

Code No. 1534

FACULTY OF SCIENCE
B.Sc. III – Year Examination, March / April 2014

Subject : COMPUTER SCIENCE
Paper – III: Database Management Systems

Time : 3 hours

Max. Marks : 100

Section – A (10 X 2 = 20 Marks)

I Answer all questions.

- | | |
|-----------------------------|-------------------------------|
| (a) Define Index. | (b) What are the data models? |
| (c) What is foreign key? | (d) Explain primary key |
| (e) Explain integrity rule. | (f) Discuss ISA |
| (g) Deadlock | (h) Serializability |
| (i) ROLAP | (j) Star schema |

Section – B (5 X 16 = 80 Marks)

II Answer all questions.

- 2 a) Discuss the problems of file system data management.
b) What is relationship? Discuss the relationships in the relational database.
- OR**
- c) Explain data redundancy problem.
d) What are the components of DBMS?
- 3 a) Discuss generalization and specialization with neat diagrams.
b) Explain in detail 4NF, 5NF.
- OR**
- c) What is entity relationship model? Explain with example.
d) What is entity clustering? Explain the use in the ER diagrams.
- 4 a) What is view? How to create and delete a view? Explain with example.
b) What is data base life cycle? Explain with a diagram the different states of data base life cycle.
- OR**
- c) What is cursor? What are their types explain with examples.
d) With the syntax and example write the important numeric and string functions.
- 5 a) What is transaction? What are their properties?
b) What are the advantages and disadvantages of DDBMS?
- OR**
- c) Discuss in detail database recovery management.
d) Explain the differences between distributed database and client server architecture.
- 6 a) What is data warehouse? Explain its architecture.
b) How does data mining work? Discuss the different phases in data mining process.
- OR**
- c) What is business intelligence? Describe BI framework.
d) Describe DBA's responsibilities.
