

PREVIEW QUESTION BANK

Module Name : cec24-hs07 Statistical Methods for Psychological Research - I-ENG
Exam Date : 18-May-2024 Batch : 09:00-12:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	15161001	<p>Scientific research is a</p> <ol style="list-style-type: none"> 1. Processes of searching again and again 2. Finding a Solution to any problem 3. Working in a scientific way to search for the truth of any problem 4. Exercise of new knowledge exploration <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
Objective Question				
2	15161002	<p>In research, measured attribute of concept and construct is known as</p> <ol style="list-style-type: none"> 1. Variable 2. Constant 3. Construct 4. Definition <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
Objective Question				
3	15161003	<p>_____ is the variable that has equal potential to create a similar effect on the dependent variable as the independent variable can do.</p> <ol style="list-style-type: none"> 1. Moderator Variable 2. Active Variable 3. Extraneous Variable 4. Confounding Variable <p>A1 : 1</p>	2.0	0.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

4 15161004

2.0 0.00

A film critic has been assigned the task of ranking 10 actors according to their acting prowess. He ranked them according to their acting ability. This type of measurement is

1. Classification Scale of Measurement
2. Ordinal Scale of Measurement
3. Equal-Interval Scale of Measurement
4. Ratio Scale of Measurement

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

5 15161005

2.0 0.00

The class teacher divided the students into four groups on the basis of the game they played. The teacher used

1. Quantitative Classification
2. Qualitative Classification
3. Chronological Classification
4. Spatial Classification

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

6 15161006

2.0 0.00

To create a frequency distribution manually from a given large data, the very first step is to

1. Find the Range of the Data
2. Decide the Width of the Class Interval
3. Determine the Numbers of Class Interval
4. Arrange the Data in either Ascending or Descending order

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

7 15161007

A data series has the range of 60. How many classes will be in the frequency distribution if the unit of interval is 10?

1. 5
2. 6
3. 7
4. 8

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

8 15161008

What is the cumulative frequency of the class interval 50-59 in the given frequency distribution?

C.I.	20-29	30-39	40-49	50-59	60-69	70-79	80-89
f	25	35	45	75	60	40	20

1. 160
2. 170
3. 180
4. 190

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

9 15161009

2.0 0.00

Of the given frequency distribution, what is the value of 30th percentile?

C.I.	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64
f	7	14	16	25	32	22	19	9	6

1. 35.1
2. 36.1
3. 37.1
4. 38.1

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

10 15161010

2.0 0.00

To create a chart out of the data in excel, which menu button is used

1. File
2. Home
3. Insert
4. Formulas

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

11 15161011

2.0 0.00

In SPSS, the list of variables used in analysis can be seen at

1. Data View
2. View
3. Variable View
4. File

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

12 15161012

2.0 0.00

In a coordinate graph, the quadrant-III represents

1. Positive values on X and Y
2. Negative values on X and Y
3. Positive values on X and negative values on Y
4. Negative values X and positive values on Y

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

13 15161013

2.0 0.00

The median, the quartile and the deciles can be easily estimated from

1. The Cumulative Frequency Graph
2. The Ogive
3. The Frequency Polygon
4. The Line Graph of Frequency Distribution

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

14 15161014

2.0 0.00

What is the value of smoothed frequency when the frequency of the given class interval is 10 and adjacent frequencies are 6 and 5?

1. 7
2. 8
3. 9
4. 10

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

15 15161015

2.0 0.00

What is the value of mean in the given data?

C.I.	50-54	55-59	60-64	65-69	70-74	75-79	80-84
f	5	8	20	35	18	10	4

- 1. 60.59
- 2. 66.59
- 3. 66.95
- 4. 60.95

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

16 15161016

2.0 0.00

The given frequency distribution has a mean of 70.5 and a median of 72.5. What is the value of mode in this distribution?

- 1. 74.5
- 2. 75.5
- 3. 76.5
- 4. 78.5

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

17 15161017

2.0 0.00

Which measure of central tendency includes the magnitude of all the scores for its estimation?

1. Mode
2. Range
3. Median
4. Mean

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

18 15161018

Estimate the interquartile range of the following data series.

X=40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90

1. 20
2. 25
3. 30
4. 35

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

19 15161019

What is the Quartile Deviation of the given frequency distribution?

C.I.	10-14	15-19	20-24	25-29	30-34	35-39	40-44
f	5	8	20	35	18	10	4

1. 4.47
2. 4.50
3. 4.35
4. 4.15

2.0 0.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

20 15161020

2.0 0.00

What is the value of the variance of the given data series?

X	25	24	26	29	27	30	32	30	26	31	32	30	31	23	24
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- 1. 8.86
- 2. 7.86
- 3. 10.86
- 4. 9.86

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

21 15161021

2.0 0.00

2025 is the total variance of a given frequency distribution. What would be its standard deviation?

- 1. 45
- 2. 50
- 3. 65
- 4. 70

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

22 15161022

2.0 0.00

Which of the following statement does not characterize the standard deviation?

1. Standard deviation is the more reliable measure of variability
2. Standard deviation value is positive
3. Standard deviation is affected by sample fluctuations
4. Standard deviation is sensitive to outliers

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

23 15161023

6 coins are tossed together. What is the probability of getting 2 heads and 4 tails?

1. 15/64
2. 12/60
3. 6/60
4. 30/64

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

24 15161024

A normal curve never touches the x axis. This is because of

- (A). Normal curve is continuous curve
- (B). Normal curve is symmetrical
- (C). Normal curve is asymptotic
- (D). Normal curve is a probability distribution

1. (A), (C) and (D) Only
2. (A) and (D) Only
3. (B) and (D) Only
4. (C) Only

A1 : 1

A2 : 2

A3 : 3

2.0 0.00

A4 : 4

Objective Question

25	15161025	<p>What percent of cases lies between -2σ and -3σ in a normal distribution?</p> <ol style="list-style-type: none"> 1. 5% 2. 2% 3. 2.14% 4. 5.14% <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

26	15161026	<p>Which of the following are the benefits of converting raw scores to standard scores?</p> <p>(A). Allows you to be more likely to find a significant result.</p> <p>(B). Allows you to compare scores from different scales</p> <p>(C). Allows you to check if your data have been entered correctly</p> <ol style="list-style-type: none"> 1. (A) Only 2. (B) and (C) Only 3. (C) Only 4. (B) Only <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

27	15161027	<p>A frequency distribution has a kurtosis values less than 0.263 so this distribution is a</p> <ol style="list-style-type: none"> 1. Leptokurtic Distribution 2. Platykurtic Distribution 3. Normal Distribution 4. Binomial Distribution <p>A1 : 1</p>	2.0	0.00
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A2 : 2

A3 : 3

A4 : 4

Objective Question

28	15161028	<p>Scores on a certain standardized test have a mean of 500 and a standard deviation of 100. How common is a score between 600 and 700? Calculate the probability.</p> <p>1. 2.5%</p> <p>2. 5%</p> <p>3. 16%</p> <p>4. 13.5%</p> <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

29	15161029	<p>A psychological attribute is normally distributed with a mean score of 100 and a standard deviation of 20. What would be the actual score if a subject has 1.5 z score?</p> <p>1. 110</p> <p>2. 120</p> <p>3. 130</p> <p>4. 140</p> <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

30	15161030	<p>Mathematics and Reasoning ability scores have been taken from 15 subjects. The sum of product of sigma scores of these two variable is 12. What would be the degree of correlation?</p> <p>1. 0.70</p> <p>2. 0.65</p> <p>3. 0.85</p> <p>4. 0.80</p>	2.0	0.00
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- A1 : 1
- A2 : 2
- A3 : 3
- A4 : 4

Objective Question

31 15161031

2.0 0.00

Which of the following are the types of correlation?

- (A). Positive and Negative
 - (B). Linear and Nonlinear
 - (C). Partial and Multiple
 - (D). Simple and Rank Difference
1. (A) and (C) Only
 2. (B) and (D) Only
 3. (A) Only
 4. (A), (B), (C) and (D) Only

- A1 : 1
- A2 : 2
- A3 : 3
- A4 : 4

Objective Question

32 15161032

2.0 0.00

Find the degree of rank difference correlation from the given data-

Subject	A	B	C	D	E	F	G	H	I	J
Rank (R1)	9	4	7	1	10	8	2	6	3	5
Rank (R2)	8	5	10	7	3	1	9	2	4	6

1. -0.485
2. +0.485
3. -0.285
4. +0.285

- A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

33 15161033

Which of the following is the example that shows a correlation?

1. It rained and the ground is wet.
2. Ice cream sales increase as the temperature increases
3. The alarm clock went off, and I woke up
4. I put water in the freezer, and now I have ice

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

34 15161034

Among the following conditions, which is not the condition for the computation of Biserial r ?

- (A). Both the variables are continuous.
 - (B). Both the variables can be measured and quantified.
 - (C). One variable can be quantified and other one is reduced to artificial dichotomy.
 - (D). Both the variables are normally distributed.
1. (A) and (D) Only
 2. (A) and (C) Only
 3. (A) Only
 4. (B) Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

35 15161035

2.0 0.00

Item-Total Correlation is established as process of psychometric analysis. Which method of correlation is used for this?

1. Rank Order Correlation
2. Biserial r
3. Point Biserial r
4. Partial Correlation

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

36 15161036

2.0 0.00

Which are the appropriate conditions for computation of tetrachoric r.

- (A). Both variables should be continuous
- (B). Both variables are normally distributed
- (C). Characters or attributes of both variables are measurable in scores
- (D). Both the variables are linearly related to each other

1. (A) and (D) Only
2. (B), (C) and (D) Only
3. (A), (B) and (D) Only
4. (B) and (D) Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

37 15161037

2.0 0.00

A Phi Coefficient is the degree of correlation

- (A). Between two nominal scale variables
- (B). Between two continuous normally distributed variables
- (C). Between a continuous variable and a genuine dichotomous variable
- (D). Between two variables of genuine dichotomies

- 1. (A) Only
- 2. (D) Only
- 3. (B) and (C) Only
- 4. (A), (B) and (C) Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

38 15161038

2.0 0.00

If the partial relationship is represented by $r_{15.2346}$ then name the variables which are kept constant.

- 1. Variables 2, 3 and 4
- 2. Variables 3, 4, 5 and 6
- 3. Variables 2, 3 4 and 5
- 4. Variables 2, 3, 6 and 4

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

39 15161039

2.0 0.00

Which of the following are the characteristics of Multiple R?

- (A). It's a Pearson's Correlation
- (B). It has always a positive value
- (C). Its value is more than 1
- (D). It is based on the regression equation.

1. (A), (B) and (C) Only
2. (A), (C) and (D) Only
3. (A), (B) and (D) Only
4. (B), (C) and (D) Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

40 15161040

2.0 0.00

What is a regression analysis?

- (A). A statistical tool that measures the relationship between variables
- (B). A statistical tool that describes the variables
- (C). A statistical tool to model time series data
- (D). A statistical tool to measure continuous data

1. (A) and (B) Only
2. (C) and (D) Only
3. (C) Only
4. (B) Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

41 15161041

2.0 0.00

of the given data, workout the regression equation for X on Y.

Achievement Scores (X)		IQ Scores (Y)	
M_X	55	M_Y	100
SD_X	4	SD_Y	15
Correlation $r_{XY}=0.60$			

1. $X = 0.16Y + 39$
2. $X = 2.25Y + 39$
3. $X = 0.16Y + 30$
4. $X = 2.25Y + 30$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

42 15161042

2.0 0.00

Which of the following statements are true about the regression line?

- (A). It is a line of the average relationship
- (B). It is known as the estimating equation
- (C). It is also known as the prediction equation
- (D). It is the best-fit line.

1. (A), (C) and (D) Only
2. (D) Only
3. (C) and (D) Only
4. (A), (B), (C) and (D) Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

43 15161043

2.0 0.00

A sample is the subset of-

- (A). The Population
 - (B). The University
 - (C). The Sampling Frame
1. (A) Only
 2. (A) and (C) Only
 3. (A), (B), and (C) Only
 4. (A) and (B) Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

44 15161044

2.0 0.00

At a 99% confidence level what sample size is required from an infinite population when the margin of error is 5%?

1. 385
2. 600
3. 400
4. 666

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

45 15161045

2.0 0.00

If the standard error of the distribution is 2 when the standard deviation of the sample distribution is 10. What is the sample size?

1. 50
2. 100
3. 25
4. 75

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

46	15161046	<p>To determine the confidence interval for the estimate of population parameters from a small sample, which formula is the correct one?</p> <ol style="list-style-type: none"> 1. Mean+t values \timesthe standard error of the mean 2. Mean-t values \timesthe standard error of the mean 3. Mean\pmt values+the standard error of the mean 4. Mean\pmt values \timesthe standard error of the mean <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

47	15161047	<p>The numerical value of a standard deviation can never be _____</p> <ol style="list-style-type: none"> 1. Negative 2. Positive 3. Zero 4. Larger than the variance <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

48	15161048	<p>The formula $\sigma_r = \frac{1-r^2}{\sqrt{N}}$ is used to know the standard error of the coefficient of correlation when</p> <ol style="list-style-type: none"> 1. The degree of correlation is close to ± 0.50 and the sample is a large 2. The degree of correlation is high and the sample is large 3. The degree of correlation is low and the sample is large 4. The degree of correlation is low and the sample is small <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p>	2.0	0.00
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A4 : 4

Objective Question

49	15161049	<p>What is the basic purpose of a chi-square test of independence?</p> <ol style="list-style-type: none"> 1. To analyze the multivariate statistics 2. To determine if two variables are related or independent 3. To determine the probability of statistical error in measurement 4. To determine the cause and effect in the dependent variables <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

50	15161050	<p>The coefficient of Kendall's tau is to be considered as good when its magnitude is</p> <ol style="list-style-type: none"> 1. More than 0.60 2. More than 0.90 3. Between 0.60 to 0.80 4. Upto 0.60 and beyond <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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