

TED ((10)	-5063/	4070

(REVISION --- 2010)

Reg. No.	
Signature	

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

DATABASE MANAGEMENT SYSTEMS

[Time: 3 hours

(Maximum marks: 100)

PART -- A

(Maximum marks: 10)

Marks

- I Answer all questions in one or two sentences. Each question carries 2 marks.
 - 1. Name different database languages.
 - 2. What is meant by candidate key?
 - 3. Define Transaction.
 - 4. Expand the term 'SQL'.
 - 5. Write the use of Views.

 $(5 \times 2 = 10)$

PART - B

(Maximum marks: 30)

- II Answer any five of the following questions. Each question carries 6 marks.
 - Mention the application areas of DBMS.
 - Write the functions of storage manager and data dictionary.
 - 3. Differentiate between specialization and generalization.
 - 4. Explain the relational operations union, intersection and minus.
 - 5. Describe how to map entity types in ER model to relational model.
 - Compare 3NF and BCNF.
 - Explain triggers with example.

 $(5 \times 6 = 30)$

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P.T.O.

Marks



TOA	DT	
PA	RT	 •

(Maximum marks: 60)

		(Answer one full question from each unit. Each full question carries 13 marks.)	
		Unit — I	
III	(a)	With diagram explain three schema architecture.	8
	(b)	Name different database users and write their functions.	7
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IV	(a)	Compare two tier and three tier architecture.	8
	(b)	Write the advantages of DBMS.	7
		Unit — II	
V	(a)	Draw ER Diagram notations and specify their use.	8
	(b)	Differentiate between weak entity type and strong entity type with example.	7
		OR	
VI	(a)	Explain any two unary relational operations.	8
	(b)	Explain different type of attributes.	7
		Unit — III	
VII	(a)	Draw the state diagram of transactions and explain its states.	8
	(b)	Explain functional dependency with example.	7
		OR	
VIII	(a)	Explain join dependency and 5NF.	8
	(b)	Explain 4NF with example.	7
		Unit — IV	
IX	(a)	Write DDL commands in SQL with their syntax and example.	8
	(b)	List and explain aggregate functions in SQL.	7
		Or	
X	(a)	Differentiate between embedded SQL and dynamic SQL.	8
	(b)	Write the steps in establishing connection to database using JDBC.	7