Name:

**Enrolment No:** 



#### UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2019

**Course: Business Intelligence** 

**Program:** BTech – CS (ECRA/BFSI)

Course Code: CSIB 383

Semester: VIII

Time 03 hrs.

Max. Marks: 100

## Instructions: All questions are compulsory. Options are given for questions 9 and 11.

	SECTION A		
S. No.		Marks	CO
Q 1	List the functional areas of Business Intelligence tool.	4	CO1
Q 2	Explain the role of BI in healthcare industry	4	CO2
Q 3	What is decision support system? What are its three tiers?	4	CO3
Q 4	Explain the cloud computing architecture and services.	4	CO1
Q 5	Differentiate between OLAP and OLTP.	4	CO1
	SECTION B	•	
Q 6	Dealing with BI solution architecture, you are asked to create an architecture of UPES. Explain how Centralized and Decentralized architecture will differ	10	CO2
Q 7	Explain in detail the extract/transform/load (ETL) design of an automated warehouse	10	CO4
	hierarchies on dimensions(b):  Store Store10  Store01  Water Type Brand City Month Season Sales_area  Family Province Semester  Family Province Semester  Group State Year  (a)	10	CO3
Q 9	Explain how cross tabulation can help to deal with the different hierarchies?  Explain the following terms with an example:  (a) SAAS  (b) IAAS  (c) PAAS	10	CO1

	OR			
	Discuss the conceptual modeling and design process of data warehouses.			
	SECTION-C			
Q 10	Explain Dashboard and its types. Write the steps to create a dashboard and dashboard design principles with the help of example.	20	CO5	
Q 11	Describe the process of building reports and different reporting styles.			
	OR Explain Kaplan-Norton Balanced Scorecard and Rayport-Jaworski Performance Dashboard and Strategy Framework.	20	CO4	

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#### **SECTION A** S. No. Marks CO Explain the role of BI in healthcare industry. O 1 4 **CO1** Q 2 Differentiate between OLAP and OLTP. 4 **CO1** What are the business functional requirements and also draw the BI logical diagram. Q 3 4 CO<sub>3</sub> O 4 Explain the concept of Metrics in detail. 4 CO<sub>4</sub> Q 5 Consider the following data cube: supplies PAPER PEN PENCIL RUBBER SCISSOR location RESTAURANT 7 29 14 5 HIGH SCHOOL 4 **CO1** 17 19 22 COLLEGE time 14 178 30 10 16 OFFICE QUARTER 4 QUARTER 3 STORE 25 305 26 21 QUARTER 2 OUARTER 1 What do you understand from it? (dimensions, attributes, measures)

#### **SECTION B**

Q 6	Explain the data mining techniques used in neural networks with special reference to decision trees.	10	CO2
Q 7	Discuss the conceptual modeling and design process of data warehouses.	10	CO1
Q 8	Describe the process of building charts for Dashboards.	10	CO4
Q 9	Explain the role of Business Intelligence in formulating the corporate strategy of the	10	CO3

	OR Describe how to design and plan a BI system.		
	SECTION-C		•
Q 10	The steps are required to plan a BI project are given in the figure below.  The company that you are working for is a News reporting company dealing with a project on 2019 election prediction and survey. How are you going forward to implement a BI project?  Determine Project Requirements  Determine or revise & databases  Determine or revise cost estimates  Revise risk assessment  Identify critical success factors  Prepare project charter  Create high-level project plan  Kick-off project	20	CO4
Q 11	Explain Dashboard and its types. Write the steps to create a dashboard and dashboard design principles with the help of example.  OR  Dealing with a BI solution architecture, you are asked to create an architecture of UPES. Explain how Centralized and Decentralized architecture will differ. Explain other alternative architectures. How can you expand UPES BI potential?	20	CO5