



SN – 401

III Semester B.A./B.Sc. Examination, November/December 2017  
(CBCS) (Fresh+Repeater) (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 10** questions. **Each** question carries **2** marks. (10×2=20)
- 1) Define Database and give example.
  - 2) What is Weak Entity ?
  - 3) Explain data independence.
  - 4) What is Normalization ?
  - 5) Explain ALTER TABLE command with example.
  - 6) What is join in SQL ? Mention the different types of joins.
  - 7) Write any 2 features of PL/SQL.
  - 8) Enumerate the characteristics of software.
  - 9) List out 4 software myths.
  - 10) What are generic products ?
  - 11) What is agility ?
  - 12) What is abstraction ?

SECTION – B

- II. Answer **any 5** of the following questions : (5×10=50)
- 13) a) Explain schema, instance and various database states.  
b) Write a note on database users. (5+5)
  - 14) a) Explain various types of attributes with example.  
b) Explain any 3 fundamental operation in relational algebra with example. (5+5)



P.T.O.



- 15) a) What is SQL ? Explain DML commands with an example for each.  
 b) Define Relationship. Explain the various types of relationships between entity sets with suitable examples. (5+5)
- 16) a) Explain GRANT and REVOKE command with example.  
 b) Explain briefly the DML commands with suitable example. (5+5)
- 17) a) Write the basic structure of PL/SQL with example.  
 b) Explain the various types of operators available in PL/SQL. (5+5)
- 18) a) Explain coupling and cohesion.  
 b) Explain unit testing and integration testing. (5+5)
- 19) a) What is SRS ? Explain the requirements engineering process.  
 b) Explain SPIRAL model. (5+5)
- 20) a) Explain verification and validation.  
 b) What is Software Quality ? Explain different quality factors. (5+5)



SECTION - B

(2x10=20)

II. Answer any 2 of the following questions :

(5+5)

(5+5)

P.T.O.