


Name:			
Enrolment No:			
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>End Semester Examination, December 2023</b> <b>Course: B.Tech (CSE-H+NH)-All</b> <span style="float: right;"><b>Semester: VII</b></span> <b>Program: Banking &amp; Insurance Technology - Application Architecture, Database &amp; Structures</b> <b>Time : 03 hrs.</b> <b>Course Code: CSBI4011P</b> <span style="float: right;"><b>Max. Marks: 100</b></span>			
<b>Instructions:</b>			
<b>SECTION A</b> <b>(5Qx4M=20Marks)</b> <u><b>Note: All 5 questions are compulsory. Each question of Section A carries 4 marks.</b></u>			
S. No.		Marks	CO
Q 1	Discuss the components and characteristics of DBMS.	4	CO1
Q 2	Describe importance of data archiving and backup.	4	CO1
Q 3	Explain data protection law in India.	4	CO1
Q 4	Discuss the challenges of a Core banking Solution and how it can be resolved?	4	CO2
Q 5	Write down data protection principles.	4	CO4
<b>SECTION B</b> <b>(4Qx10M= 40 Marks)</b> <u><b>Note: Answer all the questions. Each question of section B carries 10 marks.</b></u>			
Q 6	Explain the importance of data modelling in core banking solutions. How it is useful to expand the banking business?	7+3=10	CO3
Q 7	Explain architecture of Core banking Enterprise System view and its components with diagram.	10	CO2
Q 8	List the Master Data Management (MDM) and its different types.	10	CO5
Q 9	Illustrate key technologies involved in storing big data. What is the legal requirements of data storage?  OR Define Data Model and its usage. List down the types of data models.	10	CO3  CO4
<b>SECTION-C</b> <b>(2Qx20M=40 Marks)</b>			
Q 10	Describe IBM SPSS predictive analytics functionality and components with diagram.	20	CO5

Q 11	<p>Draw and describe the Core Banking Solution with various components that make the system complete and effective. (20)</p> <p style="text-align: center;"><b>OR</b></p> <p>Discuss and differentiate: (5x4M)</p> <ul style="list-style-type: none"><li>i) Real-time database Systems performance Evaluation and Web-Database Systems performance Evaluation</li><li>ii) ER Model and Data Model</li><li>iii) Meta data and Reference data</li><li>iv) Structured and Unstructured Data</li></ul>	<b>20</b>	<b>CO4, CO3, CO5</b>