

Roll No: -----



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, April 2018

**Program:** B. Tech CSE (BFSI)  
**Subject (Course):** Analytics in Banking Industry  
**Course Code :** CSIB424  
**No. of page/s:** 3

**Semester –** VIII  
**Max. Marks** : 100  
**Duration** : 3 Hrs

**Section A (This section has 5 questions attempt all)**  
**(Q1.1 to 2.4 each sub question is objective and carry 1 mark each)**

<p><b>1.1</b> What are the four stages of ASUG BI Maturity Model? <b>a)</b> Dictatorship, Anarchy, Democracy and Collaboration <b>b)</b> Infant, Child, Young adult and Adult <b>c)</b> Analytical, Consultative, Experimental and Strategic <b>d)</b> Informative, Elaborative, Exhaustive and Innovative</p>	<p><b>1.2</b> Which following documents are to be included in the BI Vision document ? <b>a)</b> Logical Data Architecture and Logical Technology Architecture <b>b)</b> Logical BI Architecture and Logical Infrastructure Architecture <b>c)</b> b only <b>d)</b> a &amp; b both</p>
<p><b>1.3</b> Proof of Concept includes which of the following? <b>a)</b> Creating Logical System design and database design <b>b)</b> Creating Logical database design and data models <b>c)</b> Creating Logical System design, database design and data models <b>d)</b> Creating Logical System design and data models</p>	<p><b>1.4</b> What are the two types of BI reports? <b>a)</b> Development intelligence report and Report documents. <b>b)</b> Development documents and analytical documents <b>c)</b> Analytical reports and Operational reports <b>d)</b> Intelligence reports and Operational reports</p>
<p><b>2.1</b> Which of the following are Chart types? <b>a)</b> PDF, Excel and Line charts <b>b)</b> Line, Images and Area charts <b>c)</b> Columns/Bar, Line and Scatter/Bubble <b>d)</b> Pie/Doughnut, Area and Images</p>	<p><b>2.2</b> R-J performance score card defines articulating business strategy as - <b>a)</b> Customer Sales, Customer Feedback and Customer acquisition <b>b)</b> Business model, implementation and evaluation <b>c)</b> Market opportunity assessment, market capturing and market making <b>d)</b> Implementation, Change management and customer feedback</p>

<p><b>2.3</b> What are typical two types of organizational culture?</p> <p>a) Autocratic entrepreneurial  b) Autocratic and democratic  c) Innovative and entrepreneurial  d) Automatic and entrepreneurial</p>	<p><b>2.4</b> Two types of BI expanded analytics are</p> <p>a) Descriptive analytics and text mining  b) Text and image analytics  c) Predictive and descriptive  d) Predictive analytics and text mining</p>
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**True or False:**

- 3.1.** BI design is all about knowing about your customers. True/False (1 Marks)
- 3.2.** Business intelligence values are obtained without the help and management of key Stakeholders. True/False (1 Marks)
- 3.3.** A fact table typically has two types of columns: those that contain facts, and those that are foreign keys to dimension tables True/False (1 Marks)
- 3.4.** A vertical bar chart is sometimes called a column bar chart.. True/False (1 Marks)
- 4.1.** The basis of Business Intelligence is not data. True/False (1 Marks)
- 4.2.** A Scatter (XY) Plot has points that show the relationship between two sets of data. True/False (1 Marks)
- 4.3.** Authentication defines the level of access that the user has to the functionality and content. True/False (1 Marks)
- 4.4.** Sizing a BI deployment requires a reasonable degree of planning. True/False (1 Marks)
- 5.1.** Radar Chart shows plotting multi-dimensional sets of data using several axis, e.g. compare different aspects of stock like price, volume, price to earning ratio, etc. True/False (1 Marks)
- 5.2.** A scorecard is a specific dashboard including Key Performance Indicators (KPIs), usually used on an operational level. True/False (1 Marks)
- 5.3.** Alerts are Used to call the attention of the user to a specific item that has reached a predefined limit. True/False (1 Marks)
- 5.4.** Multi-dimensional data cubes is built by taking data from all the similar businesses in the market. True/False (1 Marks)

**Section B**

**(Question 6, 7 and 8 are compulsory. Attempt any one question 9 OR 10)**

**Fill in the blanks: (8 X 1.25 marks=10 Marks)**

- 6.1. Engagement process begins with \_\_\_\_ meetings and initial \_\_\_\_\_ with the customer
- 6.2. The BI framework combines data control, \_\_\_\_\_, \_\_\_\_\_, statistics integration, facts quality, end person data delivery, information security, etc.
- 6.3. \_\_\_\_\_ is a conceptual, abstract design
- 6.4. The most commonly used diagram representing the project schedule is a \_\_\_\_ chart or \_\_\_\_\_ chart.
- 6.5. \_\_\_\_\_ are parameters or measures of quantitative assessment used for measurement, comparison or to track performance or production.
- 6.6. Scorecards are designed to measure progress towards meeting \_\_\_\_\_, dashboards are only designed for \_\_\_\_\_ of specific activities.
- 6.7. In a \_\_\_\_\_, the arc length of each slice (and consequently its central angle and area), is proportional to \_\_\_\_\_ it represents.

6.8. Data series is a collection of related data points \_\_\_\_\_ and \_\_\_\_\_ as a graph.

7.1 Explain five key areas of strategy? **(5 Marks)**

7.2 Illustrate about POC. **(5 Marks)**

8. Define Metrics. Branding and implementation metrics focus on? **(10 marks)**

9. Draw and discuss Report authoring task flow **(10 Marks)**

OR

10.1 Centralized verses decentralized BI architecture. **(5 Marks)**

10.2 Describe important points in BI related to Authentication, authorization and access permissions? **(5 Marks)**

### **Section C**

**(Attempt both questions in section C )**

11.1 Draw and discuss Kaplan-Norton balanced scorecard. **(12 Marks)**

**Answer one out of 11.2&11.3:**

11.2 Analyze limitations to the K-N balanced scorecard.

OR

11.3 List the elements which are common to any graph. **(8 Marks)**

12. Draw ASUG business intelligence maturity model. **(20 Marks)**

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## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, April 2018

<b>Program:</b>	B. Tech CSE (BFSI)	<b>Semester –</b>	<b>VIII</b>
<b>Subject (Course):</b>	Analytics in Banking Industry	<b>Max. Marks</b>	<b>: 100</b>
<b>Course Code</b>	<b>: CSIB424</b>	<b>Duration</b>	<b>: 3 Hrs</b>
<b>No. of page/s:</b>	<b>3</b>		

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**Section A (This section has 5 questions attempt all)**

**(Q1.1 to 5.4 each sub question carry 1 mark each)**

**Fill in the blanks:**

- 1.1. Engagement process begins with \_\_\_\_ meetings and initial \_\_\_\_\_ with the customer
- 1.2. The BI framework combines data control, \_\_\_\_\_, \_\_\_\_\_, statistics integration, facts quality, end person data delivery, information security, etc.
- 1.3. \_\_\_\_\_ is a conceptual, abstract design
- 1.4. The most commonly used diagram representing the project schedule is a \_\_\_\_ chart or \_\_\_\_\_ chart.
- 2.1. \_\_\_\_\_ are parameters or measures of quantitative assessment used for measurement, comparison or to track performance or production.
- 2.2. Scorecards are designed to measure progress towards meeting \_\_\_\_\_, dashboards are only designed for \_\_\_\_\_ of specific activities.
- 2.3. In a \_\_\_\_\_, the arc length of each slice (and consequently its central angle and area), is proportional to \_\_\_\_\_ it represents.
- 2.4. Data series is a collection of related data points \_\_\_\_\_ and \_\_\_\_\_ as a graph.

**True or False:**

- 3.1. BI design is all about knowing about your customers. True/False **(1 Marks)**
- 3.2. Business intelligence values are obtained without the help and management of key Stakeholders. True/False **(1 Marks)**
- 3.3. A fact table typically has two types of columns: those that contain facts, and those that are foreign keys to dimension tables True/False **(1 Marks)**
- 3.4. A vertical bar chart is sometimes called a column bar chart.. True/False **(1 Marks)**
  
- 4.1. The basis of Business Intelligence is not data. True/False **(1 Marks)**
- 4.2. A Scatter (XY) Plot has points that show the relationship between two sets of data. True/False **(1 Marks)**
- 4.3. Authentication defines the level of access that the user has to the functionality and content. True/False **(1 Marks)**
- 4.4. Sizing a BI deployment requires a reasonable degree of planning. True/False **(1 Marks)**

**5.1.** Radar Chart shows plotting multi-dimensional sets of data using several axis, e.g. compare different aspects of stock like price, volume, price to earning ratio, etc. True/False  
(1 Marks)

**5.2.** A scorecard is a specific dashboard including Key Performance Indicators (KPIs), usually used on an operational level. True/False  
(1 Marks)

**5.3.** Alerts are Used to call the attention of the user to a specific item that has reached a predefined limit. True/False  
(1 Marks)

**5.4.** Multi-dimensional data cubes is built by taking data from all the similar businesses in the market. True/False  
(1 Marks)

**Section B**

**(Q6 to 8 are compulsory and attempt one question out of 9 &10)**

<p><b>6.1</b> What are the four stages of ASUG BI Maturity Model?  <b>a)</b> Dictatorship, Anarchy, Democracy and Collaboration  <b>b)</b> Infant, Child, Young adult and Adult  <b>c)</b> Analytical, Consultative, Experimental and Strategic  <b>d)</b> Informative, Elaborative, Exhaustive and Innovative</p>	<p><b>6.2</b> Which following documents are to be included in the BI Vision document ?  <b>a)</b> Logical Data Architecture and Logical Technology Architecture  <b>b)</b> Logical BI Architecture and Logical Infrastructure Architecture  <b>c)</b> b only  <b>d)</b> a &amp; b both</p>
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<p><b>6.5</b> Which of the following are Chart types?  <b>a)</b> PDF, Excel and Line charts  <b>b)</b> Line, Images and Area charts  <b>c)</b> Columns/Bar, Line and Scatter/Bubble  <b>d)</b> Pie/Doughnut, Area and Images</p>	<p><b>6.6</b> R-J performance score card defines articulating business strategy as -  <b>a)</b> Customer Sales, Customer Feedback and Customer acquisition  <b>b)</b> Business model, implementation and evaluation  <b>c)</b> Market opportunity assessment, market capturing and market making  <b>d)</b> Implementation, Change management and customer feedback</p>
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<b>d) Automatic and entrepreneurial</b>	
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**(8X1.25=10 marks)**

7. Explain and show diagrammatically any three:

List report, Crosstab report, Chart report, Map report.

**(10 Marks)**

8. Explain seven types of Chart types. Also give example images.

**(10 Marks)**

9. Draw and discuss Report authoring task flow

**(10 Marks)**

OR

10 List the elements which are common to any graph. Explain Drilling in report.

**(10 Marks)**

### Section C

**(Question 11 and 12.1 are compulsory. Out of 12.2 &12.3 attempt only one question)**

11. Draw ASUG business intelligence maturity model.

**(20 Marks)**

12.1 Discuss and diagrammatically show Rayport-Jaworski performance dashboard and strategy framework.

**(12 Marks)**

12.2 Also List Six critical steps.

OR

12.3 Define Metrics. Branding and implementation metrics focus on?

**(8 Marks)**