



MS – 578

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**II Semester B.C.A. Examination, May 2016**  
**(Y2K8 Scheme) (Repeaters)**  
**COMPUTER SCIENCE**  
**BCA – 205 : Database Management Systems**  
**(70 Marks – 2011-12 & Onwards**  
**60 Marks – Prior to 2011-12)**

Time : 3 Hours

Max. Marks : 70/60

- Instructions :** 1) *Section A, B, C are common to all. Section D is applicable to 2011-12 batch onwards.*
- 2) *70 marks for students from 2011-12 batch onwards and 60 marks for repeater students prior to 2011-12.*

SECTION – A

Answer **any ten** questions. **Each** question carries **one** mark.

**(10×1=10)**

1. Define database.
2. What is multivalued attribute ?
3. Define spanned record.
4. What is relationship ?
5. Define scheme diagram.
6. Define primary key.
7. What is cursor ?
8. What is hashing ?
9. Write down any two DML commands.
10. Define a tuple.
11. What is trigger ?
12. What is SQL ?

P.T.O.



## SECTION – B

Answer **any five** questions. **Each** question carries **three** marks.

(5×3=15)

13. What is weak entity ? Give an example.
14. What are disadvantages of traditional database ?
15. Write any three responsibilities of DBA.
16. Write a note on buffering of blocks.
17. Explain UPDATE command with an example.
18. Differentiate between centralized and distributed databases.
19. Write a note on database languages.
20. Define the terms :
  - i) Cylinder
  - ii) Sector
  - iii) Track.

## SECTION – C

Answer **any five** questions. **Each** question carries **seven** marks.

(5×7=35)

21. Explain the advantages of DBMS.
22. What is an ER-diagram ? Mention different notations used in ER-diagram.
23. Explain different types of relationships in E-R Data model.
24. Explain three-schema architecture with a neat diagram.
25. Explain 1NF, 2NF and 3NF in brief.
26. Explain ACID properties of a transaction.



27. Write a note on database users.
28. What is a data model ? Explain different data models.

SECTION – D

Answer **any one** question. **Each** question carries **ten** marks.

(1×10=10)

29. a) Write a note on DBMS interfaces.

b) Write any five applications of DBMS.

(5+5)

30. Construct and explain ER-diagram for Company database by taking necessary entities and attributes.

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