**MSDB03/MTCSE16B3**

**MODEL QUE PAPERS**

**M.TECH**

**IV Semester**

**SPE: (OBJECT ORIENTED SOFTWARE DEVELOPMENT)**

**DATABASE DESIGN DEVELOPMENT AND DEPLOYMENT**

Time: 3 Hours Max. Marks: 75

***INSTRUCTIONS:***

* *Question paper is divided into three groups.*
* *Each group is of 25 marks.*
* *Figure to the right in bracket indicates mark.*
* *Assume suitable data if necessary.*

**GROUP A : Answer any three questions. (Question No. 1 is compulsory)**

Q.1 What is information system? What its purpose? (05)

Q.2 What is derived attributes? Give an example. (10)

Q.3 Explain the following terms (10)

* 1. Candidate key
  2. Composite Primary key
  3. Foreign key
  4. Secondary key

Q.4 Explain all the components of the dynamic HTML environment (10)

Q.5 What is a macro? Explain how to create macros with in the macro group. Give example of java code for each case. (10)

**GROUP B : Answer any three questions. (Question No. 6 is compulsory)**

Q.6 Write about natural and outer join. (05)

Q.7 Explain OLAP system. (10)

Q.8 Explain the following terms: (10)

(i)Buffer management (ii)Virtual memory

Q.9 Explain how the following term differ: fragmentation transparency, replication Transparency and location Transparency. (10)

Q.10 What do you understand by database design? Implement database design in accordance with different phases . (10)

**GROUP C: All Questions are Compulsory.**

**Q.11 Fill in the blanks (Each question carries 2 marks)**

(i) In database level entire \_\_\_\_\_\_\_\_\_\_ is locked.

(ii) Database mostly focus on \_\_\_\_\_\_\_\_.

(iii) A \_\_\_\_\_\_\_\_\_\_\_ is an instruction that triggers one or more actions.

(iv) Two approaches to the designs of conceptual schema are\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_.

(v) The key idea behind the shadow –paging technique is to maintain two page tables during the life of a transaction : the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_.

**Q.12 Multiple choice question. (Each question carries 2 marks)**

(i) DAO is an object oriented API used to access \_\_\_\_\_\_\_\_\_\_.

(a) MS Access

(b) MS visual basic

(c) MS word

(d) MS excel.

(ii) ROLAP uses \_\_\_\_\_\_\_\_\_\_.

(a) Star schema

(b) Data cubes

(c) Client

(b) Server

(iii) **\_\_\_\_\_\_\_\_\_\_\_\_\_** is used for Query insertion, deletion & updation of data/information stored in the database.

1. DDL
2. DML
3. DCL
4. None of the above

(iv) An entity set that does have a primary key is called a \_\_\_\_\_\_\_\_ entity set.

* 1. Weak
  2. Strong
  3. Medium
  4. None of the above

(v) \_\_\_\_\_\_\_\_\_\_ Join is a join operation that connects relations when

values from specified columns have specified relationships.

(a) Theta

(b) Outer

(c) Equi

(d) None of the above

**Q.13 True or false (Each question carries 1 marks)**

(i) One to one relationship is a data model.

(ii) Granularity refers to represent values.

(iii) The lowest implement able normal form is labeled 2NF,for second normal form.

(iv) The purpose of degree to consistency is to avoid cascading, abort without necessarily insuring serializablity .

(v) A Microsoft Access database administrator retains full permissions on a secure database Used by a workgroup.

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