S.No. 5215

16 SMBECA 1:2/
16 SMBECS 1:1/16 SMBEIT 1:1

(For candidates admitted from 2016–2017 onwards)

B.C.A./B.Sc. DEGREE EXAMINATION, APRIL 2022.

Part III — Computer Applications/Computer Science/Information Technology — Major Based Elective

SOFTWARE ENGINEERING

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20)

Answer ALL questions.

1. What is System Engineering?

2. Define software process.

3. What does Verification represent?

4. What are the objectives of testing?

5. What are the approaches of integration testing?

6. What is a boundary value analysis?

7. State the approaches for prototyping requirements.

8. Define Unit testing.

9. Write any four qualities attributes identifies by ISO 9126.

10. Define metrics.

SECTION B — (5 × 5 = 25)

Answer ALL questions, choosing either (a) or (b).

11. (a) Write short notes on Waterfall Model.

Or

(b) Explain the various activities involved in software process model.

12. (a) Write short notes on System Engineering Hierarchy.

Or

(b) Explain the steps involved in Requirements Engineering process.

13. (a) Write short notes on levels of software process.

Or

(b) Explain about structural design patterns.

14. (a) What are the characteristics for a Good design?

Or

(b) Write short notes on SCM process.

15. (a) Write short notes on open source software development.

Or

(b) List and explain the types of web applications.

SECTION C — (3 × 10 = 30)

Answer any THREE questions.

16. Explain briefly about Spiral model and its phases.

17. Explain briefly about the Elements of Analysis Modelling Approaches.

18. Explain briefly about the Golden rules involved for designing.

19. Explain the various types of Software Maintenance.

20. Discuss the Steps involved in Re-engineering.