

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.: 123B1F031

## INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
1.	Implement merge sort to efficiently organize large scale orders based on timestamp	-	7/07/25	Jn. 14/7	(C)
2.	Implement quick sort to enhance personalised movie ranking and improve responsiveness	-	21/07/25	Jn. 28/7	(C)
3.	Emergency Relief supply optimization Implement the fractional knapsack algorithm to maximize utility value within given weight constraints	-	4/08/25	Jn. 18/8	(C)
4.	Smart Traffic management Implement dijkstra's algorithm to determine the optimal ambulance route under dynamic traffic conditions	-	12/08/25	Jn. 8/9	(C)

This is certify that Shri. \_\_\_\_\_ has carried out the

above mentioned Design and analysis of algorithm lab Practicals / Term Work  
 in the IT Department of Pimpri Chinchwad College of Engineering, Pune-44.

Date: 3/11/2025

*Jana  
3/11/25*  
 Subject Incharge **H.O.D. Information Technology**  
 Pimpri Chinchwad College of Engineering  
 Head of Department  
 Sect. 26, Pradhikaran, Nigdi, Pune-411044  
 Pimpri Chinchwad College of Engineering, Pune - 44

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Optimal delivery Routing	25/08/25	g.m. 15/9		(C)
Implement DP to identify cost effective delivery Paths				
Disaster Relief Resource Allocation - use of Knapsack approach to optimize essential supply allocation within capacity limits	08/09/25	g.m. 29/9		(C)
University Exam timetable scheduling - Implement Graph colouring techniques to generate conflict free and efficient timetables	15/09/25	g.m. 13/10		(C)
Delivery Route optimization apply the branch and bound algorithm to determine the least cost delivery Route across cities	6/10/25	g.m. 3/11		(C)

This is certify that Shri. Rahul Dhangi Hile has carried out the mentioned design and analysis of algorithm lab Practicals / Term Work in IT Department of Pimpri Chinchwad College of Engineering, Pune-44.

1: 03/11/2025

*31/11/25*  
 Subject Incharge **H.O.D. Information Technology**  
 Pimpri-Chinchwad College of Engineering  
 Head of Department  
 Sect. 26, Pradhikaran, Nigdi, Pune-411044  
 Pimpri Chinchwad College of Engineering, Pune