Paper / Subject Code: 32426 / Department Optional Course-I: Advance Data Management Technologies

1T01235 - T.E.(Information Technology Engineering)(SEM-V)(Choice Base Credit Grading System) (R- 19) (C Scheme) / 32426 - Department Optional Course-I: Advance Data Management

Technologies QP CODE: 10028404 DATE: 02/06/2023

(3 Hours) [Total Marks: 80]

N.B.:		1. Question no. 1 is compulsory.	
		2. Attempt any Three from out of remaining Five questions.	
		3. Assume suitable data wherever necessary.	
		4. Figures at right indicates full marks.	
0.1		Explain challenges in ETL functions.	5
Q 1	a b	Differentiate between Star and Snowflake Schema	5
	υ	Differentiate between star and showhake schema	3
	0	Explain Query processing in detail.	2
	c d	Write a note on Mandatory Access Control.	6,5
	u	write a note on wandatory Access Control.	5
0.2			
Q 2	a	Explain Discretionary Access Control with grant option.	10
		Explain the concept immediate data extraction and deferred data extraction in data	97
	b h	warehouse with suitable example.	10
	Ü		
		Explain external sort merge algorithm with proper example and required number of	
Q 3	a	block transfer and seek cost.	10
	b	What is big data? Explain in detail types and characteristics of big data.	10
A.			
<i>)</i> `		Draw and Explain Enterprise and federated data warehouse architectures.	
Q 4	a		10
	b	What is mean by Distributed databases? List and explain types of distributed databases.	10
		databases.	
Q 5	a	Consider a data warehouse for weather related data like region, date and temperature.	10
		Using this example analyse the following OLAP operations 1)slice 2)dice 3)rollup 4)drill down 5)pivot.	
		S. A. S.	
	b	Explain in brief the CAP theorem and BASE property of NOSQL with suitable	
	300	diagram	10
	3		
83×		Write Short Note on:	
Q6			
	a	Data loading techniques in data warehouse	10

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Temporal and Spatial Databases

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