

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

Department Of Information Technology

Year and Course T.Y B.Tech PRN No.: 123B1F044

## INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
1.	Implement MergeSort to efficiently organize large scale order on timestamp.		8/7/25	<u>for</u> 5/8	ⓐ
2.	Implement QuickSort to enhance personalized ranking & improve responsive		22/7/25	<u>for</u> 19/8	ⓐ
3.	Emergency Relief supply Optimization implement the Fractional knapsack algorithm to maximize utility value within given weight constraints		5/8/25	<u>for</u> 29	ⓐ
4.	Smart Traffic conditions Implement Dijkstra's Algo to determine the optimal ambulance route.		19/8/25	<u>for</u> 29	ⓐ
5.	Optimal delivery routing implement DP to identify cost effective delivery paths.		2/9/25	<u>for</u> 23/9	ⓐ

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

Date : 4/11/25

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

**H.O.D. Information Technology**  
Pimpri-Chinchwad College of Engineering  
Sector Head of Department  
Pune-411044

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Sr. No.	Title	Page No.	Date	Signature	Remarks
6.	Disaster relief resource allocation use 0/1 knapsack approach to optimize essential supply allocation within capacity limits.		23/9/25	<u>[Signature]</u> 14/10	②
7.	University Exam Timetable Scheduling - Implement graph coloring techniques to generate conflict free & efficient timetables.		30/8/25	<u>[Signature]</u> 4/11	②
8.	Delivery route optimization apply the branch & bound algorithm to determine the least cost delivery route across cities.		14/10/25	<u>[Signature]</u> 4/11	②

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