergency Relief Supply optimization - Implement the Fractional knapsack algo to maximize utility value within given weight constraint	-	5/8/25	Jr 19/8	(C)
4.	Smart Traffic Management - Implement Dijkstra's algo to determine optimal ambulance route under dynamic traffic conditions	-	19/8/25	Jr 19/8	(C)

This is certify that Shri/Miss. Pradnya Jeevan Kulkarni, has carried out the above mentioned Data Analysis & Algorithms Lab <sup>design</sup> Practicals / Term Work in the I.T Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date : 04/11/25

Jr  
9/11/25
**H.O.D. Information Technology**  
**Pimpri-Chinchwad College of Engineering**  
**Sect. 26, Pradhikaran, Nigdi, Pune-411044**  
 Subject Incharge Head of Department  
 Pimpri Chinchwad College of Engineering, Pune - 44

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Sr. No.	Title	Page No.	Date	Signature	Remarks
5.	Optimal Delivery Routing - Implement DP to identify cost effective delivery paths	-	2/9/25	J.R. 30/9	(C)
6.	Disaster Relief Resource allocation - use 0/1 knapsack approach to optimize essential supply allocation within capacity limits.	-	23/9/25	J.R. 14/10	(C)
7.	University Exam Timetable scheduling . Implement Graph coloring techniques to generate conflict free & efficient timetables	-	30/9/25	J.R. 14/10	(C)
8.	Delivery Route Optimization - apply the branch & algo to determine least cost of delivery route. across 3 cities	-	12/10/25	J.R. 14/11	(C)

This is certify that Shri. Miss. Poonam Jeevan Kulkarni has carried out the  
 above mentioned Design & Analysis of Algorithms . Practicals / Term Work  
 in the I.T Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date : 04/11/25

  
 Subject Incharge Jyoti T. S.  
 Pimpri Chinchwad College of Engineering  
 Sector No. 26, Pradhikaran, Nigdi, Pune - 411044

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