KINGDOM OF SAUDI ARABIA
Ministry of Higher Education
Al-Imam Mohammad Ibn-Saud Islamic University
College of Science
Department of Mathematics & Statistics

1439/1440 Second Semester
Course Code &Number: STA110
Course Title: Principles of Statistics
Date of Exam: 20/11/2018

Alternative MIDTERM

Duration of Exam: 1Hour

اسـم الطالب: ....

الرقم الجامعي: ....

رقم الشعـبة: ....

إجابات أسئلة الاختبار (اختر إجابة واحدة فقط بتظليلها جيداً بالقلم الرصاص الغامق أو الأزرق)

question	answer a	b	c	d	question	answer a	b	c	d
1	o	o	o	o	16	o	o	o	o
2	o	o	o	o	17	o	o	o	o
3	o	o	o	o	18	o	o	o	o
4	o	o	o	o	19	o	o	o	o
5	o	o	o	o	20	o	o	o	o
6	o	o	o	o	21	o	o	o	o
7	o	o	o	o	22	o	o	o	o
8	o	o	o	o	23	o	o	o	o
9	o	o	o	o	24	o	o	o	o
10	o	o	o	o	25	o	o	o	o
11	o	o	o	o	26	o	o	o	o
12	o	o	o	o	27	o	o	o	o
13	o	o	o	o	28	o	o	o	o
14	o	o	o	o	29	o	o	o	o
15	o	o	o	o	30	o	o	o	o

TOTAL	30	....

تعليمات الاختبار

- تأكد أن عدد أسئلة الاختبار 30 سؤال
- أجب على جميع الأسئلة
- مدة الاختبار ساعة
- مسموح باستخدام الحاسبة العادية
- يمنع استخدام الجوال

The questions

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1) The <u>time</u> is an example of a .... variable.

a) discrete	b) nominal	c) ordinal	d) continuous

2) The <u>number of students</u> is considered to be a .... variable.

a) discrete	b) nominal	c) continuous	d) ordinal

3) The <u>rank</u> (instructor, assistant professor, etc.) is .... data.

a) discrete	b) quantitative	c) qualitative	d) continuous

4) Data collected about <u>grades of students</u> in final examination can be graphed by using a .... graph.

a) Ogive	b) histogram	c) bar graph	d) polygon

5) <u>Levels</u> of education (Primary, Middle...) are .... data.

a) quantitative	b) discrete	c) ordinal	d) nominal

6) The <u>distance</u> between two cities is 600 kilometer is example of .... variable.

a) discrete	b) nominal	c) ordinal	d) continuous

7) .... is the set of all elements.

a) Sample	b) Population	c) Census	d) Parameter

8) .... is a numerical measurement describing some characteristic of a <u>sample</u>.

a) Data	b) Parameter	c) Population	d) Statistic

9) ....data can be either <u>numeric or non-numeric</u>.

a) Qualitative	b) Quantitative	c) Discrete	d) Continuous

10) .... is collecting data for a <u>sample</u>.

a) Sample survey	b) Statistics	c) Population	d) Data

11) The <u>levels of services</u> (excellent, very good, ...) can be representing by:

a) polygon	b) ogive	c) pie chart	d) histogram

12) .... is not a graphical presentation of <u>quantitative data</u>.

a) Ogive	b) Histogram	c) Polygon	d) Bar graph

13) The <u>relative frequency</u> for the class 8-12 in the following data is:

Class	0-4	4-8	8-12	12-16
Frequency	2	8	6	4

a) 0.10	b) 0.40	c) 0.30	d) 0.20

14) The <u>percent frequency</u> for the color "Black" in the following table is:

Colors of cars	White	Black	Red	Yellow
Frequency	15	20	10	5

a) 10%	b) 20%	c) 30%	d) 40%

15) The following graph is called :
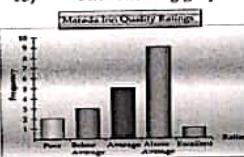
a) bar graph	b) pie chart	c) histogram	d) ogive

16) The <u>class width (length)</u> for the class 4-10 is:

a) 14	b) 2.5	c) 7	d) 6

17) The <u>frequency</u> for the class 70-80 in the following graph is:
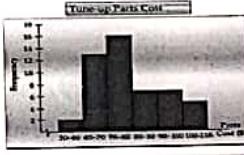
a) 2	b) 16	c) 12	d) 6

18) The value of <u>relative frequency</u> for the class 10-15 is:

Class	0-5	5-10	10-15	15-20
Relative frequency	0.20	0.10	....	0.50

a) 0.10	b) 0.20	c) 0.30	d) 0.40

19) The <u>mean</u> for the data values 10, 5, 5, 7, 13 is:

a) 7	b) 5	c) 10	d) 8

20) The <u>median</u> for the data values 12, 10, 16, 18, 17, 10 is:

a) 10	b) 14	c) 12	d) 17

21) The <u>first quartile</u> (Q_1) for the data values 3, 4, 7, 7, 9, 11 is:

a) 4	b) 7	c) 9	d) 11

22) The <u>geometric mean</u> for the data values 4, 2, 1, 1, 8, 1, 2, 2 is

a) 4	b) 19.625	c) 0.205	d) 2

23) The 70th <u>percentile</u> (P_{70}) for the data values 11, 13, 14, 14, 17, 19, 20, 34, 35, 36 is

a) 20	b) 55	c) 35	d) 27

24) The <u>harmonic mean</u> for the data values 4, 2, 2, 8, 8, 1, 2, 2,4, 4 is

a) 3.031	b) 2.5	c) 3.7	d) 3

25) The <u>midpoint</u> of the class 12-16 is:

a) 14	b) 4	c) 12	d) 16

26) Which relationship is <u>true</u>?

a) Second quartile= P_{25}	b) first quartile= P_{50}	c) Median= P_{75}	d) Second quartile= median

27) Which <u>is not</u> from a five numbers summary?

a) Geometric mean	b) Largest value	c) Median	d) Third quartile

28) The 30th <u>percentile</u> (P_{30}) for the data values 10, 14, 15, 15, 20, 27, 29 is

a) 14	b) 15	c) 14.5	d) 15.5

29) If the variance for a sample is 4, then the value of the standard deviation equal:

a) 16	b) 8	c) 4	d) 2

30) The coefficient of variation for the scores 10, 5, 7, 8, 14, 16 is:

a) 10	b) 4.24	c) 42.43	d) 6

End of Examination