STATISTICS FINAL EXAM

السلام عليكم ورحمة الله وبركاته..

هنا تجميع أسئلة من نماذج سابقة لجزئية الاختبار النهائي:

- Chapter 1
- Chapter2
- Chapter3
- Chapter10,13
- Chapter 4
- Chapter 5
- Chapter 6

KAU guide
Preparatory year guidance

للمزيد:
https://kauguide.wixsite.com/preparatoryyear

1-find the IQR from the following data: {12 20 5 6 18 32 30}

- 24

2-for the following probability distribution, find the value of k ?

x	**0**	**1**	**2**	**3**
P(x)	0.5	0.02	k	0.14

- 0.34

3-the value that occurs the most often in a data set is called the .....

- Mode

4-if 45% of students like statistics and 3 students are selected at random, find the probability that none of them likes statistics?

- 0.166

5-in a company 25% of the emplyees got a master degree, 54% of the emplyees got a bachelor degreem and the others got a dectorate degree. İf an emplyee is selected at random,find the probability that he has not gotten a dectorate degree?

- 0.79

6-when we study the relationship between the number of smoking years and having a heart disease, the correlation coefficient could be :

- 0.8
- -0.07
- 0
- -0.9

7-when we study the relationship between the age of a house and its price, which correlation should be used?

- Pearson or spearman
- Pearson only
- Spearman only

8-if the sample size is 40 and the variance is 64, then the standard deviation is?

- 8

9-in a binomial experiment, the number of trials must be

- Fixed

10- the percentage of blood type (A) in a pie graph is 65%. The corresponding degree of the angle is?

- 234°

11-check the outliers for the following data set: {17 31 32 35 39 40 41 44 62} ?

- 62

12-the following plot represents the time it takes 17 students to get to school , find the mode?

0	6 7 7 8 9
1	0 5 5 5 5 7 7
2	1 2 3 3 6

- 15

13-how many times a die is rolled when the mean of the numbers greater than 4 that will be rolled = 20 ?

- 60

14-two employees were asked to rate six different brands on a scale from 0 to 10 points. The data are shown in the following table:

Brand	A	B	C	D	E	F
Employee 1	4	9	5	7	8	10
Employee 2	9	5	8	4	6	1

- - 0.829

15-selecting a baby : the baby is a boy and the baby is a girl." These events are said to be …… events.

- Mutually exclusive

16-one thousand tickets are sold at 3$ each for a PC valued ate 1500$. What is the expected value of the gain if you only purchase two tickets?

- -3

17- in a company 33% of the employees got a master degree, 5% of the employees got a doctorate degree, and the others got a bachelor degree. If an employee is selected at random, find the probability that he has not gotten a bachelor degree?

- 0.62

18-if the regression line equation is $y' = -10.8 + 5.9x$, the the y' intercept equals:

- -10.8

19-find the IQR from the following data: 20 14 10 12 30 22 32

- 18

20-the following date are recorded:

$$n = 6\,, \sum x = 153\,, \sum y = 18\,, \sum xy = 182\,, \sum x^2 = 500$$

Calculate the slope of the regression line:

- 4.64×10^{-4}

21-when we study the relationship between the number of studying hours and the weight of a student. The correlation coefficient could be:

- 0
- -1
- 0.9
- -0.8

22-for the following probability distribution, find the probability that X is more than or equal 3.

X	2	3	4	5
P(x)	0.3	0.31	0.19	0.2

- 0.70

23-which of these cannot be considered a probability?

- -58%
- 82%
- 0
- 0.17

24-which of the following represents a stratified sample:

- Dividing teachers into groups according their education level and select 15 teachers from each group.
- Selecting 16 children from class using random numbers to determine their heights.
- Selecting 3 hospitals from Jeddah and interview all doctors in them.
- Selecting every 13th customer in the salon to have a free service.

25-a survey found that one out of three children eat an apple daily. If 5 children are selected at random, find the probability that exactly 3 will not eat an apple daily?

- 0.329

26-compute the mean for the following probability distribution:

X	**0**	**1**	**5**	**6**
P(X)	0.2	0.1	0.6	0.1

- 3.7

27-at a local university, 90% of first-year students have computers. If 3 students are selected at random, find the probability that none of them has a computer.

- 0.001

28-if the sample size is 30 and the standard deviation is 7. Then the variance is:

- 49

29-it was reported that 68% of computer games were classified as “family and children”, if 3 computer games were purchased at random, find the probability that at least one was “family and children”.

- 0.962

30-a survey found that one out of four children eat chocolate daily. If 6 are selected at random, find the probability that exactly 4 will not eat chocolate daily?

- 0.297

31-when the majority of the data values fall to the left of the mean ,the distribution is said to be ……..

- Right-skewed

32- a survey found that one out of four people say they visit a doctor every month. If 5 people are selected at random, find the probability that exactly 2 will not visit a doctor every month.

- 0.088

33-when we study the relationship between the person's age and his weight, which correlation coefficient should be used?

- Pearson or spearman

34-if 45% of students like statistics and 3 students are selected at random, find the probability that none of them likes statistics?

- 0.166

35-a city recorded its highest temperatures at $80^{\circ}\mathrm{F}$ and it's lowest at $27^{\circ}\mathrm{F}$ for a certain year. Use this information to find the lower and the upper class limit of the first class if you wish to construct a grouped frequency distribution with 10 class.

- 27-32

36- approximately 28% of men have a type of color blindness. If 3 men are selected at random , find the probability that at least one has that type of color blindness.

- 0.627

37-a student takes a 4 questions multiple choice exam with three choices for each question, find the probability of guessing at most 2 correct answers.

- 0.889

38-which of the following represents a random sample:

- Selecting every 10th costumer to ask them about their opinion in the new product
- Selecting three hospitals from all the hospitals in Jeddah and asking all patients in them about the quality receive.

- Selecting 20 teachers using random numbers to determine their salaries.
  - Dividing students into groups according their grades and then selecting 10 students from each group.

39-one thousand tickets are sold at 2$ each for an ipad valued at 800$. What is the expected gain if you purchased 2 tickets?

- -2.4

40-if there were a weak negative relationship between two variables, then the value of the correlation coefficient could be:

- 0.7
- 0.01
- -0.8
- -0.10

"اللهم إنّي أستودعك ما قرأت، وما حفظت، وما تعلمت، فردّه إليّ عند حاجتي إليه، إنّك على كلّ شيء قدير، وحسبنا الله ونعم الوكيل".

الحمدلله وبالتوفيق..♥