



QP – 204

III Semester B.A. B.Sc. Examination, March/April 2022

(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. **(10×2=20)**

- 1) Define DBMS. Mention its function.
- 2) Define Database Language.
- 3) Define primary and super key.
- 4) What is weak and strong entity ?
- 5) What is normalization ? Mention its types.
- 6) What is SQL ?
- 7) Mention the difference between DELETE and DROP command in SQL.
- 8) What are database triggers ?
- 9) Define software engineering.
- 10) Define collaboration.
- 11) What are UML models ? Give example.
- 12) What is SRS ? Mention its two function.

P.T.O.



## SECTION – B

- II. Answer **any five** questions. **Each** question carries **10** marks. (5×10=50)
- 13) a) Explain the advantages of DBMS. 5  
b) Explain three schema architecture. 5
- 14) a) Define the following : (2+2+1)  
i) DDL                      ii) DML                      iii) DCL. 5  
b) What is an E-R diagram ? Mention its notation's with example. 5
- 15) a) Explain the different types of JOIN statements with example. 5  
b) Explain any three algebraic operation in SQL. 5
- 16) a) What is data model ? Explain network and relational model with example. 5  
b) Explain the different types of attributes. 5
- 17) a) Write the basic syntax of PL/SQL and give example. 5  
b) What are looping statements in PL/SQL. 5
- 18) a) Explain spiral model with its diagram. 5  
b) Explain Agile development. 5
- 19) a) Explain the various types of Software Testing. 5  
b) Explain verification and validation. 5
- 20) a) Define the following :  
a) Coupling. 2  
b) Cohesion. 2  
c) Software testing. 1  
b) Write the difference between white box and black box testing. 5