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UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2017

Program: B. Tech. (CSE) with Specialization in IT Infrastructure	Semester – VII
Subject (Course): Business Intelligence	Max. Marks : 100
Course Code : CSIB383	Duration : 3 Hrs
No. of page/s: 03	

Section A - 20 marks   (5 X 4 Marks)

Q1. Explain Authentication, Authorization, Access Permissions, Group and roles.

Q2. What is the significance of requirement gathering techniques in BI project? Explain.

Q3. Project planning is not a one-time activity. Explain with proper justification.

Q4. Explain Drill-up and Drill-down capabilities.

Q5. How you can expend BI potential? Explain.

Section B - 40 marks   (5 X 8 Marks)

Q6. What is risk management and mitigation? What are different major variables of risk assessment? Explain each variable in detail.

Q7. What do understand by project scheduling? Explain the different project planning activities with proper diagram.

Q8. Differentiate between relational and dimensional reporting style. Explain the best practices for both reporting styles.

Q9. What is an enterprise performance management? Explain OLAP techniques and its implementation.

Q10. ABC Corporation is interested in implementing a BI application to serve as its enterprise-wide, ad-hoc query and reporting tool. However, the project sponsor and the senior

management want to know what the ROI would be on the BI project because it will be a tremendous undertaking. ABC Corporation's current reporting environment requires 1200 hours/month of support. Replacing the current reporting environment with a BI application will incur the following expenses.

Expenses	
Hardware	$250,000
Software	$400,000
Labor	$750,000
Total	$1,400,000

Assumption

Proposed duration of the BI project is one year.

Ongoing support of the ABC, BI environment requires the following resources.

Position	% Time
2 BI Operational Support	100
1 Database Administrator	10
1 System Administrator	10
1 Network Administrator	8
1 Trainer	25

- BI software maintenance cost is 10% per year.

- The number of work hours for individual per year is 2000

- The average hourly labor rate is estimated at $75

- ABC's investment yield is 9%

- Three years time horizon for ROI calculation

Section C - 40 marks   (2 X 20 Marks)

Q11. What is the difference between centralized and decentralized architecture? Explain the organizational culture and structure. Discuss different types of architectural alternatives. How do you examine the costs for each alternative?

Q12. (a) Depict and explain each stage of business intelligence project.

(b) Draw and explain each phase of Kimball lifecycle diagram of BI project.