

Name:

Enrolment No:



**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination, December 2018**

**Course: Data Environment**

**Programme: MBA Business Analytics**

**Time: 03 hrs.**

**Semester: I**

**Course Code: DSBA 7002**

**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>Marks</b>	<b>CO</b>
Q. 1	There are <b>20 MCQs</b> in this section. All questions are <b>compulsory</b> . Each question carries <b>1 mark</b> .	<b>20</b>	<b>CO 1</b>
i)	Data is a collection of letters, words, numbers, images with a. No rules b. No meaning c. No cost d. No use		
ii)	Data should be comprehensible which means it should be a. Easy to understand b. Difficult to understand c. Encrypted d. Expensive		
iii)	In order for data to be turned into information it needs to be a. Output b. Sold c. Coded d. Processed		
iv)	Information is data which has been given a. A code b. A storage space c. A meaning d. Some rules		
v)	Information is a. Data + Meaning + Context b. Data + Structure + Context		

	<ul style="list-style-type: none"> <li>c. Data + Structure + Meaning + Context</li> <li>d. Data + Structure + Meaning</li> </ul>		
vi)	<p>Knowledge is the application of ..... to the information</p> <ul style="list-style-type: none"> <li>a. Rules</li> <li>b. Data</li> <li>c. Explanation</li> <li>d. Output</li> </ul>		
vii)	<p>Knowledge means that you understand the ..... between pieces of information</p> <ul style="list-style-type: none"> <li>a. Cost</li> <li>b. Relationship</li> <li>c. Codes</li> <li>d. Process</li> </ul>		
viii)	<p>"It is raining today. I will need my umbrella". Is this an example of .....</p> <ul style="list-style-type: none"> <li>a. Data</li> <li>b. Information</li> <li>c. Knowledge</li> <li>d. Wisdom</li> </ul>		
ix)	<p>Which of these representation methods would people with poor literacy skills find hard to access?</p> <ul style="list-style-type: none"> <li>a. Sound</li> <li>b. Graphics</li> <li>c. Text</li> <li>d. Animation</li> </ul>		
x)	<p>Data can be stored in many different formats called .....</p> <ul style="list-style-type: none"> <li>a. Databases</li> <li>b. Data sets</li> <li>c. Data types</li> <li>d. Data fields</li> </ul>		
xi)	<p>Which data type would be the most appropriate for data with only two values?</p> <ul style="list-style-type: none"> <li>a. Boolean</li> <li>b. Real</li> <li>c. String</li> <li>d. Integer</li> </ul>		
xii)	<p>Which of the following is NOT classed as a source of data?</p> <ul style="list-style-type: none"> <li>a. Original source data</li> <li>b. Indirect data</li> <li>c. Image data</li> <li>d. Archived data</li> </ul>		
xiii)	<p>You may be able to sell original source data to other people/companies and recoup some costs</p> <ul style="list-style-type: none"> <li>a. True</li> <li>b. False</li> </ul>		
xiv)	<p>This is data which has been copied and then removed from the system and stored safely offline</p> <ul style="list-style-type: none"> <li>a. Original source data</li> <li>b. Indirect data</li> </ul>		

	c. Image data d. Archived data		
xv)	Which of the following is NOT a factor affecting the quality of information? a. Presentation b. Age c. Level of detail d. File size		
xvi)	The most appropriate way to present complex table of data might be as a ... a. Chart b. Report c. List d. Spreadsheet		
xvii)	Validation can be used to make sure that the data you enter is correct a. True b. False		
xviii)	Validation aims to make sure that data is ..... (Select the incorrect option) a. Sensible b. Reasonable c. Complete d. Correct		
xix)	Which of the following validation methods would be used to only allow numbers between 1 and 50? a. Check digit b. Type check c. Range check d. Presence check		
xx)	Which validation method is often used as part of a barcode? a. Length check b. Presence check c. Check digit d. Picture check		

**SECTION B**

	There are <b>4 Questions</b> in this section. Attempt any <b>two (2)</b> . Each question carries <b>20 marks</b> .	<b>2 x 20 = 40</b>	<b>CO 2</b>
Q. 2	Data is classified in multiple ways. Present an account on the different classification of data.		
Q. 3	A small retail outlet would like to develop a database that keeps track of all the goods it stores in its outlet. What kind of data and their types do you anticipate for this database? Identify at least seven variables. Which of these variables might be in use in other databases within the outlet?		

Q. 4	RAID systems typically allow you to replace failed disks without stopping access to the system. Thus, the data in the failed disk must be rebuilt and written to the replacement disk while the system is in operation. Which of the RAID levels yields the least amount of interference between the rebuild and ongoing disk accesses? Explain your answer.		
Q. 5	<p>For each of the following meetings, explain which phase in the CRISP process is represented:</p> <ul style="list-style-type: none"> <li>(a) Managers want to know by next week whether deployment will take place. Therefore, analysts meet to discuss how useful and accurate their model is.</li> <li>(b) The data mining project manager meets with the database manager to discuss how the data will be collected.</li> <li>(c) The data mining consultant meets with the vice president for marketing, who says that he would like to move forward with customer relationship management.</li> <li>(d) The data mining project manager meets with the production line supervisor, to discuss implementation of changes and improvements.</li> <li>(e) The analysts meet to discuss whether the classification or clustering models should be applied.</li> </ul>		
<b>SECTION-C</b>			
Q. 6	The section is <b>compulsory</b> . 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 <b>40 marks</b> .	<b>40</b>	<b>CO 3</b>
	<p>A manufacturing company consists of a number of divisions. Each division in turn consists of one or more departments. Each employee of the company belongs to only one department at any point of time. Orders are executed at the divisional level. Any number of departments (as required) may execute an order. A department may also execute a number of orders. Employees work on various orders in the organization.</p> <p>In his situation there are multiple real life entities/objects interacting with each other. Identify the different entities/objects and their relation with each other of the real world and what kind of data will be required for each entity/object to give a better meaning to them.</p>		