

Vidya Vikas Mandals
Shree Damodar College of Commerce and Economics, Margao
S.Y.B.C.A SEM III, End Semester Examination, October 2015
DATABASE MANAGEMENT SYSTEMS (BCA-302)

Duration: 2 Hours

Total Marks: 50

- Instructions:**
- 1) All questions are compulsory
 - 2) figures to the right indicate full marks.
 - 3) Write your seat number in the space provided.

Q.1 A) Define the following in one or two sentences

5*1=5 mks

- a) Data abstraction
- b) market basket analysis
- c) database driver
- d) assertion
- e) data mining

B) Select the appropriate answer

5*1=5 mks

1. _____ is the actual content of the database at a particular point in time
 - a) schema
 - b) instance
 - c) view
 - d) trigger
2. _____ is a bottom-up design process that combines a number of entity sets that share the same features into a higher-level entity set.
 - a) cardinality
 - b) Generalization
 - c) specialization
 - d) aggregation
3. _____ enables multiple users to access the database simultaneously without affecting the integrity of the database.
 - a) Multiuser Access Control
 - b) Multiuser Control
 - c) Multiuser Access device
 - d) Multiuser Access Controller
4. _____ are the sophisticated users who write specialized database applications.
 - a) naive
 - b) DBA
 - c) Specialized users
 - d) Application programmers

5. _____ constraints are the possible values to be associated with every attribute.
- a) domain
 - b) logical
 - c) referential
 - d) all of the above

Q.2 Answer the following

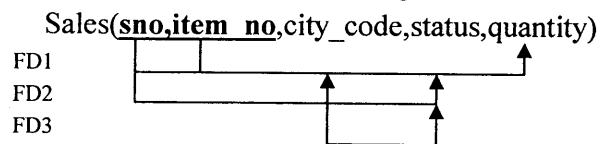
- a) Define ODBC. 2 mks
- b) Compare hierarchical, network and relational data model. 3 mks
- c) Explain the components of a data warehouse in detail. 5 mks

Q.3 Answer the following

- a) What do you understand by Roles in an ER diagram. 2 mks
- b) Explain specialization with an example. 3 mks
- c) Model an E-R diagram for a car rental company. Make assumptions wherever necessary. 5 mks

Q.4 Answer the following

- a) Define normalization. 2 mks
- b) Explain the anomalies in database design. 3 mks
- c) Define DKNF and Decompose the following relation into 3NF. 5 mks



Q.5 Answer the following

- a) Define Locks. 2 mks
- b) Explain the different types of schedules based on recoverability. 3 mks
- c) what is a Mobile database? Explain its characteristics. 5 mks
