(For the candidates admitted from 2012–2013 onwards)

B.C.A. DEGREE EXAMINATION, NOVEMBER 2017.

Fourth Semester

RELATIONAL DATABASE MANAGEMENT SYSTEM

Time: Three hours

Maximum: 75 marks

SECTION A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.

All questions carry equal marks.

- 1. Define Database management system.
- 2. What do you mean by weak entity set?
- 3. What are the basic data types used in SQL?
- 4. What is the use of views?
- 5. What are functional dependencies?
- 6. What is Encryption?
- 7. Define constant.

- 8. List the attributes of explicit cursor.
- 9. Write a note on Varray.
- 10. What is a package in PL/SQL?

SECTION B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions.

All questions carry equal marks.

11. (a) Write some applications of database systems.

Or

- (b) Discuss various types of attributes.
- 12. (a) Describe the format definition of tuple relational calculus.

Or

- (b) List and explain set operations.
- 13. (a) Briefly discuss about decomposition.

Or

(b) What are the basic security requirements? Explain.

14. (a) Describe the PL/SQL block structure.

Or

- (b) Explain FOR loop with an example.
- 15. (a) How do you declare a PL/SQL table? Explain with an example.

Or

(b) Write about triggers?

SECTION C'— $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

All questions carry equal marks.

- 16. Write in detail about database users and Administrators.
- 17. Briefly describe aggregate functions.
- 18. What is normalization? Discuss any two in detail.
- 19. Explain about Exceptions.
- 20. Elucidate how are procedures used in PL/SQL.

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