

Roll No.

Total Pages : 3

3994/M

M-26/2051

SOFTWARE ENGINEERING

Paper–BCA-324

Semester–VI

Time allowed : 3 Hours] [Maximum Marks : 75

Note: The candidates are required to attempt two questions each from Section A and Section B carrying 15 marks each and the entire Section C consisting of 5 questions carrying 3 marks each.

SECTION-A

1. (a) Define Software Engineering. Explain various associated challenges in detail. 8
- (b) Compare and contrast Waterfall and Iterative Process models. 7

2. (a) How Software Process is implemented? Explain its various characteristics. 8
- (b) Write a note on Software Configuration management. 7
3. (a) Explain various activities to plan a large project. 8
- (b) Define Quality. Explain various Software quality attributes in detail. 7
4. (a) What is SRS? Why is it needed? Explain. 8
- (b) Define Metric? Explain various Metrics for Requirement Analysis. 7

SECTION-B

5. (a) Explain various design principles in detail. 8
- (b) Why metrics are used? Explain information flow metrics in detail. 7
6. (a) Explain various Programming Principles in detail. 8

- (b) How Code is verified? Explain Code-inspection also in detail. 7
- 7. (a) Why Software Testing is required? Explain Text-Case specification, execution and analysis. 8
- (b) Explain any two White Box Testing Techniques. 7
- 8. (a) Explain “Boundary Value Analysis” and “Cause-Effect Graphing” in detail. 8
- (b) What is Software Reliability? Explain various uses of Reliability Studies. 7

SECTION-C

- 9. Explain the following :
 - (i) Software Maintenance
 - (ii) Testing Levels
 - (iii) Static Analysis
 - (iv) Software Development Life Cycle
 - (v) COCOMO model.

5×3 = 15