4th Sem. / Comp./IT/CNC/CAD/CAM

Subject : DATABASE MANAGEMENT SYSTEM /RDBMS

Time : 3 Hrs.   M.M. : 100

SECTION-A

Note: Objective type questions. All questions are compulsory.   (10x1=10)

(Course Outcome/CO)

Q.1   What is database?.   (CO-1)

Q.2   Tool developers are _____.   (CO-1)

Q.3   The three levels of DBMS architecture are _____.   (CO-2)

Q.4   What do you mean by data model?   (CO-3)

Q.5   Create table and create view are _____.(CO-7)

Q.6   The number of tuples in a relation is called _____.   (CO-4)

Q.7   The constraints imposed due to existance of foreign keys are called _____.   (CO-4)

Q.8   If every constraints on the relation is a logical consequences of the definition of keys and domains then the relation is in _____. (CO-5)

Q.9   DCL Stands for_____.   (CO-7)

Q.10 UPDATE is a command of_____.   (CO-7)

SECTION-B

Note: Very Short answer type questions. Attempt any ten questions out of twelve questions. 10x2=20

Q.11 What do you mean by sophisticated users.   (CO-1)

Q.12 What is conventional file system?   (CO-1)

Q.13 What do you mean by DBMS?   (CO-2)

Q.14 What is the role of Application programmers.   (CO-1)

Q.15 What do you mean by Entity?   (CO-3)

Q.16 What is super key?   (CO-4)

Q.17 Differentiate between Relation and domain.   (CO-4)

Q.18 What do you mean by functional Dependencies?   (CO-5)

Q.19 What are the benefits of Normalization? (CO-5)

Q.20 Write syntax of GRANT Command.   (CO-7)

Q.21 Write the syntax of two Aggregate function.   (CO-7)

Q.22 What do you mean by Mapping constraints?   (CO-4)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions.   8x5=40

Q.23 Define DBS. Explain various characteristics and applications of DBS in detail.   (CO-1)

Q.24 write short note on following.

(a) Naive user   (b) Data Base Designing

(c) Specialized user   (CO-1)

Q.25 What do you understand by DBMS architecture? How it is related to three levels of data abstraction?.   (CO-2)

Q.26 What do you mean by ER model? Explain various components of E-R model in detail.   (CO-3)

Q.27 What are mapping constraints? Explain various types of mapping constraints with example.   (CO-4)

Q.28 What do you mean by Data Base Animalies? Explain updation, delete and Insertion anomalise with example.   (CO-5)

Q.29 What do you mean by Normalization? Explain various types of Normal Forms.   (CO-5)

Q.30 Explain different DCL Commands with syntax in SQL.   (CO-7)

Q.31 Write short note on following:

(a) Data Base Access

(b) Data Base Security.   (CO-6)

Q.32 (i) Differentiate between super key and Foreign key.   (CO-4)

(ii) Differentiate between DBMS and RDBMS?   (CO-4)

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SECTION-D

Note: Long answer type questions. Attempt any three questions out of four question.   3x10=30

Q.33 (i) Write short note on Data Base controllers.   (CO-1)

(ii) What do you mean by DBMS ? Explain advantage & disadvantages of DBMS?   (CO-1)

Q.34 Write short note on following.

(I) Keys   (ii) RDBMS

(II) Integrity Rules (iv) Relational Constraints   (CO-4)

Q.35 What are the three elements of SQL? Explain various DDL commands with syntax.   (CO-7)

Q.36 (I) Define Associations. Explain the types of Associations with example.

(ii) Differentiate between Trivial and Non - trivial functional dependencies.   (CO-5)

(**Note:** Course outcome/CO is for office use only)

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Sem. - 4th
Branch : Computer Engineering
Subject : Database Mgmt. Sys./RDBMS

Time : 3 Hrs.   M.M. : 100

SECTION-A

Note: Multiple Choice Questions. All questions are Compulsory.   (10x1=10)

Q.1   Database is a   (CO-1)
a. Operating system   b. Windows XP
c. Software Package   d. None of these

Q.2   DBMS stands for?   (CO-2)
a. Data base management security
b. Data base mechanical storage
c. Data base management system
d. Database manufacture system

Q.3   ____ collection of data files?   (CO-1)
a. File   b. Database
c. Fields   d. None of these

Q.4   The DBA function includes :   (CO-8)
a. Application Programming
b. Computer Orientation Management.
c. Database Access Planning
d. All of the Above

Q.5   To give permissions to access the Data Base ___ command is used   (CO-7)
a. Revoke   b. Permit
c. Grant   d. None of the Above

Q.6   which of the following will help to maintain a unique record in the table?   (CO-3)
a. Foreign Key   b. Primary Key
c. Composite Key   d. Alternate Key

Q.7   ____ command is used to create a table   (CO-8)
a. ALTER   b. CREATE
c. DESIGN   d. NEW

Q.8   Which of these is not a valid category of SQL commands?   (CO-8)
a. ALTER   b. CREATE
c. DESIGN   d. NEW

Q.9   Which one of the following attribute can be taken as a primary key?   (CO-4)
a. Name   b. Street
c. ID   d. Department

Q.10   4NF Stands for   (CO-5)
a. Forth Normal Fil   b. Fourth Normal Form
c. Forth Normal Fraction   d. Fourth Negative File

SECTION-B

Note: Objective type Questions. All Questions are compulsory.   (10x1=10)

Q.11   "One can define any number of Primary Keys in a Relation." This statement. is True or False.   (CO-3)

Q.12 Give two examples of RDBMS. (CO-4)

Q.13 What do you mean by Cardinality? (CO-2)

Q.14 Define Metadata. (CO-1)

Q.15 The person who designs and creates the conceptual scheme of the database is known as _____ (CO-1)

Q.16 Define attributes. (CO-5)

Q.17 What does SQL stands for? (CO-8)

Q.18 Name any two SQL DCL commands. (CO-8)

Q.19 Define Database. (CO-1)

Q.20 Name any two types of DBMS Users. (CO-2)

SECTION-C

Note: Short Answer type Question. Attempt any twelve questions out of fifteen Questions. (12x5=60)

Q.21 Write five disadvantages of conventional file system. (CO-1)

Q.22 Who is DBA? Write various roles of DBA. (CO-2)

Q.23 What are ER diagrams? Write various symbols used in it. Explain briefly with example. (CO-4)

Q.24 What is Data Independence? Give five differences between Logical data independence and Physical data independence. (CO-3)

Q.25 Define an attribute. Explain various types of attributes with example. (CO-4)

Q.26 What is SQL? How DDL and DML and different? (CO8)

Q.27 Write down the syntax with example of following commands: insert, update, Alter, Delete. (CO-8)

Q.28 What are the problems associated with traditional file processing system? How are they removed in database system? (CO-2)

Q.29 What do you mean by relationship amount entities? (CO-5)

Q.30 What are various characteristics of DBMS? (CO-2)

Q.31 How data base designer is different from DBMS system designer? (CO-1)

Q.32 Define Database Security. Why it is required? (CO7)

Q.33 What is Normalization?" Explain 2NF. (CO-5)

Q.34 Explain Primary Key. Why primary key is important in Databases? (CO-8)

Q.35 Explain various forms of Select Command by using suitable examples. (CO-7)

SECTION-D

Note: Long Answer Type Questions. Attempt any Two Questions out of three Questions . (2x10=20)

Q.36 Create two tables with four fields in each table. Give the usage of foreign key and primary key by assigning various keys in each table. (CO-3)

Q.37 How can we protect our Data Base? Give the syntax and examples of Grant & Revoke Commands. (CO7)

Q.38 Explain the three levels of architecture of DBMS with labeled diagram. (CO-2)

Note : Course Outcome (CO) mentioned in the question paper is for official purpose only.

4th Sem. / Comp. Engg.

Subject : Database Management System / RDBMS

Time : 3 Hrs.   M.M. : 100

SECTION-A

Note: Objective type questions. All questions are compulsory   (10x1=10)

(Course Outcome/CO)

Q.1   Define Data.   (CO-1)

Q.2   Write the full form of DBMS   (CO-1)

Q.3   How many levels of DBMS architecture are there?   (CO-2)

Q.4   DDL stands for _____.   (CO-7)

Q.5   Define Entity.   (CO-3)

Q.6   Number of attributes in a table is called _____. (Degree/Cardinality)   (CO-4)

Q.7   Which key defines the tuple uniquely?   (CO-3)

Q.8   SQL stands for _____.   (CO-7)

Q.9   _____ command is used to modify a record in the table.   (CO-7)

Q.10 BCNF stands for _____.   (CO-5)

SECTION-B

Note: Very Short answer type questions. Attempt any ten parts   10x2=20

Q.11 Define Database.   (CO-1)

Q.12 Define Data Independence.   (CO-2)

Q.13 List two advantages of Database approach.   (CO-1)

Q.14 Describe the term Naive user.   (CO-1)

Q.15 Define Subschema.   (CO-4)

Q.16 State foreign key.   (CO-3)

Q.17 Describe Relation?   (CO-4)

Q.18 Describe the term Trivial Dependency.   (CO-5)

Q.19 Define Denormalization. (CO-5)

Q.20 Name two DML Commands. (CO-7)

Q.21 Give the syntax of Delete Command. (CO-7)

Q.22 Name two Aggregate functions. (CO-7)

Q.29 Why we need normalization? (CO-5)

Q.30 Write short note on Database Security. (CO-6)

Q.31 Explain different DDL Commands. (CO-7)

Q.32 Define Join. Explain its types. (CO-4)

SECTION-C

Note: Short answer type questions. Attempt any eight questions. 8x5=40

Q.23 Give five characteristics of Database systems. (CO-1)

Q.24 Differentiate between conventional File system and Database system (CO-1)

Q.25 Write short note on DBMS architecture. (CO-2)

Q.26 Explain E-R Model. (CO-3)

Q.27 Write short note on Integrity Rules. (CO-3)

Q.28 Differentiate between Functional and Fully functional dependencies. (CO-5)

SECTION-D

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.33 Explain DBMS Users. (CO-1)

Q.34 Explain different types of keys with example. (CO-3)

Q.35 Define Normalization. What are different normal forms. Explain. (CO-5)

Q.36 Explain various DML commands. (CO-7)

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4th Sem.

Subject : Data Base Mgmt. System / RDBMS

Time : 3 Hrs.   M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any

15 parts.   (15x2=30)

Q.1 a)   Write two advantages of database.

b)   What is conventional file system.

c)   What is file. Give example.

d)   What is record. Give example.

e)   What is data base system.

f)   Define foreign key with example.

g)   What is E-R model.

h)   Define domain with example.

i)   What is centralized data model.

j)   What is the use of avg () Sum ().

k)   Where group by clause is used.

l)   What is the use fo NULL in data base.

m)   What is the role of DBA.

n)   What is DDL & DML.

o)   Write the syntax of INSERT command.

p)   Write the syntax of DROP command.

q)   What is the relationship among entities.

r)   Write any two conditional expression.

SECTION-B

Note: Short answer type questions. Attempt any ten

parts   10x4=40

Q.2 i)   Define & Discuss history of data base
system.

ii)   Discuss conventional file system.

iii)   Discuss file, record, data, information
retrieval.

iv) Discuss DBMS designers & implementors.

v) Discuss schemas, sub schemes instances, database state of data models.

vi) Explain mapping in detail of DBMS architectures.

vii) Explain concept of centralized and client/server architectures for DBMS.

viii) Explain data independance.

ix) Explain relationship among entities in E-R model.

x) Write syntax of insert command with example.

xi) Write syntax of alter command with example.

xii) What is DML. Explain with commands.

xiii) Explain domain, attributes tuples and keys.

xiv) Write select clause with various clause.

xv) Explain the cordiality keys and relations.

SECTION-C

Note: Long answer type questions. Attempt any three questions.   3x10=30

Q.3   Explain

(a) Database systems

(b) Conventional file system

(c) Concept of files, record, data

Q.4   Explain actors on the scene, workers behind the scene, end user and application programmers, data base designers. system analyst in detail with example.

Q.5   Explain three-level of architecture with mapping.

Q.6   Explain E-R model classification, entity type, key attributes and domain of attributes.

Q.7   Explain structured query language with various commands and corresponding example.

4th Sem. / Comp. Engg.

Subject : Data Base Management System/ RDBMS

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SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts.   (15x2=30)

Q.1 a) Define Database.

b) Define Record.

c) Define Degree.

d) Define foreign key.

e) Define SQL.

f) Define File.

g) Define Mapping.

h) Define DML.

i) Write various data models.

j) What is query processor?

k) What is E-R model?

l) Define Entity.

m) Define Relational Model.

n) Define Primary key.

o) Define Relation.

p) Define Tuple.

q) Define PL/SQL.

r) What is schema?

SECTION-B

Note: Short answer type questions. Attempt any ten parts   10x4=40

Q.2 i) Compare between conventional system and database system.

ii) Explain structure of DBMS.

iii) Explain various DBMS languages.

iv) Explain database language.

v) Explain various types of Entities.

vi) Explain various notations used in ER diagram.

vii) Explain various key attributes.

viii) Explain data independence.

ix) Explain various relational constraints.

x) What are advantages and disadvantages of relational modal.

xi) Explain any two command of SQL-DDL.

xii) Explain any two command in DML.

xiii) Explain use of conditional expression in select command with example.

xiv) Explain relational model concept with object and fields.

xv) Define in following :-

(a) Attribute.

(b) Relation.

(c) Tuple.

(d) Null.

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.3 Explain data bases administrator, data base designer, End user system analyst and app^n programmer.

Q.4 Explain DBMS architecture with three levels.

Q.5 Explain E-R model in detail.

Q.6 Explain relational model with constraints and keys.

Q.7 Explain DDL, DML, DCL in SQL with example.