### 61325

# Third Semester B.A./B.Sc. Degree Examinations, August/September 2021

(CBCS Scheme — Freshers — 2016-17 onwards)

### **Computer Science**

# Paper III – DATABASE MANAGEMENT SYSTEM AND SOFTWARE ENGINEERING

Time: 3 Hours] [Max. Marks: 70

Instructions to Candidates: Answer all Sections.

#### SECTION - A

- I. Answer any **TEN** of the following. Each question carries 2 marks:  $(10 \times 2 = 20)$
- 1. What is a Database?
- 2. What are the types of entities?
- 3. Define Primary Key and Foreign Key.
- 4. Write the syntax for CREATE and ALTER commands in SQL.
- 5. What is JOIN in SQL?
- 6. What is TRUNCATE command in SQL? Give example.
- 7. Write any two features of PL/SQL.
- 8. What are software myths?
- 9. What is agile development?
- 10. What is coupling?
- 11. What is meant by Software Design?
- 12. Define DFD. Give an example.

# 61325

## SECTION - B

II.	Ansv	ver any <b>FIVE</b> of the following. Each question carries $10$ marks: $(5 \times 10 =$	50)
13.	(a) (b)	Explain the advantages of DBMS.  Explain three schema architecture.	(5) (5)
14.	(a) (b)	What is data Independence? Explain the types of data Independence.  Define Normalization. Explain 3 NF with example.	(5) (5)
15.	(a) (b)	Define relationship. Explain the types of relationship between entity with example.  Explain the various types of attributes with example.	sets (5) (5)
16.	(a) (b)	Write a note on DML commands with examples.  Write any three relational algebra operations with examples.	(5) (5)
17.	(a) (b)	Explain various aggregate functions in SQL.  Explain the waterfall model with a neat diagram.	(5) (5)
18.	(a) (b)	Write a note on software applications domain.  Explain the software design principles.	(5) (5)
19.	(a) (b)	Explain various types of cohesion.  What is a behavioural model? Mention the steps to create a behaviourdel.	(5) oural (5)
20.	(a) (b)	Define software quality. Explain the different quality factors.  Define software testing. Explain while box testing.	(5) (5)