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 :　　　(10×2=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 :　　　　　　　　　(5×10=50)

13) a) Explain the characteristics of database approach.　　　　　　　5

　　b) Discuss about various people involved in DBMS.　　　　　　　5

P.T.O.

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

——————