

Name:  
Enrolment no:

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2021**

**Course: Data Management**  
**Program: BBA (A&BD)**  
**Course Code: CSEG2019**

**Semester: III**  
**Time: 03 hrs.**  
**Max. Marks: 100**

**SECTION A**

*Each question carries 2 marks*

**[Type the answers in TEXT BOX. DO NOT WRITE IN COPIES]**

S. No.	Question	CO
Q 1	What is the full form of DBMS? a) Data of Binary Management System b) Database Management Service c) Data Backup Management System d) Database Management System	CO1
Q 2	What is information about data called? a) Hyper data b) Tera data c) Meta data d) Relations	CO1
Q 3	An attribute consisting of first name, middle name, and last name. This type of attribute is called a) Simple attribute b) Composite attribute c) Multivalued attribute d) Derived attribute	CO2
Q 4	Full form of ERD is a) Entity Relationship Database b) Entry Relationship Diagram c) Entity Relationship Diagram d) Entry Relationship Database	CO2
Q 5	The correct process of Data Mining is: a) Infrastructure, Exploration, Analysis, Interpretation, Exploitation b) Exploration, Infrastructure, Analysis, Interpretation, Exploitation c) Exploration, Infrastructure, Interpretation, Analysis, Exploitation d) Exploration, Infrastructure, Analysis, Exploitation, Interpretation	CO3
Q 6	Full form of KDD in data mining is a) Knowledge Discovery Data b) Knowledge Data definition c) Knowledge data house d) Knowledge Discovery Database	CO3
Q 7	In Second normal form (2NF), following is true for a relation/table: a) Eliminate all hidden dependencies b) Eliminate the possibility of a insertion anomalies c) Have a composite key d) Have all non key fields depend on the whole primary key	CO4
Q 8	Which Normal forms are based on the concept of functional dependency a) 4NF b) 3NF c) 2NF d) 5NF	CO4

Q 9	To remove a relation from an SQL, use _____ command a) Remove b) Drop table c) Delete d) Purge	CO5
Q 10	DBMS running across multiple processors is called as a) Distributed systems b) Parallel systems c) Centralized systems d) None of the above	CO5
<b>SECTION B</b> <i>Each question carries 5 marks</i> <b>[Write brief answers in your copies, SCAN AND UPLOAD.]</b>		
Q 1	Classify different levels of abstraction in the DBMS.	CO1
Q 2	Differentiate between Primary key and Foreign Key.	CO2
Q 3	State the purpose of normalization in DBMS.	CO4
Q 4	Distinguish between DROP, TRUNCATE and DELETE commands.	CO5
<b>Section C</b> <i>Each question carries 10 Marks.</i> <b>[Write answers in your copies, SCAN AND UPLOAD.]</b>		
Q 1	Elaborate different ACID properties in DBMS.	CO1
Q 2	Define normalization. Explain all normal forms with suitable examples.	CO4
Q 3	Discuss Selection, projection and join operators of relational algebra with suitable examples.  <b>OR</b> List any two DDL commands in SQL with syntax and appropriate examples.	CO5
<b>Section D</b> <i>Each question carries 15 Marks.</i> <b>[Write long answers in your copies, SCAN AND UPLOAD.]</b>		
Q 1	<b>Draw the E-R diagram</b> for the Online bookstore. It has following entities and attributes: i. Author(name, address) ii. Publisher(name, address, phone) iii. Books(title, year, price, ISBN) iv. Supplier(name, address)  The entities have following relations: <ul style="list-style-type: none"> <li>• Books are written by authors</li> <li>• Books are published by publishers</li> <li>• Supplier supply books</li> </ul> <b>Draw the E-R diagram, which models the above online bookstore.</b>	CO2
Q 2	Consider the following relation schema Works (Pname,Cname,salary) LivesIn(Pname,Street,City) locatedIn (Cname, city) Write the SQL queries for the following i. Find the names of all persons who live in the city Bangalore. ii. Retrieve the names of all person of "Infosys" whose salary is less than Rs. 50000 iii. Find the names of all persons who lives and work in the same city <b>OR</b> Write SQL syntax for <b>SELECT, ALTER &amp; UPDATE</b> using suitable examples.	CO5