Q.1. A database is being constructed for storing sales information system. A product can be described with a unique product number, product name, selling price, manufacturer name. The product can sale to a particular client and each client have it own unique client number, client name, client addresses, city, pin code, state and total balance to be required to paid. Each client order to buy product from the salesman. In the order, it has unique sales order number, sales order date, client number, salesman number (unique), billed whole payment by the party or not and its delivery date. The salesman have the name, addresses, city, pin code, state, salary of the sales man, delivery date, total quantity ordered, product rate.

Q.2. A student is described by a unique Roll Number, Name Adress, and Semester. Each student enrolls himself in an Academic programme offered by a Department. Academic programmes have programme name(unique), duration, a programme code(unique) and a list of courses (both core and elective course)

while the departments have department code (unique), department name (unique), HoD who is a Teacher and list of courses offered by it. Each teacher is described by employee code (unique), name, department and designation. A student registers some courses in a semester. A course is described by a unique course number, title of the course, credit allotted for the course and offering department. Database stores the grades obtained by different student in different courses registered by him/her in different semesters. Database also stores information about the courses offered by a department in a semester, the corresponding teacher(s) for each course.

Q.3.A bank database keeps record of the details of customers, accounts, loans and transactions such as deposits or withdraws. Customer record should include customer id, customer name, address, age, contact number, email id etc., accounts details involves account number, account type(fixed account, savings account, monthly account etc), date of creation of the account. Transaction detail keeps information about amount deposited or withdrawn to/from a particular account and the date of transaction. The database should also store record of loans which include loan amount, loan date and the account number to which the loan is granted.

**Q.4. Library information system :**

Database should store information about books, journals, megazines etc. Searching for books can be done by author, title, subject. Similarly journals can be searched by subject area, publisher etc. It should also be possible to see which book is issued to which student and belonging department.

**Q.6 Hospital information system:**

Patients - indoor/outdoor, medicines/lab tests(including results) prescribed to patients, information if a patient if referred to other expert/hospital. Doctors - specialization, patients attended etc. Different wards/beds and patients alloted to them etc. Patient registration form should include Registration number, Patient name, Address, Gender, Bed number, date of registration, refer doctor id etc.

Doctor information should include Doctor code, Doctor Name, Specialization etc. Lab test information should include Test name, test number, test date, results and referred doctor’s code. Bed information should include bed number, ward number and status(whether allotted or not).