

## Statistics – First – الفصل الصيفي – 2021

Q1: Suppose  $P(A)=0.34$  and  $P(B)=0.48$ . if  $P(B|A)$  equals

- a- 0.0578
- b- 0.1204
- c- 0.24
- d- 0.0816
- e- 0.1632

Q2:    **X**            **Frequency**

1	3
2	4
3	3

Suppose X in the table above is the number of emails received per hour, then the standard deviation of X is

- a- 0.60
- b- 0.816
- c- 0.775
- d- 2.0
- e- 0.667

Q3: if the upper class limits of the first two classes in a frequency table with equal class widths (lengths) are 10 and 16, respectively, then the midpoint (center) of the second class is

- a- 13
- b- 11
- c- 9.5
- d- 13.5
- e- 16.5

Q4: if  $P(A) = 0.20$ ,  $P(B) = 0.45$ , and if A and B are independent, then  $P(A \cup B)$  equals

- a- 0.56
- b- 0.74
- c- 0.09
- d- 0.65
- e- 0.29

Q5: Suppose the scores on an exam have a mean of 70 with standard deviation of 10. If one student has a test result with a z-score of -0.8 and a second student has a test result with a z-score of 1.6, how many points higher was the second student's score than that of the first?

- a- 24
- b- 10
- c- 20
- d- 2.4
- e- 12

Q6: the type and measurement level of patient blood group, respectively are

- a- Quantitative and nominal
- b- Qualitative and nominal
- c- Qualitative and ordinal
- d- Quantitative and ordinal
- e- Quantitative and interval

Q7: Suppose the mean of a math exam score is 64 with a standard deviation of 10. If each score is increased by 6 and then each result is multiplied by 1.1, then the new mean and standard deviation are

- a-  $M=77.0$  and  $\sigma=12.0$
- b-  $M=77.0$  and  $\sigma=11.0$
- c-  $M=70.6$  and  $\sigma=10.0$
- d-  $M=77.7$  and  $\sigma=12.6$

e-  $M=70.0$  and  $\sigma=10.1$

Q8: Three sixth grades, two seventh grade, and five eighth grade students were randomly arranged in a row, then the probability that the sixth students are next to each other is

- a-  $1/15$
- b-  $1/5$
- c-  $5/90$
- d-  $15/90$
- e-  $1/42$

Q9: According the chebyshev's rule, the proportion of observation within 2.5 standard deviations of the mean is

- a- Exactly 16%
- b- At most 84%
- c- At least 84%
- d- At least 16%
- e- At most 16%

Q10: The average salary of 12 male employees is 550 JD and the average salary of 8 female employees is 420 JD, then the average salary among all these employees is

- a- 495 JD
- b- 484 JD
- c- 498 JD
- d- 485 JD
- e- 505 JD

Q11:

class	frequency
8-12	7
13-17	12
18-22	10
23-27	8
28-32	3

The 60<sup>th</sup> percentile of the data presented in the table above is

- a- 18.5
- b- 19
- c- 21
- d- 20
- e- 22

Q12: if the mean of 22,X,2X+5 is 31 then the value of X is

- a- 18
- b- 22
- c- 25
- d- 27
- e- 16

Q13: if three supermarkets are selling a chocolate bar for 1.15 JD, five are selling it for 1.25 JD, and ten are selling it for 1.50 JD, then the median price of the chocolate bar is

- a- 1.15
- b- 1.25
- c- 1.30
- d- 1.50
- e- 1.20

Q14: The outlier(s) in the data set 6,20,20,21,27,22,25,30,40 is (are)

- a- 6
- b- 30 and 40
- c- 6 and 40
- d- 6 and 20
- e- 40

