Max. Marks: 70



III Semester B.A./B.Sc. Examination, November/December 2017 (CBCS) (Fresh+Repeater) (2015-16 and Onwards) COMPUTER SCIENCE – III

Database Management System and Software Engineering

Time: 3 Hours

Instruction: Answer all Sections.

SECTION - A

I. Answer any 10 questions. Each question carries 2 marks.

 $(10 \times 2 = 20)$

- 1) Define Database and give example.
- 2) What is Weak Entity?
- 3) Explain data independence.
- 4) What is Normalization?
- 5) Explain ALTER TABLE command with example.
- 6) What is join in SQL? Mention the different types of joins.
- 7) Write any 2 features of PL/SQL.
- 8) Enumerate the characteristics of software.
- 9) List out 4 software myths.
- 10) What are generic products?
- 11) What is agility?
- 12) What is abstraction?

SECTION - B

II. Answer any 5 of the following questions:

 $(5 \times 10 = 50)$

- 13) a) Explain schema, instance and various database states.
 - b) Write a note on database users.

(5+5)

- 14) a) Explain various types of attributes with example.
 - b) Explain any 3 fundamental operation in relational algebra with example. (5+5)



15) a)	What is SQL? Explain DML commands with an example for each	eh.
	b)	Define Relationship. Explain the various types of relationships be entity sets with suitable examples.	etween (5+5)
16) a)	Explain GRANT and REVOKE command with example.	, ,
	b)	Explain briefly the DML commands with suitable example.	(5+5)
17)	a)	Write the basic structure of PL/SQL with example.	
	b)	Explain the various types of operators available in PL/SQL.	(5+5)
18)	a)	Explain coupling and cohesion.	,
	b)	Explain unit testing and integration testing.	(5+5)
19)	a)	What is SRS? Explain the requirements engineering process.	
		Explain SPIRAL model.	(5+5)
20)	a)	Explain verification and validation.	(0.00)
	b)	What is Software Quality? Explain different quality factors.	(5+5)