

PIMPRI CHINCHWAD EDUCATION TRUST'S  
**PIMPRI CHINCHWAD COLLEGE OF ENGINEERING**

Sector No. 26, Pradhikaran, Nigdi, Pune - 411044

Department Of Information Technology.

Year and Course Third year Btech PRN No.: 123B5F138

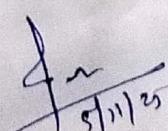
## INDEX

Sr. No.	Title	Page No.	Date	Signature	Remarks
1.	Implement Merge sort to efficiently organize large scale orders based on timestamp (Divide and Conquer).	-	9/7/25	Jn. 20/7	Very Good
2.	Implement Quick sort to enhance personalized movie ranking and improve responsiveness (Divide and Conquer).	-	23/7/25	Jn. 20/7	Very Good
3.	Emergency Relief supply optimization: Implement the fractional knapsack algorithm to maximize utility value within given weight constraint. (Greedy Approach).	-	6/8/25	Jn. 20/8	Very Good

This is certify that Shri. Rachana Dixit has carried out the above mentioned Design analysis and 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, Pune - 44

  
**H.O.D. Information Technology**  
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4.)	Smart Traffic Management Implement Dijikstra algorithm to determine the optimal ambulance route under dynamic traffic conditions (Greedy Approach).	-	23/08/25	Jn 23/08	Very Good
5.)	Optimal Delivery Routing Implement DP to identify cost effective delivery paths (Dynamic Programming)	-	10/09/25	Jn 23/09	Very Good
6.)	Disaster Relief Resource Allocation: use <del>at</del> 0/1 knapsack approach to optimization essential. Supply allocation within capacity limit. (Dynamic Programming)	-	24/09/25	Jm 1/10	Very Good

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7.	University Exam Timetable scheduling - Implement Graph coloring Technique to generate conflict free and efficient timetable (Backtracking). <i>(Greedy)</i>	-	8/10/25	<i>A. n 8/10</i>	<i>Very Good</i>
8.	Delivery Route Optimization apply the branch and bound Algorithm to determine the least cost delivery route across cities (Branch and Bound).	-	8/10/25	<i>A. n. 8/10</i>	<i>Very Good</i>

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