



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)

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- 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)

(2+2)

(2+2)

P.T.O.