GN-265

III Semester B.A./B.Sc. Examination, December - 2019

(CBCS) (F+R) (2015-16 and Onwards)

COMPUTER SCIENCE - III

Database Management system and Software Engineering

Time : 3 Hours

Max. Marks : 70

Instruction : *Answer all Sections.*

SECTION - A

I. Answer **any ten** questions. Each question carries **2** Marks :   **10x2=20**

1. Mention any two characteristics of database approach.

2. What is an instance ? Give example.

3. Write the important difference between strong and weak entity.

4. What are derived attributes ? Give example.

5. What is referential integrity ?

6. Write any two properties of normalization.

7. Give the syntax and example for GRANT command in SQL.

8. What are database triggers ?

9. What is a Software Quality Assurance ?

10. What is Software Testing ? Mention its type.

11. Define Actors in usecase diagram mention the types of factors.

12. Write any two types of cohesion.

P.T.O.

SECTION - B

II. Answer **any five** questions. Each question carries **10** marks :   **5x10=50**

13. (a)   Write a note on database users.

      (b)   Explain three schema architecture.   **5+5**

14. (a)   Define Entity. Explain different types of entities with suitable Example.

      (b)   What is a Key ? Explain the different types of keys with suitable examples.   **5+5**

15. (a)   Explain any three operations of relational algebra using suitable examples.

      (b)   Write a note on 1NF and 2NF.   **5+5**

16. (a)   Explain DDL commands with suitable examples.

      (b)   What are nested queries ?   **7+3**

17. (a)   Write the basic syntax of PL/SQL. Give an example.

      (b)   What are looping statements ? Explain any one looping statement in PL/SQL.   **5+5**

18. (a)   Explain water-fall model.

      (b)   Write a note on Extreme Programming (XP).   **5+5**

19. (a)   Explain SRS.

      (b)   What is software quality ? Explain Gravin's quality dimensions.   **5+5**

20. (a)   Explain software testing.

      (b)   Compare between White Box testing and Black Box testing.   **5+5**

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