

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.: 123BIF031

## 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	<i>[Signature]</i> 14/7	(C)
2.	Implement quick sort to enhance personalized movie ranking and improve responsiveness	-	21/07/25	<i>[Signature]</i> 28/7	(C)
3.	Emergency Relief supply optimization Implement the fractional Knapsack algorithm to maximize utility value within given weight constraints	-	4/08/25	<i>[Signature]</i> 18/8	(C)
4.	Smart Traffic management Implement diskstack's algorithm to determine the optimal ambulance route under dynamic traffic conditions	-	22/08/25	<i>[Signature]</i> 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

*[Signature]*  
31/11/25  
**H.O.D. Information Technology**  
 Pimpri Chinchwad College of Engineering  
 Subject Incharge Head of Department  
 Pimpri Chinchwad College of Engineering, Pune - 44



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Title	Page No.	Date	Signature	Remarks
Optimal delivery Routing		28/08/25	<i>dm</i> 15/9	(C)
Implement DP to identify cost effective delivery paths				
Disaster Relief Resource Allocation - use 0/1 knapsack approach to optimize essential supply allocation within capacity limits		08/09/25	<i>dm</i> 29/9	(C)
University Exam Timetable scheduling - Implement Graph coloring techniques to generate conflict free and efficient timetables		15/09/25	<i>dm</i> 13/10	(C)
Delivery Route Optimization : apply the branch and bound algorithm to determine the least cost delivery route across cities		6/10/25	<i>dm</i> 2/11	(C)

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

03/11/2025

*dm*  
31/10/25

**H.O.D. Information Technology**  
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