

Post Graduate Diploma in Management (Hospital & Health Management)

PGDM – 2023-25 Batch

2nd Year – 3rd Semester End Examination

Subject & Code	: Health Data and Database Management-HIT 705	Reg. No.:
Semester & Batch	: III, 2023-25	Date : 14-10-2024
Time & Duration	: 10:30 A.M.-01:30 P.M. (3 Hrs.)	Max. Marks : 70

Instructions:

- Budget your time as per the marks given for each question and write your answer accordingly.
 - Don't write anything on the Question Paper except writing your Registration No.
 - Mobile Phones are not allowed even for computations.
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Part A: Q.1 to Q.10 all questions are compulsory (10 X 2 Marks = 20 Marks)
One liner, MCQs, True/False

1. Data redundancy means
 - a. Some information is stored more than one time in the database.
 - b. The data are incorrect and must be re-entered in the database.
 - c. The data are in a RDBMS.
 - d. Large objects stored in an OODBMS.
2. Database Administration includes
 - a. Implement and maintain database security
 - b. Setup and maintain documentation and standards.
 - c. Establish and maintain sound backup and recovery policies and procedures.
 - d. All of the above
3. DBAs are expected to know how to tune a database and monitor its performance.
 - a. True
 - b. False
4. _____ is defined as the representation of facts as text, numbers, graphics, images, sound or video.
 - a. Data
 - b. Information
 - c. Knowledge
 - d. Characters

5. The _____ model follows formal database design rules documenting the comprehensive business information requirements in a consistent and accurate format.
- Conceptual Model
 - Logical Model
 - Physical Model
 - Procedural Model
6. The Entity Relationship (ER) Model shows:
- Information to be collected (entity)
 - The relationship of entities with other entities
 - Attributes of the entities
 - All of the above
7. When you create a table, you should have one field where no duplicate data is permitted. This field is called the:
- Primary Key
 - Principle Key
 - Foreign Key
 - Replacement Key
8. Data Manipulation Language (DML) is used to
- Define data structures like tables and columns
 - Provide administrators flexibility to set and remove user permissions
 - Modify, query or remove data from a database
 - Access data when SQL is not available
9. SELECT fname
- FROM employees
- WHERE fname = '%ob'
- will return what kind of results?
- No results
 - All employees with first name containing the letters 'ob'
 - All employees named 'ob'
 - All employees with first name ending in 'ob'
10. The following code is an example of _____:
- ```
SELECT a.FName, b.LName FROM Employee a INNER JOIN Customer b ON a.CustomerID=b.CustomerID
```
- All data in "a" along with any matching data in "b"
  - Only data in common between "a" and "b"
  - All data in "b" and any matching data in "a"
  - All data in "a" and all data in "b"

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**Part B: Q.11 to Q.15 attempt any four questions (4 X 5 Marks = 20 Marks)**

**Short Notes**

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11. Define and describe the purpose of databases
12. Why is reducing data redundancy important? Why could it be critical in a healthcare environment?
13. Write a short note on (a) Database User (b) Role of Database Administration
14. Here is a portion of your notes taken while interviewing staff in a hospital:
  - a. Patients are assigned to a ward, and are treated by doctors.
  - b. Wards contain beds occupied by patients.
  - c. Nurses work in a ward, where they attend to patients.
  - d. Patients consume medications dispensed by nurses.

Construct an E-R diagram

15. Construct an E-R diagram for a car-insurance company whose customers own one or more cars each. Each car has associated with it zero to any number of recorded accidents.

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**Part C: Q.16 to Q.20 attempt any three questions (3 X 10 Marks = 30 Marks)**

**Long Notes**

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16. Consider the database

message (message\_id, subject, body)

sent\_to(message\_id, email, senddate)

customer (email, name, family\_size, address)

- A. Find the names and emails of all customers who have sent the message with subject “Happy New Year”
- B. Find the names and common addresses of all pairs of customers who claim to have a family size 2 and have the same address.

17. Consider the following relational schema:

Doctor (DName, Reg\_no) Patient (Pname, Disease) Assigned To (Pname, Dname)

Write a SQL Query for following

**[You can make assumptions if needed]**

- a) Get the names of patients who are assigned to more than one doctor.
- b) Get the names of doctors who are treating patients with 'Polio'
- (c) rename the column Disease
- (d) Insert five records
- (e) change name of disease “ Polio” to “ TB”

18. Write SQL statements (Query) for following tables:

doctor(id, name, age, city, deptcode)

department (deptcode, deptname)

lab( labid, labname, amount,deptcode)

1. Retrieve doctor details whose deptcode is 5.
- 2 Add new deptname in department table.
3. Display doctor information whose deptname is opd
4. Change age of doctor to 60 whose id is 3.
5. Delete doctor details whose age is 55.
6. retrieve the doctor details

19. Explain Outer Joins, Inner Join and left and full join operations with example

20. The Kasturba Rural Health Centre (KRHC) is located in the Wardha dist. of Maharashtra. KRHC has implemented education intervention program on personal hygiene for Adolescent Girls. For implementing this program targeted participant were girls who where medical students, nursing students, interns, schools children and Adolescent Girls not continuing education (Home Base).

The Intervention was providing Health Awareness Education. The intervention was carried out using flip chart & flip books. The implementer were outreach workers, VHW, AWW, health worker (ANM, Doctor), Block program officers, SHG (Self Health Group), Female PRA members.

The process was documented using training reports, published documents, flipbooks, daily diary of outreach worker, daily diary of health workers, poster.

The process of their interventions were need assessment, development of educational material, mobilization of local capacity, capacity building of staff, implementation of health education and assessment of behavior changes.

During this intervention the following details were collected from target participant, name, age, education, height, weight, attainment (date) of menstrual cycle, practice of using sanitary napkins, hand washing behaviors.

**Draw ER diagram for above intervention program**