University of Sargodha

BS 3rd Term Examination 2015

Subject: I. T   Paper: Introduction to Database Management (CMP: 210)

Time Allowed: 2:30 Hours   Maximum Marks: 80

Objective Part Compulsory

Q.1.: Attempt all questions each question carry equal marks? (16*2=32)

I. What two conditions must be met before an entity can be classified as a weak entity?
II. What is a strong (or identifying) relationship, and how is it depicted in ERD?
III. Given the business rule "an employee may have many degrees," discuss its effect on attributes, entities, and relationships
IV. What is a composite entity, and when is it used?
V. What is a partial dependency? With what normal form is it associated?
VI. What three data anomalies are likely to be the result of data redundancy? How can such anomalies be eliminated?
VII. Define and discuss the concept of transitive dependency.
VIII. What is a surrogate key, and when should you use one?
IX. Why is a table whose primary key consists of a single attribute automatically in 2NF when it is in 1NF?
X. What is database Authorization?
XI. What is Decomposition?
XII. Write only names of backup strategies?
XIII. Write only names of backup types?
XIV. What is replication?
XV. Brief about Distributed catalogue Management?
XVI. What is tuning Schema?

Subjective: (12*4=48)

Note: Attempt any four questions.

Q.2 How to create view in SQL explain in detail? Also describe the advantages and disadvantages of creating views in SQL.

Q.3. What are the benefits of a hash index table? What is the purpose of clustering of data in a file?

Q.4. List several major advantages of the client/server architecture compared with other computing approaches?

Q.5. What is database security? Explain different methods available to implement security?

Q.6. Describe the advantages and disadvantages of three-tier architectures.

Q.7. List 10 potential benefits of the database approach over conventional file systems.