OBJECTIVES (MCQ'S) OF CHAPTER-1 IN ALL PUNJAB BOARDS 2011-2021

1. A collection of raw facts and figures is called: (3 Times)
(A) data (B) information (C) processing (D) object

2. Which of the following may be a temporary file? (2 Times)
(A) master file (B) transaction file (C) backup file (D) none

3. SQL stands for: (4 Times)
(A) structure query language (B) sort query language
(C) self query language (D) seek query language

4. A database consists of various components called:
(A) properties (B) tool (C) object (D) entities

5. Which one of the following type of file requires largest processing time? (3 Times)
(A) Sequential file (B) Random file (C) indexed Sequential file (D) Direct Access file

6. Which represent a collection of concepts that are used to describe the structure of a database? (2 Times)
(A) data ware house (B) database model (C) data structure (D) data type

7. A relation that contains minimal redundancy and allow easy use is called: (2 Times)
(A) clean (B) record (C) field (D) well structured

8. Each set of related items in a table is called:
(A) Table (B) Record (C) field (D) query

9. The manipulated and processed data is:
(A) Object (B) Data (C) Figure (D) information

10. Which of the following data model is more flexible: (2 Times)
(A) NETWORK model (B) Hierarchical model (C) Relational model (D) Object data model

11. Data that causes inconsistency lacks: (2 Times)
(A) Good data (B) Data Integrity (C) Data redundancy (D) Data anomaly

12. Which of the following is not a database object?
(A) table (B) query (C) form (D) MS-Word

13. Manipulation of data to achieve the required objectives and results is called:
(A) Data processing (B) Operation (C) a and b (D) None

14. Storage and retrieval of data is related to:
(A) Data capturing (B) Data Manipulation (C) Managing output result (D) None

15. All records in a file have the same:
(A) Contents (B) Structure (C) Both a and b (D) None

16. SQL is a(n): (3 Times)
(A) Unstructured language (B) Structural language
(C) Object oriented language (D) Software

17. The type of files from functional point of view include:
(A) Program files (B) Data files (C) a and b (D) None

18. Which of the following is handled by DBMS?
(A) Data integrity (B) Data security (C) Data independence (D) All

19. Database application contains procedure for:
(A) Adding records (B) Deleting records (C) Processing queries (D) All

20. Which of the following database model is often referred to as an Inverted Tree?
(A) Hierarchical (B) Network (C) Relational (D) object-oriented

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21. A set of related records that represent a unit of data is (2 times)
(a) file (b) record (c) field (d) database

22. The column of table corresponds to: (1 times)
(a) table (b) record (c) field (d) cells

23. A logical grouping of characters is a: (3 times)
(a) field (b) record (c) File (d) Database

24. MS Access save the database with the extension.
(a) .mdb (b) .msdb (c) .ppt (d) .accdb

25. A collection of related fields is:-
(a) Character (b) File (c) Record (d) Database

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26. Duplicate data in multiple data files is called:
(a) data integrity (b) data consistency (c) program dependency (d) data redundancy

27. Each separate piece of information stored in a record is called:
(a) form (b) field (c) table (d) relation

28. Which file is used to store Information that remains constant for a long time:
(a) data file (b) master file (c) transaction file (d) backup file

29. A set of related files created and managed by a (DMBS) is called:
(a) Field (b) Record (c) Database (d) Module

30. Multiple copies of the same data is referred to as:
(a) data integrity (b) data inconsistency (c) data redundancy (d) data isolation

2019

31. Which of the following is also known as data set:
(a) record (b) field (c) file (d) module

32. a type of file that contains data is called:
(a) data files (b)Program file (c) image file (d) Query file

ANSWERS

1	2	3	4	5	6	7	8	9	10	11
A	B	A	C	A	B	D	B	D	C	B
12	13	14	15	16	17	18	19	20	21	22
D	C	C	B	B	C	D	D	A	A	C
23	24	25	26	27	28	29	30	31	32	
A	D	C	D	B	B	C	C	C	A	

SHORT QUESTIONS OF CHAPTER-1 IN ALL PUNJAB BOARDS 2011-2021

1. What is meant by Transaction File?
Ans: A type of file that is used to store input data before processing is called transaction file. It may be temporary file and may exist until the master file is updated. It may also be used to maintain a permanent record of the data about a transaction. **(2 Times)**

2. What is meant by Data Independence?
Ans: Data independence means that data and application programs are separate from each other. The user can change data storage structures and operations without changing the application programs and can also modify programs without reorganization of data. The user can also modify programs without reorganization of data. **(4 Times)**

3. What do you mean by Data Integrity?
Ans: Data integrity means the correctness and consistency of data. It is another form of database protection. Integrity is related to quality of data. It is maintained with the help of integrity constraints. **(2 Times)**

4. What is meant by Database?
Ans: A database is a collection of logically related data sets or files. Each file may contain different type of information and are used for specific purposes. The files may be organized in different ways to meet different processing and retrieval requirements of the users. **(2 Times)**

5. Differentiate between Data and Information.
Ans: Data is a set of raw facts and figures information is the processed form of data. Data is used as input in the computer and information is the output of the computer. Data is meaningless and information is meaningful.

Data → processing → information

6. What is data processing?
Ans: The process of manipulating data to achieve the required objectives and results is called data processing. The software (program) is used to process raw data. The software converts raw data into meaningful information. **(2 Times)**

7. Enlist different types of database models.
Ans: The different types of database models are as follow:
i. Hierarchical model ii. Network model iii. Relational model

8. What is the concept of Consistency constraints? (2 Times)

Ans: Consistency means accuracy of data. Constraints are rules or requirements that implements in database management system. Consistency constraints are the rules that must be followed to enter data in the database. If a data does not fulfill these constraints, it cannot enters to the database.

9. What is file?

Ans: A collection of related records treated as single unit is called a file. Files are stored in secondary storage devices like disk, CD-ROM or DVD ROM. A student file may obtain the records of thousands of students. Earth student record consists of same field but each field have different data.

10. Write two advantages of DBMS.

Ans: Some advantages of DBMS are;

i. Data independence:

DBMS provides the facility of data independence. It means that the data and application programs are separate from each other. The user can change data storage structures and operations without changing the application programs. The user can also modify programs without reorganization of data.

ii. Data security:

DBMS provides the data security. It is the protection of the database from unauthorized access. DBMS provides several procedures to maintain the data security.

11. Define the term redundancy.

Ans: Redundancy is a system design in which a component is duplicated so if it fails there will be a backup. It has a negative can notation when the duplication is unnecessary or is simply the result of poor planning.

12. What is Backup file?

Ans: A type of file that is used to take backup important data is called backup file. If data is lost it can be recovered from backup file. Special programs are used to create, and use backup files.

13. Name different types of file organization.

Ans: Types of file organization are as follows:

i) Sequential file organization.
ii) Heap file organization.
iii) Hash file organization.
iv) B+ file organization.
v) Indexed sequential access method (ISAM).
vi) Cluster file organization.

14. State the use of query language. (3 Times)

Ans: SQL (Structure Query Language) is used for creating table structures, entering data into them and retrieving/updating the selected records, based on the particular criteria and format indicated, within the databases.

15. State the use of index in FMS. (2 Times)

Ans: Index are used to maintain the data in order. The order can be ascending or descending. Index is a value in fact which is known as key value. On the basis of that key value, order of data is maintained. On the basis of that index, data is retrieved and inserted.

16. Why File Organization is important in a database Design? Give two reasons. (2 Times)
OR What do you mean by File organization?

Ans: The technique for physically arranging the data on secondary storage like hard disk etc is called file organization. It is necessary because it tells the order in which data will be maintained on disk and how it will be represented when it is inserted and retrieved. If a good file organization will be used then data access and insert process will be fast.

17. Define program file.

Ans: A type of file that contains software instructions is called program file. The source program files and executable files are the examples of program files.

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18. List file types.

Ans: i) Program file ii) Data file

19. What is data dictionary? OR use of Data Dictionary (4 Times)

Ans. Data dictionary is a file that is used to store data definitions or description of structure of data used in database. It may also monitor the data that is used. It is also called repository.

20. Name four database objects.....

Ans. i) Data ii) Hardware iii) Software iv) Personnel

21. Describe term information? (3 times)

Ans. Processed data is called information. It is also known as output. It is used to make decisions.

22. List any two objectives of DBMS.

Ans. i) Shareability ii) Availability (iii) Evolvability (iv) Data integrity

23. List two advantages of file indexing? (2 times)

Ans. i) Index always refers the exact location on disk. ii) It is fast than sequential method.

24. Define data inconsistency?

Ans. Inconsistency means that two files may contain different data of the same entity. For example, the address of a student must be updated in all files if any change occurs. It is possible that it is changed in Student file but not in Library file. The data becomes inconsistent in this situation.

25. What is the purpose of backup and recovery? (4 times)

Ans. Backup means to store an additional copy of data. The data can be recovered from this file if the original files are mostly created by using specific software utilities.

26. Define data?

Ans. Raw facts and figures is called data. It is unprocessed (i-e collect information of student from admission form).

27. Any two differences between file processing and database approach?

Ans.

File Processing	DB approach
i) in file processing, data may be duplicated in different files that cause data redundancy.	i) Here data is not duplicated and appears only once.
ii) It is difficult to apply integrity checks on files.	ii) It provides many constraints of data integrity.

2018

28. Define data file.

Ans: A type of file that contains data is called data file. Data files are created by the software being used. For example Notepad s a type of text file with extension .txt.

29. List any two file types from usage point of view. OR Files names from usage point of view. (2 times)

Ans. The types of files from usage point of view are as follows:

i. Master File ii. Transaction File iii. Back up File

30. Differentiate between Master file and Transaction file. (2 times)

Ans.

Master File	Transaction File
The file is used to store the information that remains constant for a long period of time. These files are never empty since they are created. These files are updated when any change in their contents is required.	This type of file stores the input data before processing. It may be temporary file and may exist until the master file is updated.

31. List any two problems in traditional file approach.

Ans. i. Data redundancy ii. Data inconsistency

iii. Integrity problems iv. Security problem

32. Define data manipulation.

Ans. The process of applying different operations on data is called data manipulation. It includes the following operations:

a. Classifying b. calculation c. sorting d. summarizing

33. Describe network model.

Ans. Each record in this model is called a node. A higher level node is called parent and lower level node is called child. The child node can have more than one parent nodes. The child nodes are represented by arrows in this network.

34. What is the use of DML?

Ans. DML stands for Data Manipulation Language. It consists of SQL commands that are used to load update, query and the database using SELECT Commands. DML Commands include INSERT, UPDATE and DELETE.

35. List three examples of database system.

Ans.
i. Library Management System.
ii. School Management System.
iii. Account Management System.

36. Write shortcut key to compile and run C program. (1+1)

Ans.
i. Compile → Alt+F9
ii. Run → CTRL+F9

37. What is database system? OR What is the purpose of database system? (2 times)

Ans. It is a collection of data as well as programs required to manage that data. It is a computerized record keeping system. Its purpose is to maintain data and provide it to the user when it is required.

38. Why do people use database?

Ans. People use database to retrieve the data quickly and easily. Database can store large amount of data efficiently. It allows the user to display and distribute data in many ways.

39. Difference between database and database management system. (2 times)

Ans.

Database	DBMS
A collection of related data is called database.	A collection of programs to create and maintain databases is known as database management system.

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40. What is the use of DDL?

Ans: DDL stands for Data Definition Language. It consists of SQL commands used to define a database, creating tables, indexes and views. Some important commands of DDL include CREATE/DROP TABLE, ALTER TABLE, CREATE/DROP VIEW etc.

41. Differentiate between data redundancy and data inconsistency?

Ans:

Data redundancy	Data inconsistency
Data redundancy means the duplication of data in multiple files that causes wastage of storage.	Data inconsistency means two files may contain different data of the same entity.

42. Why is report generator used in database system?

Ans: Report generator is used to produce reports. It retrieves data from database and displays it in different formats. The user can use report generator to format page number, dates, titles and column headings etc.

43. Why is it important to specify data type and size of a field?

Ans: The data type of a field specifies the type of data that can be stored in the field. A field size defines the maximum number of characters that can be stored in a field.

LONG QUESTIONS OF CHAPTER-1 IN ALL PUNJAB BOARDS 2011-2021

1. List two examples of database system? **(2 Times)**
2. Define database system. Explain any three components of database system. **(3 times)**
3. Explain database management system. Discuss any three advantages of DBMS **(2 Times)**
4. What is a File? Explain three types of Files from usage point of view.
5. Briefly describe the four advantages and four disadvantages of database management system? **(4 Times)**
6. How a table/ relation is formed up in DBMS? Write down the properties of relation in detail.