2031
M.Sc. (Bio-Informatics) First Semester
MBIN-8006: Introduction to Database System

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt *five* questions in all, including Question No. I which is compulsory and selecting atleast one question from each Unit.

x-x-x

I.   Attempt the following:-

a)   Differentiate between the terms data and information.

b)   What do you understand by a weak entity? Give examples.

c)   How does data administrator differs from database administrator?

d)   Differentiate between DDL and DML statements.

e)   How a view is different from a table? Discuss in brief.

f)   How does the terms SQL and PL/SQL relate with each other?

g)   What do you understand by events in Visual Basic? Give examples.

h)   What do you understand by ODBC? Discuss in brief.   (8x1½)

UNIT – I

II.   a) What are the different components of a DBMS? Discuss their roles.

b) What are the advantages and disadvantages of ER Modeling? Discuss.   (2x6)

III.   a) Draw and explain ER diagrams for a library management system. Appropriately assume any required information yourself.

b) Differentiate between physical and logical data independence. Give examples of each.   (7,5)

UNIT – II

IV.   Explain the syntax of following statements with suitable examples:
CREATE TABLE, INSERT, UPDATE, DELETE, ALTER TABLE, SELECT(12)

V.   a) What is the utility of GRANT and REVOKE statements? Discuss with suitable examples.

b) Write a note on Client Server Technology highlighting its advantages and disadvantages.   (2x6)

P.T.O.

UNIT – III

VI.   a) What is a Cursor? Discuss its utility with the help of an example and by writing suitable PL/SQL code.

b) How functions can be created in Visual Basic? Discuss with the help of an example.   (2x6)

VII.   a) What are the steps involved in connecting to MS-Access using VB? Discuss.

b) What is a Trigger? Discuss its utility with the help of an example and by writing suitable PL/SQL code.   (2x6)

x-x-x