

“Shri Swami Vivekanand Shikshan Sanstha , Kolhapur”

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**B.Sc.I (Sem-I) Question Bank**

**DBMS**

**Q1 MCQ questions (10 Questions for 1 Mark each)**

Q1)The term "Data" refers to:

A)The electronic representation of the information( or data)

B) Basic information

C) Row Facts and figures

D)Both A and C

Q2) which of the following is at the highest level in the hierarchy of data organization?

A)Database B) Data bank C) Data file D) Data record

Q3) Which of the following is at the highest level in the hierarchy of data organization?

A) Conceptual Level

B) Physical Level

c) File Level

D) Logical Level

Q4) A file consists of

A)Fields and records B) Records and sorts C) Fields and sorts D) Databases and fields

Q5) Which of the following file extensions is not compatible with Open Office Writer?

A). txt B) .doc C) .sxw D) .csv

Q6) Rows of a relation are known as the \_\_\_\_\_.

A) Degree B) Tuples C) Entity D) All of the above

Q7) Which of the following refers to the number of tuples in a relation?

A)Entity B) Column C) Cardinality D) None of the above

Q8) In a relation database, every tuples divided into the fields are known as the\_\_\_\_\_.

A) Queries B) Domains C) Relations D) All of the above

Q9) In the relational table, which of the following can also be represented by the term "attribute"?

A)Entity B) Row C) ColumnD) Both B &C

Q10) Which of the following refers to the number of attributes in a relation?

A) Degree B)Row C) Column D) All of the above

Q11) External database is

A) Database created using DBMS package

B) Database created in MS-Word

C) Database created in EXCEL

D) All of the above

Q12) In a large DBMS

A) Each user can access every sub schema

B) Each sub schema contains every field in the logical schema

c) Each user can "see" only a small part of the entire database

D) all of these

Q13) A network schema

A) Stores data in tables

B) restricts the structure to a one-to-many relationship

C) Permits many-to-many relationships

D) None of these

Q14) which of the following refers collection of the information stored in a database at a specific time?

A) Independence B) Instance of the database C) Schema D) Data domain

Q15) which one of the following refers to the total view of the database content?

A) Conceptual view B) Physical view C) Internal view D) External view

Q16) the architecture of a database can be viewed as the \_\_\_\_\_

A) One level B) Two-level C) Three-level D) Four level

Q17) in the relation model, the relation are generally termed as \_\_\_\_\_

A) Tuples B) Attributes C) Rows D) Tables

Q18) which of the following levels is considered as the level closed to the end-users?

A) Internal Level B) External Level C) Conceptual Level D) Physical Level

Q19) which one of the following is commonly used to define the overall design of the database?

A) Application program B) Data definition language C) Schema

Q20) to which of the following the term "DBA" referred?

A) Data Bank Administrator B) Database Administrator C) Data Administrator

D) None of the above

Q21) what do you mean by one to many relationships?

A) One class may have many teachers B) One teacher can have many classes C) Many classes may have many teachers

D) Many teachers may have many classes

Q22) what do you mean by one to many relationships?

A) One class may have many teachers B) One teacher can have many classes

C) Many classes may have many teachers D) Many teachers may have many classes

Q23) A huge collection of the information or data accumulated form several different sources is known as \_\_\_\_\_:

A) Data Management B) Data Mining C) Data Warehouse

D) Both B and C

Q24) which one of the following refers to the "data about data"?

A) Directory B) Sub Data C) Warehouse D) Meta Data

Q25) A collection of interrelated records is called a

A) Database B) Spreadsheet C) Management information system D) Text file

Q26) **What are a database management system?**

- (a) Allows simultaneous access to multiple files
- (b) Can do more than one record management system
- (c) A file contains a collection of programs for managing data
- (d) Both (a) and (b)

Q27) **Which of the following is a Data Model?**

- (a) Entity Relationship model
- (b) Relational data model
- (c) Object Based data model
- (d) All

Q28) **In hierarchical model, data is organized** \_\_\_\_\_

- (a) Logical structure
- (b) Physical structure
- (c) Tree like structure
- (d) None of these

Q29) **What does 'Double Rectangles' show in the Entity-Relationship diagram?**

- (a) Relationship Set
- (b) Weak Entity Sets
- (c) Derived Attributes
- (d) Multi-valued Attributes

Q30) **7. Database Management System (DBMS) is:**

- (a) Collection of interrelated data
- (b) Collection of programs to access data
- (c) Collection of data describing one particular enterprise
- (d) All of the above

Q31) **What is the name given to database management system which is capable of handling full text data, image data, audio and video?**

- (a) Full media
- (b) Graphics media
- (c) Multimedia
- (d) Hypertext

**Q32) Relational model uses some unfamiliar terminology. One tuple is equal to**

\_\_\_\_\_

- (a) record
- (b) field
- (c) file
- (d) data base

**Q33) 11. Files stored on the secondary storage device are made up of hierarchy of data. Which of the following happens in a file record?**

- (a) Bits
- (b) Characters
- (c) Data field
- (d) Schema

**Q34) After your record, which command you need to issue to save the changes you have made for many data management environments.**

- (a) Delete
- (b) Update
- (c) Sort key
- (d) Index

**Q35) The third stage in creating a database is when we analyze our database more closely and create a \_\_\_\_\_ between the tables.**

- (a) Relationship
- (b) Join
- (c) Query
- (d) None of these

**Q36) Which of the following is a type of DBMS software?**

- (a) Utility
- (b) Data
- (c) MS Office
- (d) MySQL

**Q37) What is the language most DBMS uses to help its users access data?**

- (a) High level language
- (b) Query language
- (c) SQL
- (d) 4GL

**Q38) What features of data management are included in the data management features\_\_\_\_\_**

- (a) punctuation
- (b) language
- (c) spelling
- (d) width

**Q39) The top-to-bottom relationship between objects in the database is established by\_\_\_\_\_**

- (a) Hierarchical schema
- (b) Network schema
- (c) Relational schema
- (d) All of the above

**Q40) A collection of conceptual tools for describing data, relationships, semantics and constraints is referred to as?**

- (a) E R mode
- (b) Database
- (c) Data model
- (d) DBMS

**Q41) What is the overall term for creating, editing, formatting, storing, retrieving a text document?**

- (a) Word processing
- (b) Spreadsheet design
- (c) Web design
- (d) Database management

**Q42) ..... are distinct items that don't have much meaning to you in a given context.**

- (a) Fields
- (b) Data
- (c) Queries
- (d) Properties

**Q43) A logical schema\_\_\_\_\_**

- (a) is the entire database.
- (b) is a standard way of organizing information into the accessible part.
- (c) describes how data is actually stored on disk
- (d) All of the above

**Q44) Which of the following constrains information about a single 'entity' in the database like a person, place, event or thing?**

- (a) Query
- (b) Form
- (c) Record
- (d) Table

**Q45) The database stores information in?**

- (a) rows and columns
- (b) blocks
- (c) tracks and sectors
- (d) All of the above

**Q46) The particular field of a record that uniquely identifies each record is called the \_\_\_\_\_**

- (a) key field
- (b) primary field
- (c) master field
- (d) order field

**Q47) The smallest unit of information about a record in a database is called a?**

- (a) cell
- (b) field
- (c) record
- (d) query

**Q48) A program that generally has more user-friendly interface than a DBMS is called a?**

- (a) front end
- (b) repository
- (c) back end
- (d) form

**Q49) The database administrator's function in an organization is \_\_\_\_\_**

- (a) to be responsible for the technical aspects of managing the information contained in organizational databases.
- (b) to be responsible for the executive level aspects of decision regarding the information management.
- (c) to show the relationship among entity classes in a data warehouse.
- (d) to define which data mining tools must be used to extract data.

**Q50) A report generator is used in \_\_\_\_\_**

- (a) update files
- (b) Print files on paper
- (c) data entry
- (d) All of the above

**Q3) Broad questions (10Marks each)**

Q1) Explain structure of DBMS?

Q2) Explain architecture of DBMS?

Q3) Explain USERS of DBMS?

Q4) Explain relationship types with example in DBMS?

Q5) Explain DBMS Architecture?

Q6) Explain domain constraints with example?

Q7) Explain Integrity constraints with example?

Q8) Explain physical and logical data Independence?

Q9) Explain Object modeling in detail?

Q10) Explain characteristics database Approach?

Q3) Short questions (05Marks each)

Q1) Explain Schema in database with example?

Q2) Explain Subschema In database with example?

Q3) Explain Entity and Entity set with Example?

Q4) Explain Domain with drawing Table?



- Q5) Explain Hierarchical Model?
- Q6) Explain Network Model?
- Q7) Explain Relational Model?
- Q8) Explain Database Schema with Example?
- Q9) Explain Instances in databases?
- Q10) Explain Physical Schema with Example?
- Q11) Explain Logical schema With Example?
- Q12) Explain three schema Architecture in DBMS?
- Q13) Explain Entity and its Components?
- Q14) Explain relationship types in DBMS?
- Q15) Explain Query Engine in DBMS architecture?
- Q16) Explain need of DBMS?
- Q17) Explain Features of DBMS?
- Q18) Explain cardinality and its types?
- Q19) Difference between data and Information
- Q20) Explain Features of DBMS?





Q2) The method of file organization in which data records in a file are arranged in a specified order according to key field is known as the

a) Sequential access method b) Queuing method c) Predetermined method d) Direct access method

Q3) External database is

a) Database created using DBMS package b) Database created in MS-Word c) Database created in EXCEL d) All of the above

Q4) ROLLBACK in a database is \_\_\_\_\_ statement.

a) DDL b) DML c) DCL d) TCL

Q5) Report generators are used to

a) Store data input by a user b) Retrieve information from files

c) Answer queries d) Both (b) and (C)

Q6) In a database, related fields are grouped to

a) File b) Bank c) Menu d) Data record

Q7) The database environment has all the following components except

a) Database administrator b) Database c) Users d) Separate files

Q8) Which database handles full text data, image, audio and video?

- a) Multimedia database b) Video on demand database c) Graphics database
- d) Transaction database

Q9) The first step in the transaction processing cycle is \_\_\_\_\_

- a) Audit b) Database operations c) User inquiry d) Data entry

Q10) A Tuple is a

- a) row of a table b) key of a table c) column of a table d) two-dimensional table

Q11) The following are components of a database except \_\_\_\_\_

- a) reports b) indexes c) metadata d) user data

Q12) \_\_\_\_\_ is one reason for problems of data integrity.

- a) Data redundancy b) Security constraints c) Data inconsistency d) Data availability constraints

Q13) Forms that are used to organize business data into rows and columns are called \_\_\_\_\_

- a) transaction sheets b) business forms c) registers d) spreadsheets

Q14) The smallest logical data entity is called a data item or data

- a) Field b) Collection c) Base d) Bank

Q15) MODULA is a

- a) Assembly language b) Machine language c) Low-level language d) Programming language

Q16) A collection of interrelated records is called a

- a) Database b) Spreadsheet c) Management information system
- d) Text file

Q17) Unlike filters queries can be saved as in a database.

- a) Database b) Filters c) Objects d) Any of the above

Q18) External database is

- a) Database created using DBMS package
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- c) Database created in EXCEL
- d) All of the above

Q19) In a large DBMS

- a) each user can access every sub schema
- b) each sub schema contains every field in the logical schema
- c) each user can “see” only a small part of the entire database
- d) all of these

Q20) A network schema

- a) stores data in tables
- b) restricts the structure to a one-to-many relationship
- c) permits many-to-many relationships
- d) none of these

Q21) Administrative supervision of database activities is the responsibility of the

- a) DB manager
- b) DP manager
- c) VP-DP administration
- d) Database administrator

Q22) A file consists of

- a) Fields and records
- b) Records and sorts
- c) Fields and sorts
- d) Databases and fields

Q23) An entry in the telephone book can be compared to a

- a) Field
- b) Record
- c) File
- d) Database

Q24) Which of the following is at the highest level in the hierarchy of data organization?

- a) Database
- b) Data bank
- c) Data file
- d) Data record

Q25) Which language is used by most of DBMSs for helping their users to access data?

- a) HLL
- b) Query language
- c) SQL
- d) 4 GL

Q26) A collection of interrelated records is called a

- (A) Database (B) Spreadsheet (C) Management information system
- (D) Text file

Q27) The method of file organization in which data records in a file are arranged in a specified order according to key field is known as the

- (A) Sequential access method (B) Queuing method
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- (A) Database (B) Filters (C) Objects (D) Any of the above

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Q30) ROLLBACK in a database is \_\_\_\_\_ statement.

- (A) DDL (B) DML (C) DCL (D) TCL

Q31) Report generators are used to

- (A) Store data input by a user (B) Retrieve information from files
- (C) Answer queries (D) Both (b) and (c)

Q32) The logical data structure with a one-to-many relationship is a

- (A) Tree (B) Chain (C) Network (D) All of these

Q33) In a database, related fields are grouped to

(A) File (B) Bank (C) Menu (D) Data record

Q34) The database environment has all the following components except

(A) Database administrator (B) Database (C) Users (D) Separate files

Q35) Which database handles full text data, image, audio and video?

(A) Multimedia database (B) Video on demand database

(C) Graphics database (D) Transaction database

Q36) A DBMS that combines a DBMS and an application generator is

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(A) Oracle Corporation's Oracle (B) Microsoft's SQL Server

(C) Microsoft's Access (D) None of these

Q37) E.F. Codd represented \_\_\_\_\_ rules that a database must obey if it has to be considered truly relational.

(A) 6 (B) 8 (C) 10 (D) 12

Q38) The ability to find an individual item in a file immediately

(A) Sequential access (B) File allocation table (C) Directory

(D) Direct access

Q39) A prescribed set of well- defined instructions for solving mathematical problems is called \_\_\_\_\_

(A) An algorithm (B) A description (C) A code (D) A compiler

Q40) The distinguishable parts of a record are called



(A) Fields (B) Files (C) Data (D) All of these

Q41) The command to convert a numeric number to characters is

(A) STR () (B) CHR () (C) ASC () (D) All of these

Q42) Which normal form is considered adequate for normal relational database design?

(A) 2 NF (B) 3 NF (C) 4 NF (D) 5 NF

Q43) The command that add a new field to an active database is

(A) MODIFY STRUCTURE (B) MODIFY COMMAND

(C) MODIFY REPORT (D) MODIFY LABEL

Q44) The most commonly used operation in relational algebra for projecting a set of tuple from a relation is

(A) Union (B) Select (C) Projection (D) Join

Q45) In E-R diagram, relationship is represented by

(A) Diamond shaped (B) Dashed shaped (C) Ellipse shaped

(D) Rectangle shaped

Q46) The \_\_\_\_\_ operation allows the combining of two relations by merging pairs of tuples, one from each relation, into a single tuple.

(A) Intersection (B) Union (C) Join (D) Select

Q47) A \_\_\_\_\_ is an abstract model that describes how the data are organized and represented.

(A) Database (B) Schema (C) Instances (D) Data model

Q48) \_\_\_\_\_ describe what is in database fields.

(A) Field names (B) Field definitions (C) Field markers

(D) Structures

Q49) The most popular commercial DBMS is

(A) Oracle (B) MySQL (C) Microsoft Access (D) Microsoft SQL Server

Q50) Which of the following is a set of one or more attributes taken collectively to uniquely identify a record?

(A) Foreign key (B) Super key (C) Sub key (D) Candidate key

**Q2) Give reasons or Short Answer type questions. (10 marks for Each)**

i) Difference between data and Information?

ii) Explain Features of DBMS?

iii) Explain cardinality and its types?

iv) Explain need of DBMS?

v) Explain components of MS access in short?

vi) Explain various file type in short.

vii) Explain Data type of SQL.?

viii) Explain distributed database system.

ix) Explain Features of SQL?

x) Explain Aggregate functions in SQL?

**Q3) Broad questions (10Marks each)**

i) Explain structure of DBMS?

ii) Explain architecture of DBMS?

iii) Explain USERS of DBMS?

iv) Explain Hierarchical and Network model in DBMS?

v) Explain Normalization and its types in detail with example?

vi) Explain Heap file Organization with advantages and disadvantages?

vii) Explain Sequential file organization with advantages and disadvantages?

viii) Explain DDL and DML commands in SQL?

ix) Explain DCL and DQL commands in SQL?

**Q4) Write Short Notes on –**

i) Schema and Sub-Schema

ii) Data abstraction

iii) Data Independence.

iv) Data Dictionary

v) DFD

Vi) DDL

Vii) DML

Viii) Distributed database system

ix) Primary key

x) Foreign key

xi) Super key

xii) Unique key

xiii) File processing system

Xiv) DBMS

xv) Client Server system

xvi) SQL Data type

xvii) MS access components

xviii) Aggregate functions.

xix) Users of database.

xx) Advantages of DBMS.

