

<b>Name:</b>	
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2018**

**Course: Descriptive Analytics for Manufacturing Informatics**  
**Program: B.Tech MI –**  
**Time: 03 hrs.**

**Semester: VII**  
**CSEG475**  
**Max. Marks: 100**

**SECTION A**

S. No.		Marks	CO
Q 1	Differentiate between Business Analyst and Data Scientist.	4	CO3
Q 2	Outline important characteristics of data warehouse.	4	CO2
Q 3	Explain in brief the following terms (i) ERP (ii) ROLAP	4	CO2,3
Q 4	Discuss three kinds of data warehouse applications	4	CO2
Q 5	Distinguish between Complex Operations and Volume operations.	4	CO5

**SECTION B**

Q 6	Illustrate various chart types along with their use.	10	CO3
Q 7	What is dashboard? Explain different types of dashboard <b>OR</b> Explain in detail classic star schema.	10	CO2
Q 8	Identify the Followings  a) Three types of Analytics are [2] b) Four important characteristics of data warehouse are [3] c) Three conceptual models of data warehouse are [2] d) Four different chart types used in report [3]	10	CO1
Q 9	Differentiate between OLAP and OLTP with example.	10	CO4

**SECTION-C**

Q 10	a) Discuss how metrics drive behavior in an organization(10) b) Explain 3 Tier Data warehouse Architecture(10)	20	CO1,4
Q 11	a) What is KN Balanced scorecard used for? Also discuss its limitations (15) b) Categories three types of Decisions taken in an organization (5) <b>OR</b>	20	CO5,3
	a) What are Gestalt Principles of visual perception to dashboards? (15) b) Differentiate between Business Analyst and Data Scientist(5)		CO5,3

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**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, Decemeber 2018**

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**Program: B.Tech MI**  
**Time: 03 hrs.**

**Semester: VII**  
**CSEG475**  
**Max. Marks: 100**

**SECTION A**

S. No.		Marks	CO
Q 1	What are the three conceptual models of data warehouse	4	CO3
Q 2	List important characteristics of data warehouse.	4	CO2
Q 3	Explain the terms (i) ETL (ii) MOLAP	4	CO2,3
Q 4	Briefly explain three kinds of data warehouse applications	4	CO2
Q 5	What are the business challenges for communication service providers	4	CO5

**SECTION B**

Q 6	Explain various chart types along with their use.	10	CO3												
Q 7	What is dashboard? Explain different types of dashboard	10	CO2												
Q 8	Categories the following examples with best suitable decision categories in which the fall. <table border="1" style="width: 100%; margin-top: 5px;"> <thead> <tr> <th>EXAMPLE</th> <th>DECISION CATEGORY</th> </tr> </thead> <tbody> <tr> <td>1. Capital Investment in new Equipment</td> <td>A. Operational Decisions</td> </tr> <tr> <td>2. Production Planning</td> <td>B. Tactical Planning Decisions</td> </tr> <tr> <td>3. Staffing</td> <td>C. Strategic Decisions</td> </tr> <tr> <td>4. Fleet Sizing</td> <td></td> </tr> <tr> <td>5. Marketing Campaign Planning</td> <td></td> </tr> </tbody> </table>	EXAMPLE	DECISION CATEGORY	1. Capital Investment in new Equipment	A. Operational Decisions	2. Production Planning	B. Tactical Planning Decisions	3. Staffing	C. Strategic Decisions	4. Fleet Sizing		5. Marketing Campaign Planning		10	CO1
EXAMPLE	DECISION CATEGORY														
1. Capital Investment in new Equipment	A. Operational Decisions														
2. Production Planning	B. Tactical Planning Decisions														
3. Staffing	C. Strategic Decisions														
4. Fleet Sizing															
5. Marketing Campaign Planning															
Q 9	“Fact based decision making culture is important for an organization”. Comment <b>OR</b> Explain Star Schema in detail	10	CO4												

**SECTION-C**

Q 10	What are Gestalt Principles of visual perception to dashboards? (10) Explain 3 Tier Data warehouse Architecture(10) <b>OR</b> Discuss how metrics drive behavior in an organization(10) Explain the importance of analyzing multiple data types in Manufacturing Informatics industry (10)	20	CO1,4
Q 11	a) What is KN Balanced scorecard used for? Also discuss its limitations (15) b) Differentiate between Business Analyst and Data Scientist (5)	20	CO5,3

