Fourth Semester B.Sc. Degree Examination, April/May 2019

(CBCS Scheme)

Computer Science

Paper T4.1 – SOFTWARE ENGINEERING & DBMS

Time : 3 Hours]   *[Max. Marks : 90*

Instructions to Candidates : Answers ALL the Sections.

SECTION – A

Answer any **TEN** of the following.   **(10 × 1 = 10)**

1. What is software engineering?

2. Define project management.

3. Define SRS.

4. What is software testing?

5. Define walk through.

6. What is software analysis?

7. What is DBMS?

8. Mention the disadvantages of DBMS.

9. What is functional dependency?

10. What is the purpose of candidate key?

11. Mention DCL commands.

12. What is Equijoin?

SECTION – B

Answer any **FIVE** of the following.   (5 × 3 = 15)

13. Explain the characteristics of software.

14. Write the disadvantages of prototyping model.

15. What is DFD? Mention the symbols used in DFD.

16. Discuss the steps involved in SDLC.

17. Write the functions of DBA.

18. Explain client-server architecture.

19. Write the difference between DBMS and RDBMS.

SECTION – C

Answer any **SIX** of the following.   (6 × 5 = 30)

20. Explain waterfall model with neat diagram.

21. Explain the characteristics of SRS.

22. Describe the three schema architecture of DBMS.

23. Explain the various levels of testing.

24. Explain the characteristics of DBMS.

25. Explain different types of users in DBMS.

26. Explain data abstraction in DBMS.

27. Explain SET operations on relational data model.

SECTION – D

Answer any **FIVE** of the following. (5 × 7 = 35)

28. Explain spiral model with neat diagram. Write any two advantages and disadvantages.

29. (a) What is cohesion? Explain different types of cohesion.

    (b) Write difference between verification and validation.

30. Explain variations of SELECT statement in SQL with example.

31. Explain INF and 2NF with example.

32. Write the difference between black box and white box testing.

33. Explain SQL functions.

34. What is attribute? Explain different types of attributes with examples.

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