

MGKVP University Question Paper
B.C.A. Examination, 2017
Fifth Semester
First Paper
(Introduction to DBMS)
MGKVPonline.com

Time : Three Hours

Maximum Marks : 75

Note : Attempt any five questions. All questions carry equal marks.

Note: The answers to short questions should not exceed 200 words and the answers to long questions should not exceed 500 words.

1. Discuss the various disadvantages in the file system and explain how it can be overcome by the database system. 15

2. Construct an ER diagram for an employee payroll system. 15

3. Explain : 15

- (i) Inheritance
- (ii) Specialization
- (iii) Generalization

4. Explain how data retrieval, insertion and deletion are done using B- tree and B-tree indices. 15

5. Schema defined for Employee Management System is : $5 \times 3 = 15$

Emp : Emp ID, Name, Add, Dept. Designation, Salary

Dept : Dept ID, Name Head ID

Write SQL Queries:

- (i) Retrieve the details of employee who gets the maximum salary.
- (ii) List names of all employee who earn more than Rs. 1,00,000 in a year.
- (iii) Give the name of employee who heads the department where employee with emp ID 3 works.

6. Explain the 3NF and BCNF with example. 15

7. What are various threats to data security?

Explain how you will enforce security standards for the protection of data in a Data base. 15

8. Write short notes on : $5 \times 3 = 15$

- (i) Database Recovery
- (ii) Concurrency Control
- (iii) Functional Dependencies
