MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION
(Autonomous)
(ISO/IEC - 27001 - 2005 Certified)

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** **22321**

Important Instructions to examiners:
1) The answers should be examined by key words and not as word-to-word as given in the model answer scheme.
2) The model answer and the answer written by candidate may vary but the examiner may try to assess the understanding level of the candidate.
3) The language errors such as grammatical, spelling errors should not be given more Importance (Not applicable for subject English and Communication Skills).
4) While assessing figures, examiner may give credit for principal components indicated in the figure. The figures drawn by candidate and model answer may vary. The examiner may give credit for any equivalent figure drawn.
5) Credits may be given step wise for numerical problems. In some cases, the assumed constant values may vary and there may be some difference in the candidate's answers and model answer.
6) In case of some questions credit may be given by judgement on part of examiner of relevant answer based on candidate's understanding.
7) For programming language papers, credit may be given to any other program based on equivalent concept.

Q. No.	Sub Q.N.	Answer	Marking Scheme
1.		**Attempt any FIVE of the following:**	**10**
	(a)	**List any four DBMS softwares.**	**2M**
		(Note: Any four valid DBMS software can be considered)	
	Ans.	**List of DBMS software are the followings:**	
		i. Oracle RDBMS	*Any four 1/2M each*
		ii. IBM DB2	
		iii, Microsoft SQL Server	
		iv. MySQL	
		v. MS Access	
		vi. SQLite	
		vii. PostgreSQL	
		viii. MongoDB	
		ix. SQL Developer	
		x. SAP Sybase SE	
	(b)	**Define Domain and Attribute.**	**2M**
	Ans.	A **Domain** is defined as the set of all unique values permitted for an attribute.	*Each definition 1M*
		Attributes are the descriptive properties owned by each entity of an	

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION
(Autonomous)
(ISO/IEC - 27001 - 2005 Certified)

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** | **22321**

		entity set.	*each*
(c) **Ans.**		**List and draw any four symbols used in ER-Model.** Different symbols used in ER-Model are the following:	**2M** *Any four symbol $^{1/2}$M each*
(d) **Ans.**		**Define Constraint.** Constraints are the rules enforced on the data columns of a table. These are used to limit the type of data that can go into a table. This ensures the accuracy and reliability of the data in the database. Constraints could be either on a column level or a table level. The column level constraints are applied only to one column, whereas the table level constraints are applied to the whole table.	**2M** *Definition 2M*
(e) **Ans.**		**Define Database. List any two advantages of database system.** A database is an organized collection of data so that it can be easily accessed, managed and updated. **Advantages of database system are the following:** 1. Controlling Redundancy of data in a centralized system of DBMS 2. Integrity of data can be enforced in case of database system by enforcing constraints	**2M** *Definition 1M* *Any two advantages $^{1/2}$M each*

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** | 22321 |

		3. Inconsistency of data can be avoided by reducing duplicacy or redundancy 4. Data can be shared by multiple applications in centralized DBMS 5. Standards can be enforced in DBMS is a central system by enforcing standards easily at Company level, Department level, National level or International level. 6. Restricting unauthorized access among multiple users when sharing of data takes place in a database. 7. Providing Backup and Recovery facilities is provide by DBMS for recovering from hardware or software failures.	
	(f) **Ans.**	**Define database model.** **Definition of database model:** A database model is a type of data model that determines the logical structure of a database. It also fundamentally determines in which manner data can be stored, organized and manipulated.	**2M** *Definition 2M*
	(g) **Ans.**	**List advantages of Normalization.** **List of Advantages of Normalization are the following:** 1. More efficient data structure. 2. Avoid redundant fields or columns. 3. More flexible data structure i.e. we should be able to add new rows and data values easily 4. Better understanding of data. 5. Ensures that distinct tables exist when necessary. 6. Easier to maintain data structure i.e. it is easy to perform operations and complex queries can be easily handled. 7. Minimizes data duplication. 8. Close modeling of real world entities, processes and their relationships.	**2M** *Any two advantages 1M each*
2.	**(a)** **Ans.**	**Attempt any THREE of the following:** **Define data abstraction. Explain the levels of data abstraction with neat diagram.** **Data abstraction is defined as** • Suppression of details of data organization and storage • Highlighting of the essential features for an improved understanding of data • The characteristic that allow program data independence and program operation independence is called data abstraction.	**12** **4M** *Definition 1M*

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** 22321

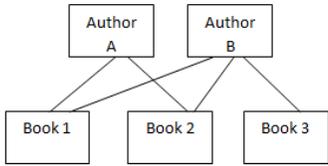|			
		Three levels of abstraction are: **Physical level**: This is the lowest level of data abstraction. It describes how data is actually stored in database. The complex data structure details is described at this level. **Logical level**: This is the middle level of 3-level data abstraction architecture. It describes what data is stored in database and the relationships among the data. **View level**: This is highest level of data abstraction. This level describes the user interaction with database system. Three Levels of data abstraction	*Levels 2M* *Diagram 1M*

	(b)	**Distinguish between network database model and relational database model.**			**4M**
	Ans.	Sr. No.	**Network database model**	**Relational database model**	
		1	Relationship between records is expressed in the form of pointers or links	Relationship between records is represented by a relation that contains a key for each record involved in the relationship.	*Any four points 1M each*
		2	Many to many relationship can also be implemented	Many to many relationship can be easily implemented	
		3	Record relationship implementation is very complex due to use of pointers	Relationship implementation is very easy through the use of a key or composite key fields	

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** | 22321 |

4	Network model is useful for representing such records which have many to many relationships	Relationship model relations are is useful for representing most of the real world objects and relationship among them	
5	In Network model also the record relations are physical	Relational model does not maintain physical connection among of records. Data is organized logically in the form of rows and columns.	
6	Example:	Example: Relation :Student Rollno name percentage 101 Abc 89.8	

| | **(c)** **Ans.** | **Describe enhanced ER model with the help of example.** Enhanced ER is a high-level data model that incorporates the extensions to the original ER model. It is created to design more accurate database schemas. EER reflects data properties and constraints more precisely. It also includes more complex requirements than traditional application.

It is a diagrammatic technique for displaying the following concepts
- Sub Class and Super Class
- Specialization and Generalization
- Union or Category
- Aggregation

These concepts are used when they comes in EER schema and the resulting schema diagrams called as EER Diagrams.

For example: Square, Circle, Triangle are the sub class of Shape super class. | **4M**

Descript ion 3M |
|---|---|---|---|

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** | 22321 |

Diagram 1M

(d) **Ans.**	**Compare file system and database system.**		**4M**

File system	Database system
1. File processing don't contain any self describing feature and neither posses metadata.	1. Presence of Self-describing nature of a database system and Metadata.
2. In file processing, if any changes to the structure of a file may require changing all programs that access the file	2. In database system, the structure of data files is stored in the DBMS catalog separately from the access program. This is called program-data independence
3. File processing system don't support multiple views.	3. Support of multiple views of the data i.e. Each user may see a different view of the database, which describes only the data of interest to that user
4. It is not possible to share data and multi user transaction simultaneously among concurrent users in case of file processing system	4. Sharing of data and multi-user transaction processing i.e allowing a set of concurrent users to retrieve from and to update the database.

Any four points 1M each

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** | 22321 |

		5. The traditional file approach, each group independently keeps their own file.	5. Controlling Redundancy is one of most important feature to use DBMS	
3.	**(a) Ans.**	**Attempt any THREE of the following:** **Explain any four Codd's rules.** **Codd's rules:** **Rule 1 : The information rule** According to E.F. codd's first rule, the whole data has to be presented to the user should be in the form of table. **Rule 2 : Guaranteed Access Rule** Whole data should be available or accessible to the user without any ambiguity. The ambiguity can be avoided only through the perfect combination of the table name, primary key, and column name. **Rule 3: Systematic treatment of null values** The null values i.e. absence of the values in the table should be treated properly. The table should allow a field to remain empty. This is not applicable to primary keys. Key columns cannot have null values. **Rule 4 : Active on-line catalog based on the relational model** Fourth rule specifies need of dynamic on-line catalog based on the relational model. There are certain system tables that stores the database definition should be present. The data accessing tools should be used to access the database structure information. **Rule 5 : The comprehensive data sub language rule**: The system must support at least one relational language that Has a linear syntax Can be used both interactively and within application programs, Supports data definition operations (including view definitions), data manipulation operations (update as well as retrieval), security and integrity constraints, and transaction management operations (begin, commit, and rollback). **Rule 6 : The view updating rule**: All views those can be updated theoretically, must be updated by the system.	**12** **4M** *Any four rules 1M each*

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** | **22321** |

		Rule 7 : High-level insert, update, and delete: A database must support high-level insertion, updation, and deletion. This must not be limited to a single row, that is, it must also support union, intersection and minus operations to yield sets of data records	
		Rule 8 : Physical data independence: Changes to the physical level (how the data is stored, whether in arrays or linked lists etc.) must not require a change to an application based on the structure.	
		Rule 9 : Logical data independence: Changes to the logical level (tables, columns, rows, and so on) must not require a change to an application based on the structure.	
		Rule 10 : Integrity independence: Integrity constraints must be specified separately from application programs and stored in the catalog. It must be possible to change such constraints as and when appropriate without unnecessarily affecting existing applications.	
		Rule 11 : Distribution independence: The distribution of portions of the database to various locations should be invisible to users of the database. Existing applications should continue to operate successfully: when a distributed version of the DBMS is first introduced; and when existing distributed data are redistributed around the system.	
		Rule 12: The non subversion rule: If the system provides a low-level (record-at-a-time) interface, then that interface cannot be used to subvert the system, for example, bypassing a relational security or integrity constraint.	
	(b) **Ans.**	**Describe functional dependency with example.** *(Note: Any other example shall be considered)* A functional dependency occurs when one attribute in a relation uniquely determine another attribute. **(OR)** A relation say R attribute X is functionally dependent on attribute Y if every value in X in the relation has exactly one value of Y in the given relation. The functional dependency is represented as X→Y, which specifies Y is functionally dependent on X or X attribute functionally determine	**4M** *Descript ion 2M*

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** 22321

		the attribute Y. **Example:** Consider table : **Employee(Emp_Id, Emp_Name, Emp_Address)** Here Emp_Id attribute can uniquely identify the Emp_Name attribute of employee table because if we know the Emp_Id, we can tell that employee name associated with it. Functional dependency can be written as: **Emp_Id → Emp_Name**	*Example 2M*
(c) Ans.		**Explain different types of attributes.** **Types of Attributes:** **1) Simple attributes** : Attributes that cannot be subdivided (i.e are atomic) into subparts are called as simple attributes. E.g: Enroll_no, RollNo **2) Composite Attributes**: The attributes which can be divided into subparts are called composite attributes. E.g: attribute **name** could be structured as a composite attribute consisting of **first_name,middle_name and last_name** **3) Single Valued Attributes:** The attribute has single value for a particular entity called as single valued attribute. E.g: Student_id **4) Multivalued Attributes:** The attribute has set of values for a specific entity called as multi valued attribute. E.g: Phone_no is multivalued attribute because employee may have zero, one or several phone no. **5) Derived Attribute:** The value for this type of attribute can be derived from the values of other related attributes or entities. E.g: Customer entity has attribute age and date_of_birth. We calculate age from date_of_birth and current_date. Here age is derived attribute and date_of_birth is base or stored attribute	**4M** *Any four types with correct explanation 1M each*

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** 22321

		6) Stored Attribute: The stored attributes are such attributes which are already stored in the database and from which the value of another attribute is derived is called stored attribute. For example: date_of_birth is a stored attribute from which age can be derived. **7) Null Attribute:** An attribute takes a null value when an entity does not have a value for it. Null can indicate "not applicable"- that is value does not exist for the entity. E.g apartment_no	
	(d) **Ans.**	**Explain different operations performed with Data Definition Language.** **DDL Operations:** 1. Create 2. Alter 3. Drop 4. Rename 5. Truncate **1) Create**: It's a DDL statement of SQL and is used to create a table in the database. It creates an empty structure of the table. *Syntax:* Create table < table name> (column1 datatype[(size)], column2 datatype[(size)], column3 datatype[(size)],……); *Example:* Create table employee (empno number(5), ename varchar2(20),Salary number(8,2)); **2) Alter** : It is used to add new attributes or to modify the existing attribute in the table structure. *Syntax for add option:* alter table<table name> add(columnName1 datatype(size) columnName2 datatyp(size) ... columnNameNdatatyp(size)); *Example:* alter table emp add(sal number(8,2));	**4M** *Any 4 operatio ns 1M each*

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: **Principles of Database**   Subject Code: **22321**

		Syntax for modify option: alter table<table name> modify (<columnName1><data type>(<size>)); *Example:* alter table emp modify sal number(10,2); **3) Rename :**This command is used to rename a table, view, sequence or a synonym. *Syntax of Rename command:* *rename <oldtable_name> to <newtable_name>;* *Example:* rename employee to employee_details; **4) Drop:** The DROP command removes a table from the database. All the tables' rows, indexes and privileges will also be removed. No DML triggers will be fired. The operation cannot be rolled back. *Syntax:* drop table <table name>; *Example:* drop table emp; **5) Truncate :**Truncate command is used to remove all rows from a table and to release the storage space used by the table keeping the table definition intact**.** *Syntax:* truncate table <table name>; *Example:* truncate table emp;	
4.	**(a)** **Ans.**	**Attempt any THREE of the following:** **Explain BCNF with example.** *(Note: Any other example shall be considered)* **BCNF:** Boyce Codd Normal Form (BCNF) is considered a special condition of third Normal form. A table is in BCNF if every determinant is a candidate key. A table can be in 3NF but not in BCNF. This occurs when a non key attribute is a determinant of a key attribute **Example of BCNF:** Let's assume there is a company where employees work in more than one department.	**12** **4M** *Explana tion 2M*

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: **Principles of Database**   Subject Code: 22321

		EMPLOYEE(EMP_ID,EMP_COUNTRY,EMP_DEPT, DEPT_TYPE,EMP_DEPT_NO) **In the above table Functional dependencies are as follows:** 1. EMP_ID → EMP_COUNTRY 2. EMP_DEPT → {DEPT_TYPE, EMP_DEPT_NO} **Candidate key: {EMP-ID, EMP-DEPT}** The table is not in BCNF because neither EMP_DEPT nor EMP_ID alone are keys. To convert the given table into BCNF, we decompose it into three tables: **1.EMP_COUNTRY table:** EMP_ID → EMP_COUNTRY **2.EMP_DEPT table:** EMP_DEPT → {DEPT_TYPE, EMP_DEPT_NO} 3. **EMP_DEPT_MAPPING table:EMP_ID,EMP_DEPT** **Functional dependencies:** 1. EMP_ID → EMP_COUNTRY 2. EMP_DEPT → {DEPT_TYPE, EMP_DEPT_NO} **Candidate keys:** For the first table: EMP_ID For the second table: EMP_DEPT For the third table: {EMP_ID, EMP_DEPT} Now, this is in BCNF because left side part of both the functional dependencies is a key.	*Example 2M*
	(b) Ans.	**Explain client/server database system.** **Client/Server Database System**	**4M** *Correct explanation 4M*

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION
(Autonomous)
(ISO/IEC - 27001 - 2005 Certified)

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: **Principles of Database**   Subject Code: | 22321 |

		1. It has two logical parts –client and server.
		2. Computer networking allows some task to be executed on a server system and some tasks on client system. This leads to development of client server architecture.
		3. Server is the machine which serves to the clients.
		4. Server machine provide services to the client machine such as file access, printing, and database access. It is used to manage the database tables optimally among multiple clients who concurrently request the server for the same data.
		5. The clients are the machines which requests for the service to the server.
		6. There are different types of client/server architecture such as
		   • Two tier architecture
		   • Three tier architecture.
		7. In two tier architecture, client systems directly approach database servers whereas in three tier architecture, there exists a middle layer which acts as application server to receive and send requests from client machine to database server and vice versa.	

	(c) **Ans.**	**Explain terms primary key and candidate key with example.** **Primary Key:** A primary key is an attribute in Relation that uniquely identifies the rows in relation. A Primary key does not hold NULL values and duplicate values. **OR** A key which is selected by the designer to uniquely identify the entity is called as Primary key. A primary key cannot contain duplicate values and it can never contain null values inside it. *Example:* In a Student table(Rollno,Name,Percentage), Rollno is the primary key **Candidate key:** In a relation there may be a key or combination of keys which uniquely identify the record. Such a key is called as Candidate key. *Example:* Consider a Student table (Rollno,Name,Percentage), if (Rollno) and(Name)both are unique then both are identified as candidate keys.	**4M** *Each definition* *1M* *Each example* *1M*

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** | 22321 |

		OR Consider a Student table (Rollno, Name, Percentage), if (Rollno, Name) is unique , then (Rollno, Name) can be a candidate key if and only if Name and Rollno individually are not unique.	

	(d)
	Ans.
		Explain entity integrity constraint with example.
		Entity integrity constraint:
		1) Unique key constraint: It avoids the duplication of values within the rows in table. It allows null values.
		Syntax:
		    Create table <table_name>
		    (column name1 datatype(size),
		    column_name2 datatype(size) constraint <constraint_name>
		    unique,
		    --- 	
		    column_name n datatype(size)
		    );
		
		Example:
		    create table dept
		    (deptno number(5) constraint dept_deptno_uk unique,
		    dname varchar2(20),
		    loc varchar2(20));
		
		2) Primary key constraint: Primary key constraint can be assigned on one or more columns in a table used to uniquely identifies the each row in table. It avoids duplication of rows and do not allow null values.
		Syntax:
		    Create table <table_name>
		    (column name1 datatype(size),
		    column_name2 datatype(size) constraint <constraint_name>
		    primary key,
		    --- 	
		    column_name n datatype(size)
		    );
		Example:
		    create table dept
		    (deptno number(5) constraint dept_deptno_pk primary key,
		    dname varchar2(20),
		    loc varchar2(20));
			4M
			
			Each constraint explanation 1M
			
			Each example 1M

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** 22321

	(e)	**Describe centralized database system with example.** *(Note: Any other example shall be considered).*	**4M**
	Ans.	**Centralized Database System:** 1. A centralized database consists of a single data server into which all data are stored and from which all data are retrieved. All the data reside at a single location and all applications must retrieve all data from that location. 2. The centralized database system consists of a single processor together with its associated data storage devices and other peripherals. It is physically confined to a single location. 3. Data can be accessed from the multiple sites with the use of a computer network while the database is maintained at the central site Following are the advantages of centralised database system: ▪ The data integrity is maximized ▪ The data redundancy is minimal. ▪ Centralized database is much more secure. ▪ Data is easily portable because it is stored at the same place. ▪ The centralized database is cheaper than other types of databases as it requires less power and maintenance. *Example:* Consider a company developing a project. As the project consist of many different types of information like documents, plans, diagrams, etc. Instead of having it stored on every project member's system it can be stored in a database on server which can act as a centralized database from which all the project members will assess the information acting as clients.	*Description 2M* *Example 2M*
5.		**Attempt any TWO of the following:**	**12**
	(a)	**Consider a single table consisting following columns. Convert it into 2NF and 3NF Table:** **(supplier_no, supplier_name, supplier_city, order_no, order_quantity, order_amount, product_code, product_name)**	**6M**
	Ans.	Given Table Schema - (supplier_no, supplier_name, supplier_city, order_no, order_quantity, order_amount, product_code, product_name) **Second Normal Form (2NF):** To convert it into 2NF, We have to decompose the given table into two tables with fully functional dependencies and establishing a	

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** | 22321 |

| | | referential integrity constraint relationship among the two tables.
Table 1- Supplier Details
(supplier_no,supplier_name,supplier_city,order_no)
Table 2 - Order Details
(order_no, order_ quantity, order_amount, product_code, product_name)
Now the above two tables are in 2NF.

Third Normal Form (3NF):
To convert the above tables in 3NF ,We have to decompose them in three tables satisfying the transitive dependencies property.
Table 1- Supplier Details
(supplier_no ,supplier_name,supplier_city)
Table 2- Product Details
(product_code,product_name)
Table 3- Transaction(Order) Details
(order_no, product_code,supplier_no, order_ quantity, order_amount)
Hence the above three tables are satisfying Transitive dependencies Thus they are in 3NF. | *2NF 3M*

3NF 3M |
| **(b)**

Ans. | **Draw ER diagram of library management system in which library maintain the data of books, borrowers, issue return details, fine collection, supplier of books etc. Assume suitable data and display the relationship among entities.** | **6M** |

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** 22321

			Use of correct entities 2M *Correct symbols 2M* *Correct relationships 2M*
(c)		Consider the relation R with five attributes L, M, N, O, P You are given following dependencies: L $\longrightarrow$ M, MN$\longrightarrow$ P, PO $\longrightarrow$ L (i) List all keys for R. (ii) Is R in 3NF? Justify your answer.	**6M**
	Ans.		
		(i) List all keys for R: Since Right hand side does not have NO, it can be part of the key. So, $(NO)^+ = \{NO\}$ We will try other combinations with NO (LNO)+ ={LNOMP} it is candidate key. (MNO)+={MNOPL} it is candidate key. (PNO)+={PNOLM} it is candidate key . we get Keys as LNO,MNO,PNO. **(ii) IsRin3NF?:** M, P, L are prime attributes, so R(L,M,N,O,P) is in 3NF.	*Listing any 3 keys 3M* *Correct 3NF justification 3M*

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:** 22321

6.		Attempt any TWO of the following:	12
	(a)	**Consider the following schemas:**	**6M**
		(i) Dept (Dept_no, Dept_name, Dept-loc)	
		(ii) Staff (Staff_id, Staff_name, Dept_no, Joint_date)	
		Draw and explain parent-child relationship for above schemas and find out foreign key with justification.	
	Ans.	Parent –Child Relationship Diagram for given Schema is as follows:	
			Diagram 3M
		Fig: Parent Child Relationship diagram	
		Foreign key: Dept_no is Foreign key for table Staff	*Identification of Foreign key 1M*
		Justification:	
		As per above schemas, Dept table is parent table and Staff table is child table.	
		Dept_no is primary key for Dept table.	
		There exist Dept_no as a common attribute in both the tables Dept and Staff.	*, Justification 2M*
		Staff_id is primary key for Staff table.	
		So, Dept_no is foreign key for table Staff.	
	(b)	**Draw enhanced ER diagram for loan payment system. Consider the following entities:**	**6M**
		(i) Loan (Loan_id, Loan_amount, Loan_date)	
		(ii) Payment (payment_id, Payment_date, Balance_amount)	
		(iii) Personal Loan (Personal Loan_no, Interest rate)	
		(iv) Home Loan (Home Loan_no, Interest rate)	
		Show strong entity set, weak entity set, super class and sub class.	
	Ans.		

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:**   **22321**

				Use of correct symbols 2M *Representation of Strong Entity 1M* *Weak Entity 1M* *Super Class 1M* *Subclass 1M*
	(c) **Ans.**	Consider 'Employee' database with appropriate details. Write a procedure to manipulate given database by adding, modifying and deleting records. Let us consider a Schema for Employee table (emp_id,emp_name,emp_addr,emp_salary) **For adding records in table:** We use Insert into command for adding /inserting data into Employee table. *Example:* SQL> Insert into Employee values(101,'Sagar','Sion',25000); **OR** *Example:* SQL> Insert into Employee values(&emp_id,'&emp_name','&emp_addr,'&emp_salary); **For modifying records in table:**		**6M** *Adding procedure 2M* *Modify procedu*

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION
(Autonomous)
(ISO/IEC - 27001 - 2005 Certified)

SUMMER – 2019 EXAMINATION
MODEL ANSWER

Subject: Principles of Database   **Subject Code:**   22321

		We use update command for modifying data of Employee table. *Example***:** SQL> update Employee set salary=30000 where emp_id=3; **For deleting records from table:** We use delete command for deleting data of Employee table. *Example:* SQL>delete from Employee where emp_id=4;	*re 2M* *Delete procedu re 2M*