University of Petroleum and Energy Studies
End Semester Examination, May 2023
Course: Data Warehousing & Multidimensional Modeling
Semester: 4th
Program: BTech   **Time: 03 hrs.**
Course Code: CSBA2011   **Max. Marks: 100**

Instructions: There are three sections. Attempt all questions.

Q. No.	Question	Marks	CO
	SECTION A		
1	Compare Roll up, Drill down, Slice and Dice operations	4	2
2	Discuss Dimension-Oriented Design techniques in an R-OLAP systems	4	3
3	Discuss cubing services performance and scalability.	4	2
4	Discuss various types of OLAP servers.	4	1
5	Explain the different components of a data warehouse architecture.	4	1
	SECTION B		
6	How would you differentiate between warehousing model and online transaction processing model?	10	1

7	Describe the following:
	   a) MOLAP characteristics
	   b) Sparse and Dense Dimensions
		10	4

8	Explain R-OLAP systems.	10	3
9	"A data warehouse can be modelled by either a star or a snowflake schema". With relevant examples discuss the two types of schemas	10	2
	SECTION-C		
10	Explain the need of requirement analysis in data warehousing	20	2
11	Explain in your own words the requirement of data warehousing.	20	1