Started on	Thursday, July 16, 2020, 7:02 PM
State	Finished
Completed on	Thursday, July 16, 2020, 9:00 PM
Time taken	1 hour 58 mins
Grade	**29.00** out of 29.00 (**100**%)

Question 1

Complete

Not graded

This first question must be answered for you to get credit for this exam.

I certify that I am taking this exam independently and that I have not received nor given unauthorized help on this exam, which would be a violation of the Academic Integrity Policy and subject to the penalties described on the syllabus. By clicking "true," I affirm that I am an honest student who completed this exam with integrity.

Select one:
- ◉ True
- ○ False

Question 2

Correct

1.00 points out of 1.00

Consider an experiment that has an uncertain numericaloutcome. When the experiment is repeated many times, the long-run average ofthe numerical outcomes of the experiment is called the _____.

Select one:
- ○ a. variance
- ◉ b. mean ✔
- ○ c. bias
- ○ d. standard deviation
- ○ e. range

Question 3

Correct

1.00 points out of 1.00

_____ is the most critical step of the decision-making process.

Select one:
- ◉ a. Identifying and defining the problem ✔
- ○ b. Evaluating the alternatives
- ○ c. Determining the set of alternatives
- ○ d. Choosing an alternative

Question 4

Correct

1.00 points out of 1.00

In the spectrum of business analytics, which is the most complex?

Select one:
- ○ a. Operational
- ◉ b. Prescriptive ✔

    ○ c. Predictive

    ○ d. Descriptive

Question 5

Correct

1.00 points out of 1.00

When working with large spreadsheets with many rows of data, it can be helpful to _____ the data to better find, view, or manage subsets of data.

Select one:

  ○ a. chart

  ○ b. split

  ○ c. manipulate

  ◉ d. sort and filter   ✔

Question 6

Correct

1.00 points out of 1.00

The most frequently occurring outcome is called the _____.

Select one:

  ◉ a. mode   ✔

  ○ b. standard deviation

  ○ c. mean

  ○ d. median

  ○ e. expected value

Question 7

Correct

1.00 points out of 1.00

The relative frequency of a class is computed by _____.

Select one:

  ○ a. dividing the frequency of the class by the midpoint

  ○ b. dividing the midpoint of the class by the sample size

  ◉ c. dividing the frequency of the class by the sample size   ✔

  ○ d. dividing the sample size by the frequency of the class

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Question 8

Correct

1.00 points out of 1.00

For any data set, which measures of central location have only one value?

Select one:

  ◉ a. Mean and median   ✔

  ○ b. Mode and median

  ○ c. Mode and standard deviation

  ○ d. Mode and mean

Question 9

Correct

1.00 points out of 1.00

Corporate-level managers use _____ to summarize sales by region, current inventory levels, and other company-wide metrics all in a single screen.

Select one:

  ◉ a. data dashboards   ✔

  ○ b. tables

  ○ c. crosstabulation

○ d. simulations

Question 10

Correct

1.00 points out of 1.00

Your height and weight are examples of which level of measurement?

Select one:
- ◉ a. Ratio ✔
- ○ b. Interval
- ○ c. Nominal
- ○ d. Ordinal

Question 11

Correct

1.00 points out of 1.00

Quartiles divide a distribution into _____.

Select one:
- ◉ a. 4 equal parts ✔
- ○ b. 2 equal parts
- ○ c. 10 equal parts
- ○ d. 100 equal parts

Question 12

Correct

1.00 points out of 1.00

Below is the data for the number of days that it took Wyche Accounting to perform audits in the last quarter of last year.

56, 42, 37, 29, 45, 51, 30, 25, 34, 57

What is the median number of days that it took Wyche Accounting to perform audits in the last quarter of last year?

Select one:
- ○ a. 40.6
- ◉ b. 39.5 ✔
- ○ c. 41
- ○ d. 42

Question 13

Correct

1.00 points out of 1.00

The net annual sales of a sample of small retail clothing stores were organized into the following relative frequency distribution.

Net Sales (in $ millions)	Percent of Total
1 up to 4	13
4 up to 7	14
7 up to 10	40
10 up to 13	23
13 or more	10

What is the mean net sales (in $ millions)?

Select one:
- ○ a. $7.09

    ○ b. Mean cannot be computed.   ✔

    ○ c. $10.09

    ○ d. $8.59

Question 14

Correct

1.00 points out of 1.00

In a sample of 10 people, 3 persons earn $8 an hour, 6 earn $9 an hour, and 1 earns $12 an hour. The weighted mean hourly wage is $9.

Select one:

◉ True ✔

○ False

Question 15

Correct

1.00 points out of 1.00

You flip a fair coin, with value 1 for Heads and value 0 for Tails. What is the expected value?

Select one:

○ a. 0.25

○ b. 0

○ c. 0.75

◉ d. 0.5   ✔

○ e. 1

Question 16

Correct

1.00 points out of 1.00

A sample of 13 adult males' heights are listed below.

70, 72, 71, 70, 69, 73, 69, 68, 70, 71, 67, 71, 74

Find the range of the data.

Select one:

○ a. 5

○ b. 6.5

○ c. 4

◉ d. 7   ✔

Question 17

Correct

1.00 points out of 1.00

A sample of 13 adult males' heights are listed below.

70, 72, 71, 70, 69, 73, 69, 68, 70, 71, 67, 71, 74

Find the range of the data.

Select one:

○ a. 6.5

○ b. 4

○ c. 5

◉ d. 7   ✔

Question 18

Correct

1.00 points out of 1.00

A stockbroker placed the following order for a customer:

• 50 shares of Kaiser Aluminum at $104 a share
• 100 shares of GTE at $25.25 a share
• 20 shares of Boston Edison at $9.125 a share

What is the weighted arithmetic mean price per share?

Select one:

○ a. $46.51 ✔

○ b. $25.25

○ c. $103.50

○ d. $79.75

Question 19

Correct

1.00 points out of 1.00

Exhibit 3-4
The following is the frequency distribution for the speeds of a sample of automobiles traveling on an interstate highway.

Speed (mph)	Frequency
50–54	2
55–59	4
60–64	5
65–69	10
70–74	9
75–79	5
	35

Refer to Exhibit 3-4. The mean is _____.

Select one:

○ a. 35

○ b. 670

○ c. 10

○ d. 67 ✔

Question 20

Correct

1.00 points out of 1.00

Exhibit 12-1
Individuals in a random sample of 150 were asked whether they supported capital punishment. The following information was obtained.

Do You Support Capital Punishment?	Number of Individuals
Yes	40
No	60
No Opinion	50

We are interested in determining whether the opinions of the individuals (as to Yes, No, and No Opinion) are uniformly

distributed.

Refer to Exhibit 12-1. If the opinions are uniformly distributed, the expected frequency for each group would be _____.

Select one:
○ a. .333
○ b. 1/3
○ c. .50
◉ d. 50 ✔

Question 21

Correct

1.00 points out of 1.00

The times (in minutes) that several underwriters took to review applications for similar insurance coverage are 50, 230, 52, and 57. What is the median length of time required to review an application?

Select one:
◉ a. 54.5 ✔
○ b. 97.25
○ c. 109.0
○ d. 141.0

Information

Descriptive Statistics
If you do not see the exact answer, pick the closest answer.

Question 22

Correct

1.00 points out of 1.00

Assume that the following test grades represent <u>continuous data</u>, and that the test grades are <u>normally distributed</u> and that they represents <u>population data</u>.

71	88	91
76	88	91
76	88	93
77.5	88	95.5
79	89.5	98.5
83	89.5	98.5
83.5	89.5	
86.5	91	

Use this data to answer the following questions.

What is the **mean**?

○ a. 82.33
○ b. 71.00
◉ c. 86.89 ✔
○ d. 92.47

Question 23

Correct

1.00 points out of 1.00

What is the **maximum** value?

- ○ a. 71.0
- ○ b. 83.0
- ◉ c. 98.5   ✔
- ○ d. 93.00

Question 24

Correct

1.00 points out of 1.00

What is the **median**?

- ○ a. 83.0
- ◉ b. 88   ✔
- ○ c. 82.3
- ○ d. 86.9

Question 25

Correct

1.00 points out of 1.00

What is the **mode**?

- ○ a. 83
- ○ b. 93
- ○ c. 88 and 91
- ◉ d. 88   ✔
- ○ e. 76, 88, 89.5, and 91

Question 26

Correct

1.00 points out of 1.00

What is the **Standard Deviation**?

- ○ a. 27.50
- ◉ b. 7.15   ✔
- ○ c. 3.95
- ○ d. 5.69

Question 27

Correct

1.00 points out of 1.00

What is the **25th percentile**?

- ○ a. 71.00
- ○ b. 79.00
- ◉ c. 82.00   ✔
- ○ d. 74.00
- ○ e. 91

Question 28

Correct

1.00 points out of 1.00

What is the **Mean Deviation**?

- ○ a. 3.95
- ◉ b. 5.69   ✔
- ○ c. 27.50
- ○ d. 7.4

Question 29

Correct

1.00 points out of 1.00

What is the **minimum** value?

- ○ a. 82.33
- ○ b. 98.5
- ◉ c. 71.00   ✔
- ○ d. 83.00

Question 30

Correct

1.00 points out of 1.00

What is the **range**?

- ○ a. 86.9
- ○ b. 71.0
- ◉ c. 27.5   ✔
- ○ d. 22.0

Information

For this problem, you will need to upload your Excel file showing your work and answering the questions below. You will see an "Upload your Exam1 DATAFile Excel File" in Moodle, right below this Exam. This problem is worth 10 points.

Using this Real Estate DATAFile, and the Price column, create and do the following:

1) Create an appropriate frequency table.

2) Create an appropriate frequency chart.

Answer these questions in a new worksheet in your Excel file:

3) At the 5% level of significance, what is the p-value for testing that this distribution is "uniform."

4) At the 5% level of significance, what is your conclusion about whether you will reject or not reject the null hypothesis that these home prices are the same (i.e., uniform?) Explain your rationale.

5) At the 5% level of significance, what is the p-value for testing that this distribution is "normally distributed?"

6) At the 5% level of significance, what is your conclusion about whether you will reject or not reject the null hypothesis that these home prices are normally distributed? Explain your rationale.

In your submitted file, it is always best to show as much of your work as possible.

◀ Exam1 Study Guide

Exam1 Upload your Exam1 DATAFile Excel File ▶