

Vidya Vikas Mandal's  
Shree Damodar College of Commerce & Economics, Margao-Goa  
S.Y.B.C.A, SEMESTER III, END SEMESTER EXAMINATION, OCTOBER 2018  
DATABASE MANAGEMENT SYSTEM

Duration: 2 Hours

Max Marks: 50

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**Q 1 A) Define the following:** (5x1= 5 Marks)

- a. Data Isolation
- b. Data Consistency
- c. Database Schema
- d. Data Definition Language
- e. Recoverable schedule

**Q 1 B) Give an example of:** (5x1=5 Marks)

- a. Data Manipulation Operations:
- b. Semi structured data model:
- c. Assertions:
- d. Prediction Mechanism in Data Mining:
- e. Disadvantage of using database:

**Q 2) Answer the following:** (10 Marks)

- a. List any four drawbacks of using file systems to store data. (2)
- b. Discuss briefly the levels of abstraction of a database. (3)
- c. What are the different types of users of a database? With a suitable diagram discuss how they interact with a database. (5)

**Q 3) Answer the following:** (10 Marks)

- a. Define Distributed Transaction. (2)
- b. Discuss ACID properties of transaction. (3)
- c. What is a data warehouse? With a suitable diagram discuss design issues of a data warehouse. (5)

**Q 4) Answer the following:** (10 Marks)

- a. List the advantages of concurrent transactions. (2)
- b. Define Foreign Key. What is the role of Referential Integrity constraints? (3)
- c. Draw an E-R diagram for the Banking Enterprise. Apply appropriate cardinality and indicate the keys of the entity sets in your diagram. (5)

Q 5) Answer the following:

(10 Marks)

- Define Multivalue Dependency. (2)
- Briefly discuss characteristics and data management issues of Multimedia Databases. (3)
- Normalize the following table upto 3NF. (5)

EMP\_DEPT

Ename	<u>Ssn</u>	Bdate	Address	Dnumber	Dname	Mgr_ssn
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