



QP – 262

III Semester B.A./B.Sc. Examination, April/May 2021

(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. Give any two examples of DBMS software.
- 2) What is an entity ? Give an example.
- 3) What is schema and instance ?
- 4) What is primary key ? Give an example.
- 5) List the data types allowed in SQL.
- 6) Differentiate between SQL and PL/SQL.
- 7) List out four software myths.
- 8) What are the characteristics of software ?
- 9) Define software engineering.
- 10) What is feasibility study ?
- 11) What is Test Plan ?
- 12) Define project management.

SECTION – B

II. Answer any five questions. Each question carries ten marks. (5×10=50)

- 13) a) Describe the characteristics of DBMS. 5
b) What is DBA ? Explain the roles and responsibilities of DBA. 5
- 14) a) Explain three-level architecture of DBMS with a neat diagram. 5
b) What is data independence ? Explain two types of data independence. 5

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- 15) a) What is data model ? Explain network model and relational model with example. 5
b) What is an attribute ? Explain different types of attributes with example. 5
- 16) a) What is normalization ? Explain 1NF and 2NF with example. 5
b) What is Join ? Explain the types of Joins in relational algebra. 5
- 17) a) Explain order-by and group-by clause with syntax and example. 5
b) What is SDLC ? Explain different phases of SDLC. 5
- 18) a) What is software product ? Explain two types of software products. 5
b) Explain spiral model. 5
- 19) a) Differentiate between verification and validation. 5
b) Describe design principles. 5
- 20) a) What is software testing ? Describe different types of testing. 5
b) Write a note on software maintenance. 5
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