

E 2201

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Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, APRIL 2016

Fourth Semester

Vocational Course—Computer Science

DATABASE MANAGEMENT SYSTEMS

(For B.Sc. Mathematics Model II)

[2013 Admission onwards]

Time : Three Hours

Maximum Marks : 80

Part A

Answer all questions.

Each question carries 1 mark.

1. What is an instance ?
2. What is a query ?
3. What is attribute inheritance ?
4. What is meant by domain of an attribute ?
5. What is meant by candidate keys ?
6. What is a Boolean type data ?
7. What is USB ?
8. What is data transfer rate ?
9. What is a query evaluation plan ?
10. What is a global transaction ?

(10 × 1 = 10)

Part B

Answer any eight questions.

Each question carries 2 marks.

11. Explain the purpose of database management system.
12. Give any two subsystems of database management system.
13. Explain composite attributes.
14. List two reasons why null values might be introduced into the database.
15. What is Tuple variables ?
16. Explain outer join operation.

Turn over

17. Explain the distinction between a type x and a reference type $\text{ref}(x)$.
18. What is RAID ?
19. What is dense index ?
20. What is double buffering ?
21. What are the two methods that the pipelines can be executed ?
22. What is LANs ?

(8 × 2 = 16)

Part C

*Answer any **six** questions.
Each question carries 4 marks.*

23. Explain different categories of data models.
24. Explain the major components of E-R model.
25. What is weak entity set ? Explain with an example.
26. Explain Aggregate functions.
27. Explain the rename operation in SQC.
28. Explain Flash memory.
29. Describe the detail indexing database.
30. Explain different types of interconnection networks.
31. Explain different server systems.

(6 × 4 = 24)

Part D

*Answer any **two** questions.
Each question carries 15 marks.*

32. Explain the entity-relationship diagram with an example.
33. Explain modification of database in detail.
34. Explain the structure of a B+ tree.
35. Explain server system architectures.

(2 × 15 = 30)