



NS – 356

III Semester B.A./B.Sc. Examination, Nov./Dec. 2016
(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 : (10x2=20)

- 1) What is DBMS ? Mention the functions of DBMS.
- 2) Define DML. Mention the different operations of DML.
- 3) Write a note on DBMS interface.
- 4) What is normalisation ? What are the different types of normal forms.
- 5) What is join in SQL ? Mention the different types of joins.
- 6) Explain the ALTER command in SQL.
- 7) What is an ER-diagram ? What are the different notation used to construct ER-diagram.
- 8) Define Software engineering.
- 9) What is software myths ? Mention the classification of software myths.
- 10) What is Agile development ?
- 11) What is meant by design pattern ?
- 12) Define DFD. Mention the different notation used in DFD.

SECTION – B

II. Answer any 5 of the following questions : (5x10=50)

- 13) a) Explain the characteristics of database approach. 5
- b) Discuss about various people involved in DBMS. 5

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- 14) a) What is data independence ? Explain the types of data independence. 4
b) Explain the database system environment and its components with a neat diagram. 6
- 15) a) Explain various types of attributes with example. 5
b) Explain SELECT and PROJECT operation in relational algebra with example. 5
- 16) a) What is SQL ? Explain DDL commands with an example. 5
b) Explain the aggregate functions in SQL with an example. 5
- 17) a) Explain waterfall model. 5
b) Explain the attributes of a good software. 5
- 18) a) What is a software process ? Explain Incremental process model. 5
b) What is EXTREME programming ? Explain the XP value. 5
- 19) a) What is SRS ? Explain the requirement's engineering process. 6
b) What is a behavioral model ? Mention the steps to create a behavioral model. 4
- 20) a) What is software quality ? Explain the different quality factors. 5
b) Define software testing. Explain the different types of testing. 5
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