


Name:		
Enrolment No:		
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>Online End Semester Examination, 2021</b>		
Course: Business Statistics Course Code: DSQT1004 Program: BBA (Core) & BBA (EPCC)		Semester: II Time: 03 Hours Max. Marks: 100
<b>SECTION A</b>		
1. Each question carries 5 Marks 2. Instruction: Choose the correct answer.		
Sl. No.	Question	CO
Q.1. (a)	A postal worker counts the number of complaint letters received by the Indian Postal Service in a given day; what is the type of data collected. Select one: a. Qualitative b. Quantitative	CO1
(b)	Which data about paintings would not be qualitative? Select one: a. The style b. The artist c. The value d. The theme	
Q.2. (a)	In an eye color study, 25 out of 50 people in the sample had brown eyes. In this situation, what does the number .50 represent? Select one: a. A class b. A class relative frequency c. A class percentage d. A class frequency	CO1
(b)	In what form of graphical summarization of the data data-values are retained? Select one: a. Stem-and-leaf plot b. Histogram c. Pie chart	

<p>Q.3.</p> <p>(a)</p> <p>(b)</p>	<p>Which of the following is a measure of the variability of a distribution? Select one:</p> <p>a. Median b. Skewness c. Range d. Sample size</p> <p>The distribution of salaries of professional basketball players is skewed to the right. Which measure of central tendency would be the best measure to determine the location of the center of the distribution? Select one:</p> <p>a. Range b. Mode c. Median d. Mean</p>	<p>CO2</p>
<p>Q.4.</p> <p>(a)</p> <p>(b)</p>	<p>An usher records the number of unoccupied seats in a movie theater during each viewing of a film; what is the type of data collected. Select one:</p> <p>a. Quantitative b. Qualitative</p> <p>As part of an economics class project, students were asked to randomly select 500 New York Stock Exchange (NYSE) stocks from the Wall Street Journal. As part of the project, students were asked to summarize the current prices (also referred to as the closing price of the stock for a particular trading date) of the collected stocks using graphical and numerical techniques. Would this be an application of descriptive or inferential statistics? Select one:</p> <p>a. Descriptive statistics b. Inferential statistics</p>	<p>CO2</p>
<p>Q.5.</p> <p>(a)</p> <p>(b)</p>	<p>Arrangement of data in the given series is required while computing</p> <p>a. Mean b. Median c. Mode d. Percentile</p> <p>Calculating the difference between the largest and smallest figure produces which figure?</p> <p>a. Median b. Range c. Mean d. Sum</p>	<p>CO2</p>

<p>Q.6.</p> <p>(a)</p> <p>(b)</p>	<p>What is the most basic outcome of an experiment? Select one:</p> <p>a. Sample point b. Sample space c. Event d. Experiment</p> <p>Which number could be the probability of an event that is almost certain to occur? Select one:</p> <p>a. .99 b. .51 c. 1.01 d. .01</p>	<p>CO4</p>
-----------------------------------	---	------------

**SECTION B**

**1. Each question carries 10 marks.**

**2. Instruction: Write short / brief notes.**

<p>Q.1.</p>	<p>A hat contains the numbers 1, 2 and 3 on 3 slips of paper. A number is drawn at random, replaced and another one is drawn. How many ordered samples are possible?</p>	<p>CO4</p>
<p>Q.2.</p>	<p>Samples of size 3 are selected from the set {1,2,3,4,5,6,7,8,9,10}. We choose these samples without replacement; that is, once a number is chosen, it is removed from the set and cannot be selected again. Examples of some possible samples are {1,4,7}, {2,4, 9} and {6,7,10}. The order in which samples items are drawn is irrelevant. What is a probability that the sample contains 1 or 2 (inclusive or)?</p>	<p>CO4</p>
<p>Q.3.</p>	<p>Pick 2 children at random from a group of 10 boys and 10 girls. What is the probability of picking 2 girls?</p>	<p>CO4</p>
<p>Q.4.</p>	<p>Given that 0.4 % of women, 8% of men have congenital color blindness. What is the probability of a randomly chosen person is a color blind man?</p>	<p>CO4</p>
<p>Q.5.</p>	<p>Suppose a drug test gives 99% true positive results for drug users and 98% true negative results for non-drug users. Suppose 0.5% of people are users of the drug. If a randomly selected individual tests positive, what is the probability that he is a user?</p>	<p>CO4</p>

### Section C

**1. Each question carries 10 Marks.**

**2. Instruction:** a) Please enter the data of this section into MS Excel worksheets.

b) Compute the answers using MS Excel only.

c) Submit your answers as MS Excel worksheets.

Q.1.

A) Using MS Excel find Mean for each day. Also find Standard deviation for Means using MS Excel.

Day	Weight				
1	496	504	496	505	509
2	501	492	510	496	521
3	501	498	510	499	482
4	493	490	506	506	505
5	477	460	460	478	490
6	503	495	493	505	499
7	495	494	481	490	510
8	502	528	520	490	505
9	509	502	502	489	503
10	499	492	503	506	490

CO2

B) Find the Linear Regression with the defined function in MS Excel without any calculation manually.

Day	Non Conformer
1	3
2	5
3	4
4	8
5	9
6	7
7	10
8	13
9	12
10	15

CO3