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## III Semester B.A. B.Sc. Examination, March/April 2022 (CBCS) (F+R) (2015-16 and onwards) COMPUTER SCIENCE – III

## **Database Management System and Software Engineering**

Time: 3 Hours

Max. Marks: 70

## SECTION - A

I. Answer any ten questions. Each question carries 2 marks.

 $(10 \times 2 = 20)$ 

1) Define DBMS. Mention its function.

Instruction: Answer all Sections.

- 2) Define Database Language.
- 3) Define primary and super key.
- 4) What is weak and strong entity?
- 5) What is normalization? Mention its types.
- 6) What is SQL?
- 7) Mention the difference between DELETE and DROP command in SQL.
- 8) What are database triggers?
- 9) Define software engineering.
- 10) Define collaboration.
- 11) What are UML models? Give example.
- 12) What is SRS? Mention its two function.



## SECTION - B

II. Answer any five questions. Each question carries 10 marks.			(5×10=50)
13)		Explain the advantages of DBMS.  Explain three schema architecture.	5 5
14)	a)	Define the following : i) DDL ii) DML iii) DCL.	(2+2+1)
	b)	What is an E-R diagram? Mention its notation's with example.	5
15)	a)	Explain the different types of JOIN statements with example.	5
		Explain any three algebraic operation in SQL.	5
16)	a)	What is data model? Explain network and relational model wit example.	h 5
	b)	Explain the different types of attributes.	5
17)		Write the basic syntax of PL/SQL and give example. What are looping statements in PL/SQL.	5 5
18)	a)	Explain spiral model with its diagram.  Explain Agile development.	5
19)		Explain the various types of Software Testing.  Explain verification and validation.	5
20)	a)	Define the following:	
		a) Coupling.	2
		b) Cohesion. c) Software testing.	2
	h)	_	1
	U)	Write the difference between white box and black box testing.	5