

**COPYRIGHT RESERVED BCA (Sem-IV) – Database**

**Management System (403) Core-X**

**2022**

*Time : 3 hours*

*Full Marks : 70*

*Candidates are required to give their answers  
in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Answer all sections as directed.*

**Section-A**

(10)

**Objective type Questions**

1. Choose the correct alternative for each of the following questions :  $2 \times 10 = 20$

(a) Which type of data can be stored in the

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(1)  
41+25+16

(Turn over)

database ?

- (i) Image Oriented data
  - (ii) Text files containing data
  - (iii) Data in the form of audio and video
  - (iv) All of the above
- (b) Which of the following is not a type of database ?
- (i) Hierarchical
  - (ii) Network
  - (iii) Distributed
  - (iv) Decentralized
- (c) What is information about data called ?
- (i) Hyper data
  - (ii) Tera data
  - (iii) Meta data
  - (iv) Relation.

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(2)

Contd.

(d) \_\_\_\_\_ is a set of one or more attributes taken collectively to uniquely identify a record.

- (i) Primary key
- (ii) Foreign key
- (iii) Super Key
- (iv) Candidate key

(e) Which command is used to remove a relation from an SQL ?

- (i) Drop table
- (ii) Delete
- (iii) Purge
- (iv) Remove

(f) Which form have a relation that contains information about single entity?

- (i) 4 NF
- (ii) 2 NF

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(3)

(Turn over)



- ~~(b)~~ 5 NF  
~~(c)~~ 3 NF
- (g) Which one of the following is used to define the structure of the relation, deleting relation and relating schemas ?

- (i) DML  
 (ii) DDL  
(iii) Query  
(iv) Relational Schemas

- (h) Create table employee (name Varchar, id int) what type of Statement is this ?

- (i) DML  
 (ii) DDL  
(iii) View  
(iv) Integrity Constraint

- (i) The \_\_\_ clause allow us to select only those rows in the result relation of the

\_\_\_ clause that satisfy a Specified predicate.

- (i) where, from  
 (ii) from, select  
 (iii) select, from  
(iv) from, where

- (j) Select \* from employee where salary>1000 and dept\_id=101; Which of the following field are displayed as output ?

- (i) Salary, dept\_id  
(ii) Employee  
(iii) Salary  
 (iv) All the fields of employee relation

### Section-B

Short Answer type Questions



Answer any four questions of the following :

4×5=20

2. Explain the three levels of architecture of Database Management System.
3. Define E-R model with example? 2
4. Differentiate between Normalization and de-normalization. 2
5. What is a Constraint ? Name some constraints.
6. Define a function in SQL? How many types of functions are there.
7. Differentiate between DBMS and File management System. 2
8. What do you understand by Client Server architecture of My SQL. 1

### Section-C

Long Answer type Questions

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(6)

Contd.

Answer any two questions of the following :

15×2=30

9. Write SQL command for the following on the basis of given table CLUB.

Coach_id	Coach nama	Age	Sports	Date of app	Pay	Sex
1	Kukreja	35	Karate	27.03.1996	1000	M
2	Ravina	34	Karate	20.01.1998	1200	F
3	Karan	34	Squash	19.02.1998	2000	M
4	Tarun	33	Basketball	1.01.1998	1500	M
5	Zubin	36	Swimming	12.01.1998	750	M

- (a) To Show all information about the Swimming coaches in the club.
- (b) To list name of all coaches with their date of appointmen in descending orders
- (c) To display a report showing coachname, pay, age and bonus (15% of Pay) for all coaches

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(7)

(Turn over)

ePlus



(d) Insert the value in the table (11, Archana

35, Swimming, 19-03-1997, 1800, F)

10. What is Normalization? Briefly discuss its type. 10-12

11. Write short notes on :

(a) Constraints 2

(b) Foreign key 3

(c) DML 3

12. What do you mean by Operator? What are

the different types of operators in SQL.

(a) To show all information about the

Swimming coaches in the club.

(b) To list name of all coaches with their date

of appointment in descending order.

(c) To display a report showing coach name,

pay, age and bonus (15% of pay) for all