FIRST SEMESTER FYUGP EXAMINATION NOVEMBER 2024
MAJOR
CSC1CJ102   DATABASE MANAGEMENT SYSTEM

Time : 2 Hrs   **Maximum Marks : 70**

Section A				Ceiling Marks : 24
Answer all questions. Each carries 3 marks.				

No.	Question	M	BL	CO
1.	Define the term database?	3	1	CO1
2.	Justify your answer "File system can't efficiently store and retrieve the data".	3	5	CO1 CO3 CO5
3.	Compare structured and unstructured databases?	3	4	CO1 CO6
4.	Write short note on unstructured database with example?	3	6	CO1 CO5 CO6
5.	Value the importance of normalization in the development of a relational model from an ER diagram?	3	5	CO1 CO2 CO3
6.	Explain the use of IN operator with suitable example?	3	2	CO4
7.	Constrcuct a simple SQL query to retrieve the names of all customer from a customer table?	3	6	CO4
8.	Justify the use of trigger in database system?	3	5	CO4
9.	Compare atomicity consistency ?	3	3	CO5
10.	Formulate a mechanism to ensure that failed transaction are properly rolled back to maintain the atomocity of a database?	3	6	CO5

Section B				Ceiling Marks : 36
Answer all questions. Each question carries 6 marks.				

No.	Question	M	BL	CO
11.	Compare an contrast file system and database system ?	6	4	CO1 CO5
12.	Explain detail about 2NF and 3NF with example?	6	2	CO2 CO3
13.	Demonstrate 3NF and BCNF with example?	6	3	CO2 CO3
14.	Develop a case study that illustrates the process of moving a database from 1NF to 3NF?	6	6	CO2 CO3
15.	Differentiate primary and candidate key with examples?	6	4	CO4
16.	Draw and explain transaction state diagram ?	6	3	CO5
17.	Compare simple locking protocol and two phase locking protocol in transaction?	6	4	CO5
18.	Construct a schedule for a series of transaction in a database system and demonstrate how it ensures serializability?	6	6	CO5

Section c				
Answer any 1 question. Each carries 10 marks. (1X10=10 Marks)				

No.	Question	M	BL	CO
19.	Explain detail about the components of ER model with examples?	10	2	CO3
20.	What is aggregate function? Explain different types with example?	10	1	CO4

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