UG-479 BSCS-08

B.Sc. DEGREE EXAMINATION – DECEMBER, 2018.

Second Year

Computer Science

DESIGN AND ANALYSIS OF ALGORITHMS

Time : 3 hours

Maximum marks : 75

PART A — $(5 \times 5 = 25 \text{ marks})$

Answer any FIVE questions.

- 1. Elaborate the algorithms.
- 2. Write short note on Programme testing.
- 3. Explain about the Big-O notation.
- 4. Define Recurrences. Write about the substitution method.
- 5. Write short notes on Hill climbing.
- 6. Mention about the Factorial using recursion.
- 7. Write about the Bubble Sort with suitable example.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

- 8. Explain about the Knight's tour.
- 9. Discuss about the correctness of the algorithm.
- 10. Elaborate about the Growth of function.
- 11. Discuss about the Recurrences Master method.
- 12. Explain in detail about the Jeep Problem.
- 13. Briefly explain about the Branch and Bound with suitable example.
- 14. Discuss about the Linear Search with suitable example.

 $\mathbf{2}$

UG-479