1128

B.E. (Information Technology)
Fifth Semester
ITE-541/571: Database Management Systems

Time allowed: 3 Hours   **Max. Marks: 50**

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

x-x-x

I.   Define the following terms:-

a) Data independence

b) B trees

c) Data models

d) Integrity constraints

e) Weal entity

f) Transaction

g) Numeric functions

h) Project operation

i) Select operation in algebra

j) DDL statements   (10x1)

UNIT – I

II.   a) Discuss the main characteristics of the database approach and specify how it differs from traditional file system.

b) Discuss the concept of data independence.   (6,4)

III. a) Compare the difference between clustered index and dense index

b) Explain the various integrity constraints with example.   (4,6)

IV.   Construct an E-R diagram for a hospital with a *set of* patients and a set of medical doctors. Associate with each patient a log of the various tests and examinations conducted.   (10)

UNIT – II

V.   Explain the concept of cursors and its types with example.   (10)

P.T.O.

VI. Explain the following terms with example:-

a) Functional dependency

b) Multi valued dependency

c) Join dependency   (10)

VII. Discuss how a concept of conflict equivalence leads to the concept of conflict serializability with example.   (10)

x-x-x