University of Mumbai
Examination 2020
Examinations Commencing from 23ʳᵈ December 2020 to 6ᵗʰ January 2021 and from 7ᵗʰ January 2021 to 20ᵗʰ January 2021

Program: **Information Technology**
Curriculum Scheme: Rev 2016
Examination: TE Semester VI
Course Code: ITC503 and Course Name: ADMT

Time: 2 hour   Max. Marks: 80

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Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks	Difficulty Level
1.	Which of the following is a basic form of grant statement?	E
Option A:	GRANT 'privilege list' ON 'relation name or view name' to user/role list	
Option B:	GRANT 'privilege list' ON user/role list to 'relation name or view name'	
Option C:	GRANT 'privilege list' TO 'user/role list'	
Option D:	GRANT 'privilege list' ON 'relation name or view name' ON user/role list	
2.	Which of the following statement is used to remove the privilege from the user U1 and U2?	M
Option A:	Remove update on department from U1,U2	
Option B:	Revoke update on employee from U1,U2	
Option C:	Revoke update on employee from U1	
Option D:	Revoke update on employee from U1	
3.	Which of the following is NOT a valid access control mechanism?	E
Option A:	Discretionary Access Control.	
Option B:	Subjective Access Control.	
Option C:	Mandatory Access Control.	
Option D:	Role Based Access Control.	
4.	'Spatial databases' are also known as	E
Option A:	Geo-databases	
Option B:	Mono-databases	
Option C:	Concurrent databases	
Option D:	Mobile database	
5.	Different types of time available in the Temporal database.	M
Option A:	Valid Time	
Option B:	Transaction Time	
Option C:	Bi-Temporal Time	
Option D:	Valid, Transaction as well as Bi-temporal	
6.	MAC is based on the following multilevel security.	M
Option A:	Top secret and Secret	
Option B:	Secret and Confidential	
Option C:	Confidential, Restricted, and Unclassified	

Option D:	Top secret and Secret, Confidential, Restricted, and Unclassified	
7.	Challenges of Mobile Database are _____	E
Option A:	Disconnection	
Option B:	Low Bandwidth	
Option C:	Disconnection and Low Bandwidth	
Option D:	Neither Disconnection nor Low Bandwidth	
8.	By 'spatial data' we mean data that has	M
Option A:	The values which are Complex	
Option B:	The values which are Positional	
Option C:	The values which are Graphic	
Option D:	The values which are Decimal	
9.	Functional dependency (FD) that holds at a particular point of time is identified as…..	E
Option A:	Interval FD	
Option B:	Temporal FD	
Option C:	Pointer FD	
Option D:	Spatial FD	
10.	A subject S is not allowed read access to an object O unless class(S) ≥ class(O) is known as the	D
Option A:	Snow flax schema property	
Option B:	Star property	
Option C:	Complex Security property	
Option D:	simple security property	
11.	Drawbacks of DAC are as below except the below option number	D
Option A:	Low level of data protection	
Option B:	Obscure	
Option C:	vulnerable to malicious attacks,	
Option D:	User Friendly	
12.	In RBAC the Mutual exclusion of roles can be categorized into ……..	D
Option A:	authorization time exclusion (static)	
Option B:	Both static and dynamic	
Option C:	Runtime exclusion	
Option D:	Neither static Nor dynamic	
13.	Which of the following scenarios may lead to an irrecoverable error in a database system?	
Option A:	A transaction writes a data item after it is read by an uncommitted transaction	
Option B:	A transaction reads a data item after it is read by an uncommitted transaction	
Option C:	A transaction reads a data item after it is written by a committed transaction	
Option D:	A transaction reads a data item after it is written by an uncommitted transaction	

14	Which one of the following is NOT a part of the ACID properties of database transactions?	
Option A:	Atomicity	
Option B:	Consistency	
Option C:	Isolation	
Option D:	Freedom from deadlock	
15	_____ is an essential part of any backup system.	
Option A:	Filter	
Option B:	Recovery	
Option C:	Security	
Option D:	Scalability	
16	Which of the following is not a recovery technique?	
Option A:	Deferred update	
Option B:	Immediate update	
Option C:	Two phase commit	
Option D:	Recovery management	
17	The relationship between DEPARTMENT and EMPLOYEE is a	
Option A:	One-to-one relationship	
Option B:	One-to-many relationship	
Option C:	many-to-one relationship	
Option D:	many-to-many relationship	
18	Which of the following is not a promise of a distributed database?	
Option A:	Network Transparency	
Option B:	Replication Transparency	
Option C:	Fragmentation Transparency	
Option D:	None of the above	
19	Commit and rollback are related to ……….	
Option A:	data integrity	
Option B:	data consistency	
Option C:	data sharing	
Option D:	Data security	
20	The data is stored, retrieved & updated in _____.	
Option A:	OLAP	
Option B:	OLTP	
Option C:	SMTP.	
Option D:	FTP	

Q2	Attempt any 4 out of 6 questions	5 marks each
A	List out characteristics of Temporal Database	
B	Explain Transaction state diagram.	
C	Write a short note on query evaluation plan	
D	List the issues of distributed database and explain any one	
E	Explain roll up, drill down, slice and dice operation on OLAP	
F	What is Deadlock and explain wait-die approach of deadlock prevention.	

Q3.	Attempt any 2 out of 3 questions	10 marks each
A	Difference between Mandatory Access control and Discretionary access control also explain Access control list and access control list with respect to same.	
B	Explain 2 phase commit protocol with example.	
C	Explain significance of Serializability explain conflict and view Serializability with example.	