Total No. of Questions : 8]

P298

[6003]-377 [Total No. of Pages : 2 T.E. (Electronics/E&T.C.) DATABASE MANAGEMENT (2019 Pattern) (Semester - I) (304183)

Time : 2¹/₂ Hours]

[Max. Marks : 70

SEAT No. :

- Instructions to the candidates:
 - 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8 from following questions.
 - 2) Neat diagram must be drawn wherever necessary.
 - 3) Figures to the right indicate full marks.
 - 4) Assume suitable data, if necessary.

Q1) a)	Explain with example: Aggregate functions, Builtin functions.	[6]
b)	Describe role of Primary key, Foreign key, Uruque key.	[6]
c)	Explain any two transaction control commands.	[6]
1	OR OR	

Q2) a) Explain with example, sub-queries and correlated subqueries. [6]

- b) Explain use of group by, having, order by, join and its types. [6]
- c) How stored procedures, stored functions, database triggers work in SQL, explain with example. [6]
- Q3) a) What is database transaction management? List properties of transaction. [5]
 - b) In database transaction management. What is the role of schedule? Explain serial schedule in details. [6]
 - c) In serializability, explain conflict and view with example. [6]

OR

- Q4) a) Explain with example, recoverable and non recoverable schedules. [6]
 - b) What is need of concurrency control in database management? Explain locking methods and deadlock handling. [6]
 - c) Explain need and role of Time-Stamp based protocols in database management control. [5]

P.T.O.

Q5)	a)	Explain in detail an architecture of a parallel database.	[5]
	b)	Explain multiuser DBMS architecture.	[6]
	c)	With schematic diagram, explain the architecture of Oracle Database	.[6]
		OR	¢.
Q6)	a)	What are performance parameters in parallel database.	[5]
	b)	Explain in detail, types of architectures of parallel databases.	[6]
	c)	Explain virtualization in multicore processor.	[6]
Q7)	a)	What is necessity of distributed database management system? Ware advantages of distributed database.	/hat [6]
	b)	What are types of distributed database? Explain with schematic diagrachitecture of distributed databases.	am, [6]
	c)	With suitable example, explain design of distributed database.	[6]
Q 8)	a)	Explain how data is stored in distributed database.	[6]
	b)	What is distributed transaction? Explain failure modes of distributed transaction.	uted [6]
	c)	Explain in short: Comment protocols and concurrency contro distributed database.	1 in [6]
	6		
(5		
(5	AP. A A A A A A A A A A A A A A A A A A	