THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2023

COMPUTER SCIENCE & MATHEMATICS (DOUBLE MAIN)

GDCS3B04T: DBMS & SOFTWARE ENGINEERING

Time: 2 Hours   **Maximum Marks: 60**

SECTION A: Answer the following questions. Each carries *two* marks.

(Ceiling 20 marks)

1. What is software engineering?

2. Write notes on 2PL.

3. What is meant by software quality assurance?

4. Mention the role of the primary key in a relational database.

5. Comment on DSDM.

6. Write the use of the ALTER command in SQL with an example.

7. What is data Independence?

8. Briefly explain the three-level schema architecture.

9. What are the advantages of the incremental model to software approach?

10. Define the software process.

11. State the ACID property of a transaction.

12. Distinguish between verification and validation.

SECTION B: Answer the following questions. Each carries *five* marks.

(Ceiling 30 marks)

13. Explain about ER model.

14. Demonstrate class diagram and use case diagram with examples.

15. Explain DML statements with examples.

16. Describe the Agile modeling approach to software development.

17. Explain Software maintenance.

18. Discuss different aggregate functions with an example.

19. What are the different types of software testing?

SECTION C: Answer any *one* question. Each carries *ten* marks.

20. What is normalization? Explain 1NF, 2NF, 3NF with suitable example.

21. Discuss any three traditional SDLC Models.

(1 x 10 = 10 Marks)