

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech II Year II Semester Regular & Supplementary Examinations August-2023
DATABASE MANAGEMENT SYSTEMS

(Common to CIC & CCC)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a Define Database. Discuss about applications of Database Systems. CO1 L1 6M
b List out the purpose of Database Systems. CO1 L1 6M

OR

- 2 Explain about ER model and Component of ER Diagram. CO1 L4 12M

UNIT-II

- 3 a Identify relational database query. CO2 L2 6M
b Distinguish GROUP by and HAVING clauses with examples. CO2 L5 6M

OR

- 4 a Distinguish between two set theoretic operations of relational algebra with an example. CO2 L2 6M
b Create a sub query to establish the WHERE, ANY, AS and ALL sub queries with example. CO2 L6 6M

UNIT-III

- 5 Explain in detail about 1NF, 2NF, 3NF and BCNF with example. CO3 L6 12M

OR

- 6 a Consider the schema: R (A, B, C, G, H, I) and the set of FD's (A → B, A → C, CG → H, CG → I, B → H). Prove the members of F+: A → H, CG → HI, AG → I with axioms is true. CO3 L3 6M
b Consider the relation scheme R = {E, F, G, H, I, J, K, L, M, N} and the set of functional dependencies {{E, F} → {G}, {F} → {I, J}, {E, H} → {K, L}, K → {M}, L → {N}} on R. What is the key for R? CO3 L5 6M

UNIT-IV

- 7 a Define a Transaction. List the properties of transaction. CO4 L1 6M
b Write briefly about serializability with example. CO4 L3 6M

OR

- 8 Explain ACID properties and illustrate them through examples. CO4 L4 12M

UNIT-V

- 9 a Discuss how do you recover from failure. CO5 L6 6M
b Explain about the deadlock prevention schemes. CO5 L2 6M

OR

- 10 a What are the factors to be taken into account when choosing a RAID level? CO5 L1 6M
b Distinguish between fixed length records and variable length records. CO5 L2 6M

*** END ***

THE UNIVERSITY OF CHICAGO

PH.D. PROGRAM

DEPARTMENT OF CHEMISTRY

Year	Grade	Course	Notes
1954	A	PHYSICAL CHEMISTRY I	
1954	A	PHYSICAL CHEMISTRY II	
1954	A	PHYSICAL CHEMISTRY III	
1954	A	PHYSICAL CHEMISTRY IV	
1954	A	PHYSICAL CHEMISTRY V	
1954	A	PHYSICAL CHEMISTRY VI	
1954	A	PHYSICAL CHEMISTRY VII	
1954	A	PHYSICAL CHEMISTRY VIII	
1954	A	PHYSICAL CHEMISTRY IX	
1954	A	PHYSICAL CHEMISTRY X	
1954	A	PHYSICAL CHEMISTRY XI	
1954	A	PHYSICAL CHEMISTRY XII	
1954	A	PHYSICAL CHEMISTRY XIII	
1954	A	PHYSICAL CHEMISTRY XIV	
1954	A	PHYSICAL CHEMISTRY XV	
1954	A	PHYSICAL CHEMISTRY XVI	
1954	A	PHYSICAL CHEMISTRY XVII	
1954	A	PHYSICAL CHEMISTRY XVIII	
1954	A	PHYSICAL CHEMISTRY XIX	
1954	A	PHYSICAL CHEMISTRY XX	
1954	A	PHYSICAL CHEMISTRY XXI	
1954	A	PHYSICAL CHEMISTRY XXII	
1954	A	PHYSICAL CHEMISTRY XXIII	
1954	A	PHYSICAL CHEMISTRY XXIV	
1954	A	PHYSICAL CHEMISTRY XXV	
1954	A	PHYSICAL CHEMISTRY XXVI	
1954	A	PHYSICAL CHEMISTRY XXVII	
1954	A	PHYSICAL CHEMISTRY XXVIII	
1954	A	PHYSICAL CHEMISTRY XXIX	
1954	A	PHYSICAL CHEMISTRY XXX	