19I510 DESIGN AND ANALYSIS OF ALGORITHMS LABORATORY

0 0 2 1

LIST OF EXPERIMENTS:1. Analysis of Algorithms  
2. Sorting Algorithms  
3. Hashing: Collision Resolution Techniques  
4. String Matching Algorithms  
5. Graph Algorithms  
6. Greedy Algorithms  
7. Divide and Conquer  
8. Dynamic programming  
9. Backtracking  
10. Branch and Bound

Total P: 30

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CO** | **COURSE OUTCOMES** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **P10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | To implement efficient algorithms for various classes of problems such as sorting, graph problems and string matching. | 3 | 3 | 3 |  | 3 |  |  |  |  | 3 |  | 2 | 3 | 3 |
| **CO2** | Devise an efficient solution for any given problem using design techniques and analyze the time complexity of the same. | 3 | 3 | 3 |  | 3 |  |  |  |  | 3 |  | 2 | 3 | 3 |

**Course Objectives :**

1. Identify and implement the appropriate advanced data structures for contemporary applications.
2. To implement the appropriate design techniques for the real world problems.