

National Testing Agency

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Data Analysis For Social Science Teachers

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Data Analysis For Social Science Teachers-1

Section Id :	603489137
Section Number :	1
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Sub-Section Number :	1
Sub-Section Id :	603489230
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 6034895811 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The key assumption of the multivariate data analysis is:

1. Data should be random
2. Data should be normal
3. Data should be free from outliers
4. Not more than 10% missing cases

Options :

60348921265. 1

60348921266. 2

60348921267. 3

60348921268. 4

Question Number : 2 Question Id : 6034895812 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Missing completely at random (MCAR) for $Y = f(X)$ is applicable when:

1. Missing values of Y depend on Y itself
2. Missing values of Y depend on X, but not on Y
3. Missing values of Y does not depend on X
4. Missing values of Y depend on both X and Y

Options :

60348921269. 1

60348921270. 2

60348921271. 3

60348921272. 4

Question Number : 3 Question Id : 6034895813 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In multivariate analysis, other than its regular use, z-scores can be used for:

1. Data standardisation
2. Outlier detection
3. Missing value treatment
4. Data imputation

Options :

60348921273. 1

60348921274. 2

60348921275. 3

60348921276. 4

Question Number : 4 Question Id : 6034895814 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Mahalanobis distance is used for:

1. Data imputation
2. Data reliability
3. Outlier detection
4. Data standardisation

Options :

60348921277. 1

60348921278. 2

60348921279. 3

60348921280. 4

Question Number : 5 Question Id : 6034895815 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Principal component analysis method uses the

1. Common variance
2. Total variance
3. Specific variance
4. Error variance

Options :

60348921281. 1

60348921282. 2

60348921283. 3

60348921284. 4

Question Number : 6 Question Id : 6034895816 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Kolmogorov – Smirnov (KS test) is normally used for:

1. Data adequacy
2. Data reliability
3. Data normality
4. Missing value identification

Options :

60348921285. 1

60348921286. 2

60348921287. 3

60348921288. 4

Question Number : 7 Question Id : 6034895817 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

At 95% level of confidence and 0.5 as standard deviation, what sample size is adequate for an empirical research?

1. 384
2. 768
3. 1537
4. Can't be ascertained

Options :

60348921289. 1

60348921290. 2

60348921291. 3

60348921292. 4

Question Number : 8 Question Id : 6034895818 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

PP and QQ plots are useful to ascertain:

1. Spread of the data
2. How well empirical data go with theoretical data
3. Data concentration
4. Missing values

Options :

60348921293. 1

60348921294. 2

60348921295. 3

60348921296. 4

Question Number : 9 Question Id : 6034895819 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Single word substitution for "homogeneity of variance in MLR" is?

1. Homoscedasticity
2. Heteroscedasticity
3. Randomness
4. Multicollinearity

Options :

60348921297. 1

60348921298. 2

60348921299. 3

60348921300. 4

Question Number : 10 Question Id : 6034895820 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following are true to deal with heteroscedasticity in MLR?

- A. Logarithmic values can be found for different variables
- B. Modification of standard error in the model
- C. Application of generalized linear squares

Choose the correct answer from the options given below

1. A and B only
2. A, B and C only
3. B and C only
4. A and C only

Options :

60348921301. 1

60348921302. 2

60348921303. 3

60348921304. 4

Question Number : 11 Question Id : 6034895821 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A correlation of 0.7 was found between time spent studying and percentage on an exam. What is the proportion of variance in exam scores that can be explained by time spent studying?

1. 0.70
2. 0.49
3. 0.30
4. 0.07

Options :

60348921305. 1

60348921306. 2

60348921307. 3

60348921308. 4

Question Number : 12 Question Id : 6034895822 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is a more generalized test for autocorrelation in time series data?

1. ANOVA
2. Levene's test
3. Breusch-Godfrey test
4. Durbin-Watson

Options :

60348921309. 1

60348921310. 2

60348921311. 3

60348921312. 4

Question Number : 13 Question Id : 6034895823 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Multicollinearity is a situation where:

1. Independent variables have high correlation among themselves
2. Independent variables are highly correlated with their residuals
3. Independent variables are highly correlated with the dependent variable
4. Independent and dependent variables are perfectly correlated

Options :

60348921313. 1

60348921314. 2

60348921315. 3

60348921316. 4

Question Number : 14 Question Id : 6034895824 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

T-test in MLR decides:

1. If an independent variable has significant relationship with other independent variables
2. If an independent variable has significant relationship with the dependent variable
3. Regression coefficients are all same and equal to zero
4. Regression coefficients are all different and not equal to zero

Options :

60348921317. 1

60348921318. 2

60348921319. 3

60348921320. 4

Question Number : 15 Question Id : 6034895825 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What relationship exists between VIF and tolerance (TOL) values of an independent variable in an MLR model?

1. They are directly proportional to each other
2. They are inversely proportional to each other
3. They are inversely proportional to each other and $VIF \times TOL = 1$
4. No relationship exists between them

Options :

60348921321. 1

60348921322. 2

60348921323. 3

60348921324. 4

Question Number : 16 Question Id : 6034895826 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is/are NOT true to deal with multi-collinearity in MLR?

1. Logarithmic values can be found for different variables
2. Dropping highly correlated variables from the model
3. Factor analysis of existing variables and then building the model
4. Increasing the sample size

Options :

60348921325. 1

60348921326. 2

60348921327. 3

60348921328. 4

Question Number : 17 Question Id : 6034895827 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Logistic regression model is applicable when:

1. Both dependent and independent variables need to be scale variables
2. Both dependent and independent variables need to be categorical variables
3. Dependent variable is categorical in nature while no bar for independent variables
4. Dependent variable has no bar while independent variables have to be categorical

Options :

60348921329. 1

60348921330. 2

60348921331. 3

60348921332. 4

Question Number : 18 Question Id : 6034895828 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is used by logistic regression to best fit the data?

1. Least square method
2. Interpolation method
3. Classification method
4. Maximum likelihood method

Options :

60348921333. 1

60348921334. 2

60348921335. 3

60348921336. 4

Question Number : 19 Question Id : 6034895829 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following distribution is relevant for logistic regression?

1. Binomial distribution
2. Bernoulli's distribution
3. Poisson distribution
4. Exponential distribution

Options :

60348921337. 1

60348921338. 2

60348921339. 3

60348921340. 4

Question Number : 20 Question Id : 6034895830 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following in logistic regression resembles t-test in MLR?

1. Exponential beta
2. Wald's ratio
3. H.L test
4. Pseudo R-squared

Options :

60348921341. 1

60348921342. 2

60348921343. 3

60348921344. 4

Question Number : 21 Question Id : 6034895831 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which one of the following options is true?

1. Linear Regression error values have to be normally distributed but in the case of Logistic Regression, this is not the case
2. Logistic Regression error values have to be normally distributed but in the case of Linear Regression, this is not the case
3. Both Linear Regression and Logistic Regression error values have to be normally distributed
4. Both Linear Regression and Logistic Regression error values have not to be normally distributed

Options :

60348921345. 1

60348921346. 2

60348921347. 3

60348921348. 4

Question Number : 22 Question Id : 6034895832 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In logistic regression, what is true about odds ratio > 1 ?

1. It indicates that the likelihood of an event occurring is more likely for the response category than the reference category
2. It indicates that the likelihood of an event occurring is less likely for the response category than the reference category
3. It indicates that the likelihood of an event occurring is equally likely for the response category than the reference category
4. It indicates that the likelihood of an event occurring is more likely for the reference category than the response category

Options :

60348921349. 1

60348921350. 2

60348921351. 3

60348921352. 4

Question Number : 23 Question Id : 6034895833 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Recall in classification through logistic model is:

1. $TP/(TP + FP)$
2. $TP/(TP + FN)$
3. $TP/(TP + TN)$
4. $(TP + TN)/(TP + FP + TN + FN)$

Options :

60348921353. 1

60348921354. 2

60348921355. 3

60348921356. 4

Question Number : 24 Question Id : 6034895834 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In which of the pseudo R squared measures in logistic regression 100% of R squared can be achieved?

1. Cox and Snell measure
2. McFadden measure
3. Nagelkerke measure
4. 100% R squared can never be achieved

Options :

60348921357. 1

60348921358. 2

60348921359. 3

60348921360. 4

Question Number : 25 Question Id : 6034895835 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following forecasting methods addresses trend but not seasonality?

1. Moving average
2. Exponential smoothing
3. Holt's method
4. ARIMA

Options :

60348921361. 1

60348921362. 2

60348921363. 3

60348921364. 4

Question Number : 26 Question Id : 6034895836 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

If for two successive time periods forecasting errors and MADs are respectively (403, -1942) and (403, 1172) then what would be the tracking signal for second period, approximately?

1. -1.00
2. 1.00
3. -1.31
4. 1.31

Options :

60348921365. 1

60348921366. 2

60348921367. 3

60348921368. 4

Question Number : 27 Question Id : 6034895837 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What model is basically used in the Winters' method?

1. $(\text{level} + \text{trend}) * \text{seasonality}$
2. $\text{level} + \text{trend} + \text{seasonality}$
3. $\text{level} * \text{trend} * \text{seasonality}$
4. $(\text{level} * \text{trend}) / \text{seasonality}$

Options :

60348921369. 1

60348921370. 2

60348921371. 3

60348921372. 4

Question Number : 28 Question Id : 6034895838 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In the case of ARIMA (p, d, q) forecasting, what describes the integration of the time series with various lags?

A. p

B. d

C. q

Choose the correct answer from the options given below

1. A only
2. B only
3. C only
4. A and C only

Options :

60348921373. 1

60348921374. 2

60348921375. 3

60348921376. 4

Question Number : 29 Question Id : 6034895839 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In the case of ARIMA (p, d, q) which one of the following is normally true?

1. ACF decides MA while PACF decides AR
2. PACF decides MA while ACF decides AR
3. PACF and ACF can decide only AR
4. PACF and ACF can decide only MA

Options :

60348921377. 1

60348921378. 2

60348921379. 3

60348921380. 4

Question Number : 30 Question Id : 6034895840 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What are the control limits for ACF and PACF in ARIMA, if the residuals are normally distributed with mean = 0 and standard deviation = 1?

1. -1.96 to +1.96 through 0
2. $-1.96/\sqrt{n}$ to $+1.96/\sqrt{n}$ through 0
3. $-1.96\sqrt{n}$ to $+1.96\sqrt{n}$ through 0
4. $-1.96\sigma/\sqrt{n}$ to $+1.96\sigma/\sqrt{n}$ through 0

Options :

60348921381. 1

60348921382. 2

60348921383. 3

60348921384. 4

Question Number : 31 Question Id : 6034895841 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following statistics is used to test whether the autocorrelations are significantly different from zero?

1. Normalized BIC
2. RMSE or MSE
3. Ljung Box statistics
4. AIC or BIC

Options :

60348921385. 1

60348921386. 2

60348921387. 3

60348921388. 4

Question Number : 32 Question Id : 6034895842 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What are the two main windows in SPSS?

1. Data view and variable view
2. Data editor and output viewer
3. Data view and output viewer
4. Variable view and output viewer

Options :

60348921389. 1

60348921390. 2

60348921391. 3

60348921392. 4

Question Number : 33 Question Id : 6034895843 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which menu item contains procedures to manipulate variables?

1. Graph menu
2. Data menu
3. Transform menu
4. Analyze menu

Options :

60348921393. 1

60348921394. 2

60348921395. 3

60348921396. 4

Question Number : 34 Question Id : 6034895844 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which menu item is used to create bar graphs and scatter plots?

1. Graph menu
2. Data menu
3. Transform menu
4. Analyze menu

Options :

60348921397. 1

60348921398. 2

60348921399. 3

60348921400. 4

Question Number : 35 Question Id : 6034895845 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which menu item contains the split file and select cases command?

1. Graph menu
2. Data menu
3. Transform menu
4. Analyze menu

Options :

60348921401. 1

60348921402. 2

60348921403. 3

60348921404. 4

Question Number : 36 Question Id : 6034895846 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Select the window where the results of your analysis appear?

1. Data view
2. Variable view
3. Output viewer
4. Data editor

Options :

60348921405. 1

60348921406. 2

60348921407. 3

60348921408. 4

Question Number : 37 Question Id : 6034895847 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is used for entering and viewing data?

1. Data view
2. Variable view
3. Output viewer
4. Data editor

Options :

60348921409. 1

60348921410. 2

60348921411. 3

60348921412. 4

Question Number : 38 Question Id : 6034895848 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is used for creating and defining various characteristics of variables?

1. Data view
2. Variable view
3. Output viewer
4. Data editor

Options :

60348921413. 1

60348921414. 2

60348921415. 3

60348921416. 4

Question Number : 39 Question Id : 6034895849 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In which one of the following tabs, rows represent variables and columns represent characteristics of variables?

1. Data view
2. Variable view
3. Output viewer
4. Data editor

Options :

60348921417. 1

60348921418. 2

60348921419. 3

60348921420. 4

Question Number : 40 Question Id : 6034895850 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What does the operation "Recode Into Different Variables" do to the data?

1. Replaces missing data with some random scores
2. Reverses the position of the independent and dependent variable on a graph
3. Redistributes a range of values into a new set of categories and creates a new variable
4. Represents the data in the form of a pie chart

Options :

60348921421. 1

60348921422. 2

60348921423. 3

60348921424. 4

Question Number : 41 Question Id : 6034895851 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In which one of the following tabs, rows represent individual cases and columns represent variables in your data?

1. Data view
2. Variable view
3. Output viewer
4. Data editor

Options :

60348921425. 1

60348921426. 2

60348921427. 3

60348921428. 4

Question Number : 42 Question Id : 6034895852 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The extension given to SPSS data files is

1. SPSS
2. DOC
3. SAV
4. PPTM

Options :

60348921429. 1

60348921430. 2

60348921431. 3

60348921432. 4

Question Number : 43 Question Id : 6034895853 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A bag contains 3 red, 7 green and 2 blue balls. A ball is drawn at random. The probability of the ball drawn is either red or blue is :

1. $\frac{3}{12}$
2. $\frac{7}{12}$
3. $\frac{5}{12}$
4. $\frac{2}{12}$

Options :

60348921433. 1

60348921434. 2

60348921435. 3

60348921436. 4

Question Number : 44 Question Id : 6034895854 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The procedure to conduct a reliability analysis is:

1. Analyze, Regression
2. Analyze, Classify
3. Analyze, Dimension Reduction
4. Analyze, Scale

Options :

60348921437. 1

60348921438. 2

60348921439. 3

60348921440. 4

Question Number : 45 Question Id : 6034895855 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

If three coins are tossed simultaneously, then the probability of getting at least two heads, is

1. $\frac{1}{4}$
2. $\frac{3}{8}$
3. $\frac{1}{2}$
4. $\frac{1}{8}$

Options :

60348921441. 1

60348921442. 2

60348921443. 3

60348921444. 4

Question Number : 46 Question Id : 6034895856 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A two-way analysis of variance will have _____ F-tests.

1. 1
2. 2
3. 3
4. 4

Options :

60348921445. 1

60348921446. 2

60348921447. 3

60348921448. 4

Question Number : 47 Question Id : 6034895857 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In binomial distribution, formula of calculating standard deviation is

1. Square root of p
2. Square root of pq
3. Square root of npq
4. Square root of np

Options :

60348921449. 1

60348921450. 2

60348921451. 3

60348921452. 4

Question Number : 48 Question Id : 6034895858 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Inferential statistics is a process that involves all of the following, EXCEPT

1. Estimating a parameter
2. Estimating a statistic
3. Test a hypothesis
4. Analyze relationships

Options :

60348921453. 1

60348921454. 2

60348921455. 3

60348921456. 4

Question Number : 49 Question Id : 6034895859 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The mean of binomial probability distribution is 160 and the probability is 0.64 then the number of values of binomial distribution is

1. 250
2. 200
3. 150
4. 100

Options :

60348921457. 1

60348921458. 2

60348921459. 3

60348921460. 4

Question Number : 50 Question Id : 6034895860 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A procedure used to select a sample of n objects from a population in such a way that each member of the population is chosen strictly by chance; each member of the the population is equally likely to be chosen, and every possible sample of a given size, n , has the same chance of selection, is known as

1. Statistical thinking
2. Inferential statistics
3. Descriptive statistics
4. Simple random sampling

Options :

60348921461. 1

60348921462. 2

60348921463. 3

60348921464. 4

Question Number : 51 Question Id : 6034895861 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

If the outcomes of a discrete random variable follow a Poisson distribution, then which of the following is true?

1. The mean equals the variance
2. The mean equals the standard deviation
3. The median equals the mode
4. The median equals the standard deviation

Options :

60348921465. 1

60348921466. 2

60348921467. 3

60348921468. 4

Question Number : 52 Question Id : 6034895862 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What is the conventional level of significance typically adopted in Social Science Research?

1. 0.001
2. 0.01
3. 0.05
4. 0.10

Options :

60348921469. 1

60348921470. 2

60348921471. 3

60348921472. 4

Question Number : 53 Question Id : 6034895863 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is not an example of a discrete probability distribution?

1. The sale price of a medicine
2. The number of bedrooms in a house
3. The number of bathrooms in a house
4. Number of children in a family

Options :

60348921473. 1

60348921474. 2

60348921475. 3

60348921476. 4

Question Number : 54 Question Id : 6034895864 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which one of the following statements reflects a null hypothesis?

1. Older adults will have worse memories than younger adults
2. Women will score higher than men on empathy
3. There will be no difference between group 1 and group 2 in terms of performance
4. Men will score higher than women on political awareness

Options :

60348921477. 1

60348921478. 2

60348921479. 3

60348921480. 4

Question Number : 55 Question Id : 6034895865 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

If the mean and the standard deviation of a continuous random variable that is normally distributed are 20 and 5, respectively, find an interval that contains 68% of the distribution.

1. (18,24)
2. (15,25)
3. (12,25)
4. (10,30)

Options :

60348921481. 1

60348921482. 2

60348921483. 3

60348921484. 4

Question Number : 56 Question Id : 6034895866 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What statistical test would be used with interval or ratio data with multiple dependent variables?

1. One Way ANOVA
2. Two Way ANOVA
3. Mixed ANOVA
4. MANOVA

Options :

60348921485. 1

60348921486. 2

60348921487. 3

60348921488. 4

Question Number : 57 Question Id : 6034895867 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A competency test has scores with a mean of 80 and a standard deviation of 10.
A histogram of the data shows that the distribution is normal. Use the Empirical Rule to find the percentage of scores between 60 and 100.

- 1. 99.7%
- 2. 95%
- 3. 68%
- 4. 50%

Options :

- 60348921489. 1
- 60348921490. 2
- 60348921491. 3
- 60348921492. 4

Question Number : 58 Question Id : 6034895868 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What would you use to determine whether significant differences were observed between all levels of your independent variable?

- 1. Histogram
- 2. Box - plot
- 3. F statistic
- 4. Post-hoc tests

Options :

- 60348921493. 1
- 60348921494. 2
- 60348921495. 3
- 60348921496. 4

Question Number : 59 Question Id : 6034895869 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In normal distribution, which of the following is true?

1. Mean = Median = Mode
2. Mean < Median < Mode
3. Mean > Median > Mode
4. Mean $\neq$ Median $\neq$ Mode

Options :

60348921497. 1

60348921498. 2

60348921499. 3

60348921500. 4

Question Number : 60 Question Id : 6034895870 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In which approach to probability, the outcomes are equally likely to occur?

1. Classical probability
2. Subjective probability
3. Relative frequency
4. Independent

Options :

60348921501. 1

60348921502. 2

60348921503. 3

60348921504. 4

Question Number : 61 Question Id : 6034895871 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The coefficient of skewness of a normal distribution is:

1. Positive
2. Negative
3. Zero
4. Three

Options :

60348921505. 1

60348921506. 2

60348921507. 3

60348921508. 4

Question Number : 62 Question Id : 6034895872 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

For a particular hypothesis test, $\alpha = 0.05$ and $\beta = 0.10$. The power of this test is:

1. 0.15
2. 0.90
3. 0.85
4. 0.95

Options :

60348921509. 1

60348921510. 2

60348921511. 3

60348921512. 4

Question Number : 63 Question Id : 6034895873 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which one of the following statements regarding a researcher's use of inferential statistics is true?

1. A random sample provides a perfect estimate of the population values
2. It is best to measure every member of a population, if possible
3. Descriptive statistics from a sample are used to estimate the characteristics of the population
4. Usually needs to take several samples to obtain a good estimate of the population values

Options :

60348921513. 1

60348921514. 2

60348921515. 3

60348921516. 4

Question Number : 64 Question Id : 6034895874 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

For a normal curve with mean and standard deviations, respectively, 120 and 34, what area (approx.) will lie between 40 and 76?

1. 1%
2. 5%
3. 9%
4. 12%

Options :

60348921517. 1

60348921518. 2

60348921519. 3

60348921520. 4

Question Number : 65 Question Id : 6034895875 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

If a researcher conducts a study in which the reading ability of a class of 20 second graders is tested at the beginning and at the end of the year, the appropriate statistical procedure to analyze the results would be

1. ANOVA
2. ANCOVA
3. Chi-square
4. The dependent samples t-test

Options :

60348921521. 1

60348921522. 2

60348921523. 3

60348921524. 4

Question Number : 66 Question Id : 6034895876 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Assume that you take a sample and calculate mean as 100 and at 90% confidence level, the upper limit is 112. What would be the lower limit?

1. 88
2. 100
3. 92
4. 12

Options :

60348921525. 1

60348921526. 2

60348921527. 3

60348921528. 4

Question Number : 67 Question Id : 6034895877 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The level of significance of a statistical test indicates:

1. How significant the difference between means is
2. The chance we are right in accepting the null hypothesis
3. The chance we are wrong in rejecting the null hypothesis
4. Whether to accept or reject the null hypothesis

Options :

60348921529. 1

60348921530. 2

60348921531. 3

60348921532. 4

Question Number : 68 Question Id : 6034895878 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What would you use Box's M test for?

1. To test for multivariate normality
2. To test for independence of residuals
3. To test for homogeneity of means
4. To test the assumption of homogeneity of covariance matrices

Options :

60348921533. 1

60348921534. 2

60348921535. 3

60348921536. 4

Question Number : 69 Question Id : 6034895879 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following factor analysis processes is best suited when the number of factors to extracted is known?

- A. Exploratory
- B. Confirmatory
- C. Conditional

Choose the correct answer from the options given below

- 1. A only
- 2. B only
- 3. C only
- 4. A and C only

Options :

- 60348921537. 1
- 60348921538. 2
- 60348921539. 3
- 60348921540. 4

Question Number : 70 Question Id : 6034895880 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A square matrix in which the diagonal elements are equal to 1 and the off-diagonal elements are equal to 0 is known as:

- 1. A variance–covariance matrix
- 2. A column vector
- 3. An identity matrix
- 4. The error sum of squares and cross-products matrix

Options :

- 60348921541. 1
- 60348921542. 2
- 60348921543. 3
- 60348921544. 4

Question Number : 71 Question Id : 6034895881 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Hypothesis refers to

1. The outcome of an experiment
2. A conclusion drawn from an experiment
3. A form of bias in which the subject tries to outguess the experimenter
4. A tentative statement about the relationship

Options :

- 60348921545. 1
- 60348921546. 2
- 60348921547. 3
- 60348921548. 4

Question Number : 72 Question Id : 6034895882 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Varimax rotation should be used when:

1. You believe that the underlying factors will be correlated
2. You believe that the underlying factors are non-orthogonal
3. You believe that the underlying factors are independent
4. Kaiser's criterion is met

Options :

- 60348921549. 1
- 60348921550. 2
- 60348921551. 3
- 60348921552. 4

Question Number : 73 Question Id : 6034895883 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of these is a form of oblique rotation?

1. Equamax
2. Quartimax
3. Varimax
4. Promax

Options :

60348921553. 1

60348921554. 2

60348921555. 3

60348921556. 4

Question Number : 74 Question Id : 6034895884 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What is a latent variable?

1. It is a variable that cannot be measured directly
2. It is another name for a factor
3. Latent variables represent clusters of variables that correlate highly with each other
4. All of the above

Options :

60348921557. 1

60348921558. 2

60348921559. 3

60348921560. 4

Question Number : 75 Question Id : 6034895885 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is an example of perfect mediation?

1. The strength of the relationship between the predictor and the outcome is reduced by exactly half when the mediator is included in the model
2. The relationship between the predictor and the outcome remains the same when the mediator is included in the model
3. The relationship between the predictor and the outcome is completely wiped out when the mediator is included in the model
4. The interaction of the predictor and the mediator significantly predicts the outcome, but the variables themselves do not

Options :

60348921561. 1

60348921562. 2

60348921563. 3

60348921564. 4

Question Number : 76 Question Id : 6034895886 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Imagine we found a strong positive correlation between depression and sleep problems. We might hypothesize that this relationship is explained by worry (i.e., depressed people tend to worry more than non-depressed people, leading them to experience more sleep problems). What type of analysis could we conduct to test this hypothesis?

1. Moderation
2. ANCOVA
3. Loglinear analysis
4. Mediation

Options :

60348921565. 1

60348921566. 2

60348921567. 3

60348921568. 4

Question Number : 77 Question Id : 6034895887 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which one of the following is not the part of the exploratory factor analysis process?

1. Extracting factors
2. Determining the number of factors before the analysis
3. Rotating the factors
4. Refining and interpreting the factors

Options :

60348921569. 1

60348921570. 2

60348921571. 3

60348921572. 4

Question Number : 78 Question Id : 6034895888 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is not an oblique rotation technique?

1. Promax
2. Oblimax
3. Varimax
4. Quartimin

Options :

60348921573. 1

60348921574. 2

60348921575. 3

60348921576. 4

Question Number : 79 Question Id : 6034895889 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What will a factor loading in an orthogonal solution represent?

1. Correlation
2. Partial correlation
3. Multiple correlation
4. Eigen value

Options :

60348921577. 1

60348921578. 2

60348921579. 3

60348921580. 4

Question Number : 80 Question Id : 6034895890 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

How many components have an eigenvalue of below 1?

Total Variance Explained

Component	Initial Eigen values			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.951	49.186	49.186	2.876	47.931	47.931
2	2.579	42.981	92.167	2.654	44.236	92.167
3	.264	4.401	96.567			
4	.124	2.062	98.630			
5	5.844E-02	.974	99.604			
6	2.378E-02	.396	100.000			

Extraction Method: Principal Component Analysis

1. 3
2. 4
3. 1
4. 2

Options :

60348921581. 1

60348921582. 2

60348921583. 3

60348921584. 4

Question Number : 81 Question Id : 6034895891 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which method of analysis does not classify variables as dependent or independent?

1. Regression Analysis
2. Discriminant Analysis
3. Analysis of variance
4. Cluster analysis

Options :

60348921585. 1

60348921586. 2

60348921587. 3

60348921588. 4

Question Number : 82 Question Id : 6034895892 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

_____ is a clustering procedure characterized by the development of a tree-like structure.

1. Non-hierarchical clustering
2. Hierarchical clustering
3. Divisive clustering
4. Agglomerative clustering

Options :

60348921589. 1

60348921590. 2

60348921591. 3

60348921592. 4

Question Number : 83 Question Id : 6034895893 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The integration of _____ forms the structural equation modelling.

1. CFA and path analysis
2. EFA and CFA
3. Path analysis and multiple regression
4. Conjoint analysis and path analysis

Options :

60348921593. 1

60348921594. 2

60348921595. 3

60348921596. 4

Question Number : 84 Question Id : 6034895894 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which one of the following is not a non-hierarchical clustering method?

1. Sequential threshold
2. Parallel threshold
3. Linkage method
4. Optimising partitioning

Options :

60348921597. 1

60348921598. 2

60348921599. 3

60348921600. 4

Question Number : 85 Question Id : 6034895895 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A ____ or tree graph is a graphical device for displaying clustering results. Vertical lines represent clusters that are joined together. The position of the line on the scale indicates the distances at which clusters were joined.

1. Dendogram
2. Scattergram
3. Scree plot
4. Icicle diagram

Options :

60348921601. 1

60348921602. 2

60348921603. 3

60348921604. 4

Question Number : 86 Question Id : 6034895896 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A moderator effect is where the size of the relationship between one variable and another variable is

1. Not statistically significant
2. Different for the values of a third variable
3. Statistically significant but not very strong
4. Equal to 0

Options :

60348921605. 1

60348921606. 2

60348921607. 3

60348921608. 4

Question Number : 87 Question Id : 6034895897 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Conducting surveys is the most common method of generating

1. Primary data
2. Secondary data
3. Qualitative data
4. Secondary and Qualitative data

Options :

60348921609. 1

60348921610. 2

60348921611. 3

60348921612. 4

Question Number : 88 Question Id : 6034895898 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which one of the following sets is the measure of central tendency?

1. Mean, standard deviation, mode
2. Mean, median, standard deviation
3. Arithmetic mean, median, mode
4. Standard deviation, internal validity, mode

Options :

60348921613. 1

60348921614. 2

60348921615. 3

60348921616. 4

Question Number : 89 Question Id : 6034895899 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

How many times the students appear in the research class is an example of

1. Intensity
2. Space
3. Frequency
4. Direction

Options :

60348921617. 1

60348921618. 2

60348921619. 3

60348921620. 4

Question Number : 90 Question Id : 6034895900 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

_____ is the evidence that the instrument, techniques, or process used to measure concept does indeed measure the intended concepts.

1. Reliability
2. Replicability
3. Scaling
4. Validity

Options :

60348921621. 1

60348921622. 2

60348921623. 3

60348921624. 4

Question Number : 91 Question Id : 6034895901 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Experimental design is the only appropriate design where _____ relationship can be established.

1. Strong
2. Linear
3. Weak
4. Cause and Effect

Options :

60348921625. 1

60348921626. 2

60348921627. 3

60348921628. 4

Question Number : 92 Question Id : 6034895902 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is NOT a dependence technique?

1. Multiple regression
2. Structural Equation Modeling
3. Correspondence Analysis
4. Canonical Correlation

Options :

60348921629. 1

60348921630. 2

60348921631. 3

60348921632. 4

Question Number : 93 Question Id : 6034895903 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is NOT an inter-dependence technique?

1. Cluster Analysis
2. Factor Analysis
3. Correspondence Analysis
4. Conjoint Analysis

Options :

60348921633. 1

60348921634. 2

60348921635. 3

60348921636. 4

Question Number : 94 Question Id : 6034895904 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

To test linear relationship between two metric variables, which of the following plot is best suited?

1. Bar chart
2. Histogram
3. Scatter plot
4. Box plot

Options :

60348921637. 1

60348921638. 2

60348921639. 3

60348921640. 4

Question Number : 95 Question Id : 6034895905 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What does the coefficient of multiple determination (R^2) indicate?

1. The variation around the predicted regression equation
2. The proportion of variation in Y explained by all independent variables
3. The proportion of variation in Y that is explained by a holding all independent variables constant
4. The proportion of variation in Y that is explained by a holding second independent variable constant

Options :

60348921641. 1

60348921642. 2

60348921643. 3

60348921644. 4

Question Number : 96 Question Id : 6034895906 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The numerical description that describes the sample may be expected to differ from those that describe the population because of random fluctuations inherent in the sampling process is referred to as:

1. Sampling design
2. Non-probability sampling
3. Sampling error
4. Probability sampling

Options :

60348921645. 1

60348921646. 2

60348921647. 3

60348921648. 4

Question Number : 97 Question Id : 6034895907 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The Split-half method may also be called the _____ method.

1. Test-retest
2. Parallel form
3. Alternate form
4. Odd-even

Options :

60348921649. 1

60348921650. 2

60348921651. 3

60348921652. 4

Question Number : 98 Question Id : 6034895908 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The multiple regression model cannot be estimated, if

1. Simple correlation coefficient between dependent and any of the independent variable is ± 1
2. If correlation coefficient between any two independent variables is zero
3. If the correlation coefficient between any two independent variables is ± 1
4. Option 2 and 3

Options :

60348921653. 1

60348921654. 2

60348921655. 3

60348921656. 4

Question Number : 99 Question Id : 6034895909 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is true about the variable view of the data file in SPSS?

1. It's the required data set
2. It explains the output file
3. It explains the variables in the data
4. It explains the syntax

Options :

60348921657. 1

60348921658. 2

60348921659. 3

60348921660. 4

Question Number : 100 Question Id : 6034895910 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In structural equation modelling, the recommended Goodness of fit index value is:

1. 0.05
2. 0.01
3. 0.80
4. 0.95

Options :

60348921661. 1

60348921662. 2

60348921663. 3

60348921664. 4