Name:

**Enrolment No:** 



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

**Course: Data Environment Programme: MBA Business Analytics Time: 03 hrs.**  Semester: I CC:DSBA7002 Max. Marks: 100

**Instructions:** 

The Question Paper has THREE (3) sections. Instructions and marks allocated for each is provided with the Section headings.

## Be concise and to the point. Using schematic diagrams wherever possible will enrich your response.

SECTION A	<b>SEC</b> <sup>7</sup>	<b>TION</b>	<b>I</b> A
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		Marks	CO
Q. 1	There are <b>10 MCQs</b> in this section. All questions are <b>compulsory</b> . Each question	20	CO 1
	carries 2 marks.		CO 1
i)	Information is		
	a) Data		
	b) Processed Data		
	c) Manipulated input		
	d) Computer output		
ii)	Data by itself is not useful unless		
	a) It is massive		
	b) It is processed to obtain information		
	c) It is collected from diverse sources		
	d) It is properly stated		
iii)	For taking decisions data must be		
	a) Very accurate		
	b) Massive		
	c) Processed correctly		
	d) Collected from diverse sources		
iv)	Arranging customers names in ascending order is an example of		
	a) Process management		
	b) Information processing		
	c) Process		
	d) Information		
v)	Any fact and knowledge item that can be expressed in numbers and words is called		

	a) processing	
	b) information	
	c) facts	
	d) organization	
vi)	Organization, distribution and manipulation of information is classified as	
	a) data	
	b) process	
	c) information	
	d) information processing	
vii)	Equipment and programs used to process raw data into information are called	
	a) information	
	b) information technology	
	c) information processes	
	d) raw data	
viii)	What is the first step you should take in managing data for a firm?	
ŕ	a) Identify the data needed to run the business	
	b) Cleanse the data before importing it to any database	
	c) Normalize the data before importing to a database	
	d) Audit your data quality	 
ix)	The smallest unit of data a computer can handle is called a:	
	a) file	
	<ul><li>b) byte</li><li>c) field</li></ul>	
	d) bit	
x)	Data mining is a tool for allowing users to:	
/	a) quickly compare transaction data gathered over many years	
	b) perform multidimensional data analysis	
	c) find hidden relationships in data	
	d) summarize massive amounts of data into much smaller, traditional	
	reports	

	SECTION B		
	There are <b>4 Questions</b> in this section. Attempt any <b>two</b> (2). Each question carries <b>20</b> marks.	2 x 20 = 40	CO 2
Q. 2	A market survey asked 46 questions about consumer characteristics and interests. State whether each of the following questions provides categorical or quantitative data:		
	<ul> <li>i. Age</li> <li>ii. Gender</li> <li>iii. When did you first start reading the newspaper? School, college, early career, midcareer, late career, or retirement?</li> <li>iv. How long have you been in your present job or position?</li> <li>v. What type of vehicle are you considering for your next purchase? Six response categories include sedan, hatch back, SUV, minivan, and so on.</li> </ul>		
Q. 3	A small manufacturing company would like to develop a database that keeps track of the vendor contracts that suppliers sign with the company. What kind of data do you anticipate for this database? Identify at least seven variables. Which of these variables might be in use in other databases within the firm?		
Q. 4	A University wants to create a new database for storing information about students marks obtained in examinations. What difficulties do you anticipate?		
Q. 5	Describe the possible effects of proceeding directly to mine data that has not been preprocessed.		
	SECTION-C		
Q. 6	The section is compulsory. There is a situation presented in this section followed by a question. You are required to understand the situation and answer the question. This section carries 40 marks.	40	CO 3
	1. There are two alternate roads I take to hit the main road from my home. Average speed on each of the road comes out around 30 km/hr. Let us call the two roads, as road A and road B. Total distance one needs to travel on road A and road B is 1 km and 1.3 km respectively to hit the same point on the main road. Note that, before the two roads split, I see a signal (say Z), which is common to both the roads and hence does not come in this calculation. See figure for clarifications.		
	<ul><li>a) What are the possible factors, I should consider coming up with the total time taken on each road?</li><li>b) Which road should one take to reach the main road to minimize the time taken? And what is the difference in total time taken by the two alternate routes?</li></ul>		

