1. A university registrar’s office maintains data about the following entities:

* Courses, including number, title, credits, syllabus, and prerequisites;
* Course offerings, including course number, year, semester, section number, instructor(s), timings, and classroom;
* Students, including student-id, name, and program;
* Instructors, including identification number, name, department, and title.

Further, the enrollment of students in courses and grades awarded to students in each course they are enrolled for must be appropriately modeled.Construct a E-R diagram for registrar’s office. Document all assumptions that you make about the mapping constraints

1. Design an E-R diagram for keeping track of the exploits of your favorite sports team. You should store the matches played, the scores in each match, the players in each match, and individual player statistics for each match. Summary statistics should be modeled as derived attributes.
2. Explain the significance of ER Model for Database design?
3. Enumerate the basic constructs of ER Model.
4. Explain in brief the relational approach to data base structures.
5. What is a relation? What are its characteristics?
6. Explain any three relational operators with example.
7. Explain various relational constraints with example.
8. Explain Relational Algebra. What are the relational algebra operations that can be performed?
9. What are the advantages of Relational Model?