## **DBMS MAJOR ASSIGNMENT**

(M.Tech, MCA and B.Tech Batch)

Q. Develop a database application with appropriate interfaces for the following problem mentioned against your Roll No. The database and the application must be implemented using ORACLE as back end and JAVA Swing as front end. Make the database in such a way that it fits the real world system as close as possible. You have to prepare a project report based on your work. The project report must contain the following:

- Introduction and Problem Definition
- ER/EER Model
- Relational Model
- Snapshots of Input/ Output Form

## M.Tech Roll Nos and Its Problem No. ::

Roll Nos	Problem No								

## MCA Roll Nos and Its Problem No. ::

Roll Nos	Problem No								

Roll Nos	Problem No	Roll Nos	Problem No	Roll Nos	Problem No

- 1. An information system for a departmental store.
- 2. Extra-curricular activity information system of the students of TU.
- 3. Library information system of Tezpur University.
- 4. Examination Management System of Tezpur University
- 5. A bank database to store information about its customers, accounts(savings a/c, current a/c...), loans(car loan, housing loan, ...), transaction made by customers for each loan(payments)/account(withdrawal, deposit) and so on.
- 7. Payroll system of Tezpur University
- 8. A database is being constructed to keep track of the teams and match results of a football league. A team has a number of players; all may not participate in each match. It is desired to keep track of the players participating in each match for each team, the position they played in the match, and result of the match. Each player is described by their name, address and age. Include additional information if necessary.
- 9. Hospital information system: Patients indoor/outdoor, medicines/lab tests(including results) prescribed to patients, information of a patient if referred to other expert/hospital. Doctors specialization, patients attended etc. Different wards/beds and patients alloted to them etc.
- 10. It is necessary to construct a database to keep track of the passed out students of Tezpur University (Alumni). The students are described by Name, TU registration number, home address, current address, present job and organization, e-mail address. It is desired to keep track of the programme(s) the student completed at TU and the CGPA. It is also necessary to keep track of experiences of the student after leaving TU, which includes organization name, job position and duration.
- 11. A student is described by a unique Roll Number, Name Address, 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 a 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.

- 12. An information system for faculty members of TU. The system stores the personal information like, name, address, date of birth, date of joining etc; academic information like qualifications, publications, area of specialization, conferences/workshops attended, courses taught by him/her, other resposibilities/duties etc.
- 13. Airline Ticket Reservation System
- 14. Tendering System of Tezpur University.