SUB: NETWORKING

FULL MARKS : 50 CLASS-BSC HONS TIME : 1 HR 30 MINTS

1. Answer any 10 questions . 2x10=20

a) What is a weak entity? Explain with example?
b) Draw the notation for multivalued attributes? Give one example?
c) Define Entity, Attributes.
d) Explain in detail about nested queries
e) Differentiate the relational algebra and calculus.
f) When can we use group by clause, explain.
g) Design example for Composite Keys?
h) Draw ER diagram for Ternary Relationship set with suitable example?
i) Describe half duplex and full duplex communication.
j) What are the responsibilities of a DBA?
k) Explain the use of bridges.
l) List the features of token bus protocol.
m) Write a note on e-mail.

2. Answer any 3 questions : 10x3=30

a) Explain about integrity constraints over relations? List the advantages of DBMS?
Draw the ER diagram for a company needs to store information about employees (identified by ssn, with salary and phone as attributes), departments (identified by dno, with dname and budget as attributes), and children of employees (with name and age as attributes). Employees work in departments, each department is managed by an employee, a child must be identified uniquely by name when the parent (who is an employee; assume that only one parent works for the company) is known. We are not interested in information about a child once the parent leaves the company **3+2+5**

b) Discuss Data Independence? Discuss about Data Definition language? Discuss How can you alter and destroy tables? Demonstrate how to add a NOT NULL column to a table? Discuss about the operators SELECT, PROJECT, UNION? Define redundancy? **2+2+2+1+2+1**

c) Explain use of modem in transmission. Describe Parallel transmission in details. What are the differences between http and https ? Describe Star topology with neat diagram and advantages and disadvantages. Define bandwidth. **2+2+2+3+1**

d) Explain twisted pair cable with their types. Explain OSI Model briefly . What is ip address ? . Explain the use of bridges. **3+4+ 1+2**