

# National Testing Agency

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## Data Analysis For Social Science Teachers

**Group Number :** 1  
**Group Id :** 28860734  
**Group Maximum Duration :** 0  
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## Data Analysis For Social Science Teachers

**Section Id :** 28860737  
**Section Number :** 1  
**Section type :** Online  
**Mandatory or Optional:** Mandatory  
**Number of Questions:** 100  
**Number of Questions to be attempted:** 100  
**Section Marks:** 100

**Sub-Section Number:** 1  
**Sub-Section Id:** 28860740  
**Question Shuffling Allowed :** Yes

**Question Number : 1 Question Id : 2886073075 Question Type : MCQ Option Shuffling : No**  
**Correct Marks : 1 Wrong Marks : 0**

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

- (a) missing values of Y depend on Y itself
- (b) missing values of Y depend on X, but not on Y
- (c) missing values of Y does not depend on X
- (d) missing values of Y depend on both X and Y

**Options :**

**28860712273. 1**

28860712274. 2

28860712275. 3

28860712276. 4

Question Number : 2 Question Id : 2886073076 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Mahalanobis distance is used for:

- (a) data imputation
- (b) data reliability
- (c) outlier detection
- (d) data standardisation

Options :

28860712277. 1

28860712278. 2

28860712279. 3

28860712280. 4

Question Number : 3 Question Id : 2886073077 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Kolmogorov – Smirnov (KS test) normally used for:

- (a) data adequacy
- (b) data reliability
- (c) data normality
- (d) missing value identification

Options :

28860712281. 1

28860712282. 2

28860712283. 3

28860712284. 4

Question Number : 4 Question Id : 2886073078 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

PP and QQ plots are useful to ascertain:

- a. spread of the data
- b. how well empirical data go with theoretical data
- c. data concentration
- d. missing values

Options :

28860712285. 1

28860712286. 2

28860712287. 3

28860712288. 4

Question Number : 5 Question Id : 2886073079 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Which of the followings are true to deal with heteroscedasticity in MLR:

- i. logarithmic values can be found for different variables
- ii. modification of standard error in the model
- iii. application of generalized linear squares

a. i & ii

b. i, ii & iii

c. ii & iii

d. i & iii

Options :

28860712289. 1

28860712290. 2

28860712291. 3

28860712292. 4

Question Number : 6 Question Id : 2886073080 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

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

- (a) ANOVA
- (b) Levene's test
- (c) Breusch-Godfrey test
- (d) Durbin-Watson

Options :

28860712293. 1

28860712294. 2

28860712295. 3

28860712296. 4

Question Number : 7 Question Id : 2886073081 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

t-test in MLR decides:

- (a) if an independent variable has significant relationship with other independent variables
- (b) if an independent variable has significant relationship with the dependent variable
- (c) regression coefficients are all same and equal to zero
- (d) regression coefficients are all different and not equal to zero

Options :

28860712297. 1

28860712298. 2

28860712299. 3

28860712300. 4

Question Number : 8 Question Id : 2886073082 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the followings is/are not true to deal with multi-collinearity in MLR:

- (a) logarithmic values can be found for different variables
- (b) dropping highly correlated variables from the model
- (c) factor analysis of existing variables and then building the model
- (d) increasing the sample size

Options :

28860712301. 1

28860712302. 2

28860712303. 3

28860712304. 4

Question Number : 9 Question Id : 2886073083 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- (a) least square method
- (b) interpolation method
- (c) classification method
- (d) maximum likelihood method

Options :

28860712305. 1

28860712306. 2

28860712307. 3

28860712308. 4

Question Number : 10 Question Id : 2886073084 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- (a) Exponential beta
- (b) Wald's ratio
- (c) H.L test
- (d) Pseudo R-squared

Options :

28860712309. 1

28860712310. 2

28860712311. 3

28860712312. 4

Question Number : 11 Question Id : 2886073085 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- (a) it indicates that the likelihood of an event occurring is more likely for the response category than the reference category
- (b) it indicates that the likelihood of an event occurring is less likely for the response category than the reference category
- (c) it indicates that the likelihood of an event occurring is equally likely for the response category than the reference category
- (d) it indicates that the likelihood of an event occurring is more likely for the reference category than the response category

Options :

28860712313. 1

28860712314. 2

28860712315. 3

28860712316. 4

Question Number : 12 Question Id : 2886073086 Question Type : MCQ Option Shuffling : 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?

- (a) Cox and Snell measure
- (b) McFadden measure
- (c) Nagelkerke measure
- (d) 100% R squared can never be achieved

Options :

28860712317. 1

28860712318. 2



28860712319. 3

28860712320. 4

Question Number : 13 Question Id : 2886073087 Question Type : MCQ Option Shuffling : 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?

- (a) -1.00
- (b) 1.00
- (c) -1.31
- (d) 1.31

Options :

28860712321. 1

28860712322. 2

28860712323. 3

28860712324. 4

Question Number : 14 Question Id : 2886073088 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- i. p
  - ii. d
  - iii. q
- a. i only
  - b. ii only
  - c. iii only
  - d. i & iii

Options :

28860712325. 1

28860712326. 2

28860712327. 3

28860712328. 4

Question Number : 15 Question Id : 2886073089 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- (a) -1.96 to +1.96 through 0
- (b)  $-1.96/\sqrt{n}$  to  $+1.96/\sqrt{n}$  through 0
- (c)  $-1.96\sqrt{n}$  to  $+1.96\sqrt{n}$  through 0
- (d)  $-1.96\sigma/\sqrt{n}$  to  $+1.96\sigma/\sqrt{n}$  through 0

Options :

28860712329. 1

28860712330. 2

28860712331. 3

28860712332. 4

Question Number : 16 Question Id : 2886073090 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What are the two main windows in SPSS?

- a. Data view and variable view
- b. Data editor and output viewer
- c. Data view and output viewer
- d. Variable view and output viewer

Options :

28860712333. 1

28860712334. 2

28860712335. 3

28860712336. 4

Question Number : 17 Question Id : 2886073091 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- A. Graph menu
- B. Data menu
- C. Transform menu
- D. Analyze menu

Options :

28860712337. 1

28860712338. 2

28860712339. 3

28860712340. 4

Question Number : 18 Question Id : 2886073092 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Select the window where the results of your analysis appear in SPSS?

- A. Data view
- B. Variable view
- C. Output viewer
- D. Data editor

Options :

28860712341. 1

28860712342. 2

28860712343. 3

28860712344. 4

Question Number : 19 Question Id : 2886073093 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- A. Data view
- B. Variable view
- C. Output viewer
- D. Data editor

Options :

28860712345. 1

28860712346. 2

28860712347. 3

28860712348. 4

Question Number : 20 Question Id : 2886073094 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- A. Replaces missing data with some random scores.
- B. Reverses the position of the independent and dependent variable on a graph.
- C. Redistributes a range of values into a new set of categories and creates a new variable.
- D. Represents the data in the form of a pie chart.

Options :

28860712349. 1

28860712350. 2



28860712351. 3

28860712352. 4

Question Number : 21 Question Id : 2886073095 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

The extension given to SPSS data files is \_\_\_\_\_.

- A. SPSS.
- B. DOC
- C. SAV
- D. PPTM

Options :

28860712353. 1

28860712354. 2

28860712355. 3

28860712356. 4

Question Number : 22 Question Id : 2886073096 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

The procedure to conduct a reliability analysis is:

- A. Analyze, Regression
- B. Analyze, Classify
- C. Analyze, Dimension Reduction
- D. Analyze, Scale

Options :

28860712357. 1

28860712358. 2

28860712359. 3

28860712360. 4

Question Number : 23 Question Id : 2886073097 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

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

- A. 1
- B. 2
- C. 3
- D. 4

Options :

28860712361. 1

28860712362. 2

28860712363. 3

28860712364. 4

Question Number : 24 Question Id : 2886073098 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

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

- A. estimating a parameter
- B. estimating a statistic.
- C. test a hypothesis
- D. analyze relationships

Options :

28860712365. 1

28860712366. 2

28860712367. 3

28860712368. 4

Question Number : 25 Question Id : 2886073099 Question Type : MCQ Option Shuffling : 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 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

- A. statistical thinking.
- B. inferential statistics.
- C. descriptive statistics.
- D. simple random sampling

Options :

28860712369. 1

28860712370. 2

28860712371. 3

28860712372. 4

Question Number : 26 Question Id : 2886073100 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

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

- A. 0.001
- B. 0.01
- C. 0.05
- D. 0.10

Options :

28860712373. 1

28860712374. 2

28860712375. 3

28860712376. 4

Question Number : 27 Question Id : 2886073101 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Which of these statements reflect a null hypothesis?

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

Options :

28860712377. 1

28860712378. 2

28860712379. 3

28860712380. 4

Question Number : 28 Question Id : 2886073102 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

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

- A. One Way ANOVA
- B. Two Way ANOVA
- C. Mixed ANOVA
- D. MANOVA

Options :

28860712381. 1

28860712382. 2

28860712383. 3

28860712384. 4

Question Number : 29 Question Id : 2886073103 Question Type : MCQ Option Shuffling : 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?

- A. Histogram
- B. Box - plot
- C. F statistic
- D. Post-hoc tests

Options :

28860712385. 1

28860712386. 2

28860712387. 3

28860712388. 4

Question Number : 30 Question Id : 2886073104 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

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

- A. classical probability
- B. subjective probability
- C. relative frequency
- D. independent

Options :

28860712389. 1

28860712390. 2

28860712391. 3

28860712392. 4

Question Number : 31 Question Id : 2886073105 Question Type : MCQ Option Shuffling : 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:

- A. 0.15
- B. 0.90
- C. 0.85
- D. 0.95

Options :

28860712393. 1

28860712394. 2

28860712395. 3

28860712396. 4

Question Number : 32 Question Id : 2886073106 Question Type : MCQ Option Shuffling : 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?

- A. 1%
- B. 5%
- C. 9%
- D. 12%

Options :

28860712397. 1

28860712398. 2

28860712399. 3

28860712400. 4

Question Number : 33 Question Id : 2886073107 Question Type : MCQ Option Shuffling : 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?

- A. 88
- B. 100
- C. 92
- D. 12

Options :

28860712401. 1

28860712402. 2

28860712403. 3

28860712404. 4

Question Number : 34 Question Id : 2886073108 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0



What would you use Box's M test for?

- A. To test for multivariate normality.
- B. To test for independence of residuals
- C. To test for homogeneity of means
- D. To test the assumption of homogeneity of covariance matrices.

Options :

28860712405. 1

28860712406. 2

28860712407. 3

28860712408. 4

Question Number : 35 Question Id : 2886073109 Question Type : MCQ Option Shuffling : 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:

- A. A variance-covariance matrix
- B. A column vector
- C. An identity matrix
- D. The error sum of squares and cross-products matrix

Options :

28860712409. 1

28860712410. 2

28860712411. 3

28860712412. 4

Question Number : 36 Question Id : 2886073110 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ factor analysis is best suited when the number of factors to extracted is unknown

- i. Exploratory
- ii. Confirmatory
- iii. Conditional

- a. i only
- b. ii only
- c. iii only
- d. ii & iii

Options :

28860712413. 1

28860712414. 2

28860712415. 3

28860712416. 4

Question Number : 37 Question Id : 2886073111 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

KMO values between 0.6 to 0.8 are?

- a. meritorious
- b. not acceptable
- c. acceptable
- d. irrelevant

Options :

28860712417. 1

28860712418. 2

28860712419. 3

28860712420. 4

Question Number : 38 Question Id : 2886073112 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ variance is the one that is shared with all other variables in the analysis.

- a. Common
- b. Specific
- c. Error
- d. Complete

Options :

28860712421. 1

28860712422. 2

28860712423. 3

28860712424. 4

Question Number : 39 Question Id : 2886073113 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Communality is the estimate of \_\_\_\_\_ variance.

- a. Common
- b. Specific
- c. Error
- d. Complete

Options :

28860712425. 1

28860712426. 2

28860712427. 3

28860712428. 4

Question Number : 40 Question Id : 2886073114 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Which of the following is a popular orthogonal rotation method?

- i. Equimax
- ii. Varimax
- iii. Quartimax

- a. i only
- b. ii only
- c. iii only
- d. i & iii

Options :

28860712429. 1

28860712430. 2

28860712431. 3

28860712432. 4

Question Number : 41 Question Id : 2886073115 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

In a multiple regression problem involving two independent variables( $y=a+ b_1 x_1+b_2 x_2+e$ ) what can you say about their relationship if  $b_2 = +3.0$ ?

- A) The relationship between  $X_2$  and  $Y$  is significant.
- B) The estimated value of  $Y$  increases by an average of 3 units for each increase of 1 unit of  $X_2$ , holding  $X_1$  constant.
- C) The estimated value of  $Y$  increases by an average of 3 units for each increase of 1 unit of  $X_2$ , without regard to  $X_1$ .
- D) The estimated average value of  $Y$  is 3 when  $X_2$  equals zero.

Options :

28860712433. 1

28860712434. 2

28860712435. 3

28860712436. 4

Question Number : 42 Question Id : 2886073116 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- A) The variation around the predicted regression equation.
- B) The proportion of variation in  $Y$  explained by all independent variables.
- C) The proportion of variation in  $Y$  that is explained by a holding all independent variables constant.
- D) The proportion of variation in  $Y$  that is explained by a holding second independent variable constant.

Options :

28860712437. 1

28860712438. 2

28860712439. 3

28860712440. 4

Question Number : 43 Question Id : 2886073117 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What is adjusted  $R^2$  "adjusted" for?

- i. The sample size only.
  - ii. The number of independent variables only.
  - iii. Both the number of independent variables and the sample size.
- a. i only
  - b. ii only
  - c. iii only
  - d. i & ii

Options :

28860712441. 1

28860712442. 2

28860712443. 3

28860712444. 4

Question Number : 44 Question Id : 2886073118 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

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

- i. Bar chart
- ii. Histogram
- iii. Scatter plot

a. i only

b. ii only

c. iii only

d. i & ii

Options :

28860712445. 1

28860712446. 2

28860712447. 3

28860712448. 4

Question Number : 45 Question Id : 2886073119 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0



Which of the following statement(s) can be true after a new independent variable is added to an existing linear regression model?

- i.  $R^2$  and Adjusted  $R^2$  both increase
- ii.  $R^2$  increases and Adjusted  $R^2$  decreases
- iii.  $R^2$  decreases and Adjusted  $R^2$  also decreases
- iv.  $R^2$  decreases and Adjusted  $R^2$  increases

- A) i and ii
- B) i and iii
- C) ii and iv
- D) iii only

Options :

28860712449. 1

28860712450. 2

28860712451. 3

28860712452. 4

Question Number : 46 Question Id : 2886073120 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

What kind of test can be used while testing for the difference in motivation levels between employees of two companies?

- A) Dependent samples t-test
- B) Chi-square test
- C) One-way ANOVA
- D) Independent samples t-test

Options :

28860712453. 1

28860712454. 2

28860712455. 3

28860712456. 4

Question Number : 47 Question Id : 2886073121 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

What kind of test can be used while testing for the difference in motivation levels between a set of employees of a company while joining and on completion of one-year service?

- A) Dependent samples t-test
- B) Chi-square test
- C) One-way ANOVA
- D) Independent samples t-test

Options :

28860712457. 1

28860712458. 2

28860712459. 3

28860712460. 4

Question Number : 48 Question Id : 2886073122 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The degrees of freedom for an independent samples (sizes  $n_1$  and  $n_2$ ) t-test is arrived as

- A)  $n_1 + n_2$
- B)  $n_1 - n_2$
- C)  $n_1 + n_2 + 2$
- D)  $n_1 + n_2 - 2$

Options :

28860712461. 1

28860712462. 2

28860712463. 3

28860712464. 4

Question Number : 49 Question Id : 2886073123 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What is an appropriate test when respondents were asked to compare their preference between two brands?

- A) Chi-square test
- B) Dependent samples t-test
- C) One-way ANOVA
- D) Independent samples t-test

Options :

28860712465. 1

28860712466. 2

28860712467. 3

28860712468. 4

Question Number : 50 Question Id : 2886073124 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

When a multivariate statistical technique is used to predict a dependent variable from several independent variables, the researcher is studying:

- a. dependence
- b. independence
- c. interdependence
- d. segments

Options :

28860712469. 1

28860712470. 2

28860712471. 3

28860712472. 4

Question Number : 51 Question Id : 2886073125 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

All of the following are examples of interdependence methods of analysis EXCEPT:

- a. factor analysis
- b. cluster analysis
- c. multidimensional scaling
- d. conjoint analysis

Options :

28860712473. 1

28860712474. 2

28860712475. 3

28860712476. 4

Question Number : 52 Question Id : 2886073126 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

When a researcher is attempting to predict sales volume by using building permits, amount of advertising, and the income levels of residents, the researcher is using:

- a. univariate analysis
- b. a chi-square analysis
- c. multiple regression analysis
- d. factor analysis

Options :

28860712477. 1

28860712478. 2

28860712479. 3

28860712480. 4

Question Number : 53 Question Id : 2886073127 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

A variable that is coded as either zero or one and that has two distinct levels is called a(n):

- a. regression variable
- b. dummy variable
- c. MANOVA variable
- d. ANOVA variable

Options :

28860712481. 1

28860712482. 2

28860712483. 3

28860712484. 4

Question Number : 54 Question Id : 2886073128 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

The correlation between two variables after taking into account the fact that they are correlated with other variables too is called:

- a. partial correlation
- b. standardized correlation
- c. raw correlation
- d. variant correlation

Options :

28860712485. 1

28860712486. 2

28860712487. 3

28860712488. 4

Question Number : 55 Question Id : 2886073129 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

A value of  $R^2 = 0.40$  means that \_\_\_\_\_ percent of the variance in the dependent variable is explained by the independent variables.

- a. 80
- b. 64
- c. 40
- d. 16

Options :

28860712489. 1

28860712490. 2

28860712491. 3

28860712492. 4

Question Number : 56 Question Id : 2886073130 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Which type of analysis attempts to predict a categorical dependent variable?

- a. factor analysis
- b. discriminant analysis
- c. regression analysis
- d. linear analysis

Options :

28860712493. 1

28860712494. 2

28860712495. 3

28860712496. 4

Question Number : 57 Question Id : 2886073131 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Which multivariate analysis statistically identifies a reduced number of factors from a larger number of measured variables?

- a. factor analysis
- b. regression
- c. discriminant analysis
- d. logit analysis

Options :

28860712497. 1

28860712498. 2

28860712499. 3



28860712500. 4

Question Number : 58 Question Id : 2886073132 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

A mathematical way of simplifying factor analysis results is:

- a. factor loading
- b. factor reduction
- c. factor rotation
- d. factor analysis

Options :

28860712501. 1

28860712502. 2

28860712503. 3

28860712504. 4

Question Number : 59 Question Id : 2886073133 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

General Mills would like to “see” a picture of how its brands are perceived by consumers compared to competitive brands. Which statistical technique can measure brands in multidimensional space on the basis of respondents’ judgements of the similarity of the brands?

- a. structural equations modeling
- b. factor analysis
- c. multidimensional scaling
- d. partial positioning

Options :

28860712505. 1

28860712506. 2

28860712507. 3

28860712508. 4

Question Number : 60 Question Id : 2886073134 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Which is a way to help make sure that the model is identified?

- A) have at least three observed variables for each latent construct
- B) have all formative indicators
- C) a GFI of .95 or higher
- D) a large sample size

Options :

28860712509. 1

28860712510. 2

28860712511. 3

28860712512. 4

Question Number : 61 Question Id : 2886073135 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

When two constructs are theoretically unrelated to each other, the path between those two constructs should be \_\_\_\_\_.

- A) free
- B) fixed
- C) assigned a value of 1
- D) estimated

Options :

28860712513. 1

28860712514. 2

28860712515. 3

28860712516. 4

Question Number : 62 Question Id : 2886073136 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

SEM models are estimated so as to:

- A) maximize the likelihood function.
- B) minimize the difference between the observed and estimated covariance matrices.
- C) minimize the sum of squares between constructs.
- D) minimize the least squared difference.

Options :

28860712517. 1

28860712518. 2

28860712519. 3

28860712520. 4

Question Number : 63 Question Id : 2886073137 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Which of the following is not a fit measure?

- A) RMSR
- B) SRMR
- C) GFI
- D) TFI

Options :

28860712521. 1

28860712522. 2

28860712523. 3

28860712524. 4

Question Number : 64 Question Id : 2886073138 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Which of the following value(s) for RMSEA are considered conservative?

- A) 0.06
- B) 0.09
- C) 0.90
- D) 0.99

Options :

28860712525. 1

28860712526. 2

28860712527. 3

28860712528. 4

Question Number : 65 Question Id : 2886073139 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

In moving from the measurement model to the structural model:

- A) The error terms are correlated with each other.
- B) The emphasis shifts from the relationships between latent constructs and measured variables to the nature and magnitude of the relationships between constructs.
- C) The exogenous constructs each become endogenous.
- D) The endogenous constructs become exogenous.

Options :

28860712529. 1

28860712530. 2

28860712531. 3

28860712532. 4

Question Number : 66 Question Id : 2886073140 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

A sample size of 1000 is used to test a structural model of advertising effectiveness for the Coca-Cola company. The results show that a significant relationship exists between advertising effectiveness and sales. The estimated value of the standardized path estimate is .035. The Coca-Cola management dismisses the finding. Why?

- A) The sample size is probably too small.
- B) The sample size is probably too large.
- C) The relationship is trivial.
- D) The model fit is poor.

Options :

28860712533. 1

28860712534. 2

28860712535. 3

28860712536. 4

Question Number : 67 Question Id : 2886073141 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

SEM can be thought of as a combination of which two techniques?

- A) MANOVA and ANOVA
- B) MANOVA and Exploratory factor analysis
- C) Factor analysis and multiple regression analysis
- D) MANOVA and multiple regression analysis

Options :

28860712537. 1

28860712538. 2

28860712539. 3

28860712540. 4

Question Number : 68 Question Id : 2886073142 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ is a class of procedures for representing perceptions and preferences of respondents spatially by means of a visual display.

- A) Conjoint analysis
- B) Regression analysis
- C) Hybrid conjoint analysis
- D) Multidimensional scaling (MDS)

Options :

28860712541. 1

28860712542. 2

28860712543. 3

28860712544. 4

Question Number : 69 Question Id : 2886073143 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

The derivation and use of \_\_\_\_\_ lie at the heart of multidimensional scaling.

- A) perceptual maps
- B) pair-wise tables
- C) part-worth functions
- D) contrasts

Options :

28860712545. 1

28860712546. 2

28860712547. 3

28860712548. 4

Question Number : 70 Question Id : 2886073144 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Increasing moderator decreases the effect of predictor is known as

- i. Enhancing effect
- ii. Buffering effect
- iii. Antagonistic effect

- a. i only
- b. ii only
- c. iii only
- d. i & iii

Options :

28860712549. 1

28860712550. 2

28860712551. 3

28860712552. 4

Question Number : 71 Question Id : 2886073145 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0



Increasing moderator reverses the effect of predictor is known as

- i. Enhancing effect
- ii. Buffering effect
- iii. Antagonistic effect

- a. i only
- b. ii only
- c. iii only
- d. i & ii

Options :

28860712553. 1

28860712554. 2

28860712555. 3

28860712556. 4

Question Number : 72 Question Id : 2886073146 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ is a lack of fit measure; higher values indicate poorer fits.

- A) Attribute levels
- B) Stress
- C) R-square
- D) Relative importance weights

Options :

28860712557. 1

28860712558. 2

28860712559. 3

28860712560. 4

Question Number : 73 Question Id : 2886073147 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Mediator is some time called as

- i. intermediate variable
- ii. explanatory link
- iii. indirect effects

- a. i only
- b. ii only
- c. iii only
- d. i, ii, & iii

Options :

28860712561. 1

28860712562. 2

28860712563. 3

28860712564. 4

Question Number : 74 Question Id : 2886073148 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

In non-experimental studies antecedent, mediator and consequence is measured simultaneously. \_\_\_\_\_ is the only basis to advance the causal mechanism.

- a. Theory
- b. Sobel's test
- c. Simple slope test
- d. Control variables

Options :

28860712565. 1

28860712566. 2

28860712567. 3

28860712568. 4

Question Number : 75 Question Id : 2886073149 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ is a resampling procedure used to derive standard errors and construct confidence intervals.

- a. Beta
- b. Ordinary least square
- c. Bootstrap
- d. Direct effect estimation

Options :

28860712569. 1

28860712570. 2

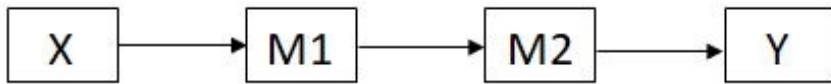
28860712571. 3

28860712572. 4

Question Number : 76 Question Id : 2886073150 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The below model is a:



- a. Simple mediation model
- b. Moderation model
- c. Moderated mediation model
- d. Serial mediation model

Options :

28860712573. 1

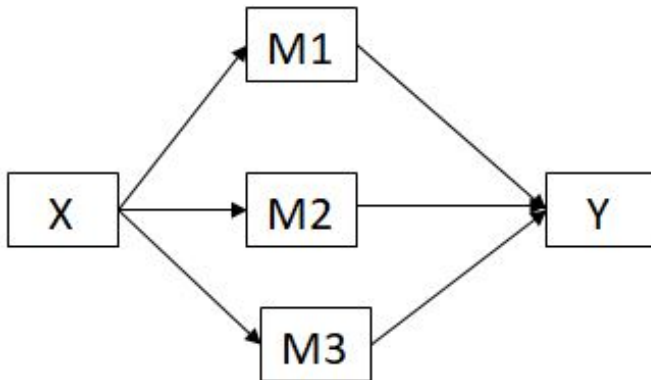
28860712574. 2

28860712575. 3

28860712576. 4

Question Number : 77 Question Id : 2886073151 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

The below model is a:



- a. Simple mediation model
- b. Moderation model
- c. Moderated mediation model
- d. Multiple mediation model

Options :

28860712577. 1

28860712578. 2

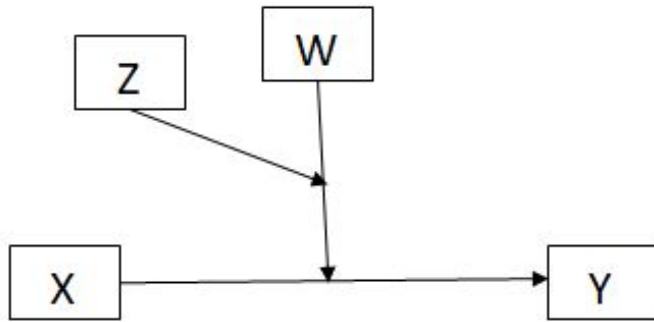
28860712579. 3

28860712580. 4

Question Number : 78 Question Id : 2886073152 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The below model is a:



- a. Two way interaction effect model
- b. Three way interaction effect model
- c. Four way interaction effect model
- d. Mediated moderated model

Options :

28860712581. 1

28860712582. 2

28860712583. 3

28860712584. 4

Question Number : 79 Question Id : 2886073153 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Understanding the conditions under which the strength and direction of the relationship is determined

- a. Mediation analysis
- b. Moderation analysis
- c. Serial mediation analysis
- d. Multiple mediation analysis

Options :

28860712585. 1

28860712586. 2

28860712587. 3

28860712588. 4

Question Number : 80 Question Id : 2886073154 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

In the below equation simple slope effect for X is:

$$Y=Z+B_1X+B_2M+B_3XM$$

- A.  $B_1+B_3M$
- B.  $B_1$
- C.  $B_3M$
- D.  $B_1+B_3X$

Options :

28860712589. 1

28860712590. 2

28860712591. 3

28860712592. 4

Question Number : 81 Question Id : 2886073155 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Integrating how and when type of hypothesis answered using:

- a. Moderation analysis
- b. Mediation analysis
- c. Moderated mediation analysis
- d. Serial mediation analysis

Options :

28860712593. 1

28860712594. 2

28860712595. 3

28860712596. 4

Question Number : 82 Question Id : 2886073156 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ occurs when the strength of an indirect effect depends on the level of some variable, or in other words, when mediation relations are contingent on the level of a moderator.

- a. Moderation analysis
- b. Mediation analysis
- c. Moderated mediation analysis
- d. Serial mediation analysis

Options :

28860712597. 1

28860712598. 2



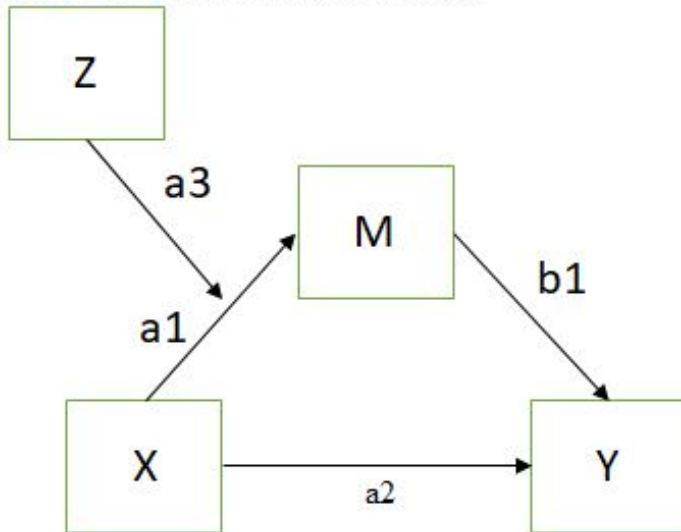
28860712599. 3

28860712600. 4

Question Number : 83 Question Id : 2886073157 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Simple slope for the below model is:



a.  $[b_2 + (a_1 + a_3Z)]b_1$

b.  $[b_0 + (a_0 + a_2Z)]b_1$

c.  $(a_1 + a_3Z)b_1$

d.  $b_1e_M + e_Y$

Options :

28860712601. 1

28860712602. 2

28860712603. 3

28860712604. 4

Question Number : 84 Question Id : 2886073158 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The \_\_\_\_\_ is the most frequent score in a distribution.

A. Mean

B. Median

C. Mode

D. outlier

Options :

28860712605. 1

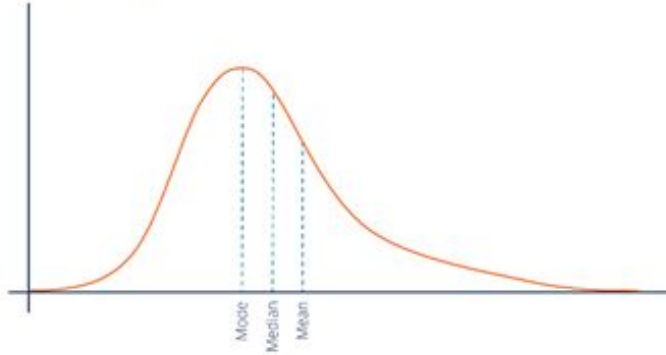
28860712606. 2

28860712607. 3

28860712608. 4

Question Number : 85 Question Id : 2886073159 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

The diagram below represents



- A. Positively skewed distribution
- B. Negatively skewed distribution
- C. Multimodal distribution
- D. Bimodal distribution

Options :

28860712609. 1

28860712610. 2

28860712611. 3

28860712612. 4

Question Number : 86 Question Id : 2886073160 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

The \_\_\_\_\_ for a particular individual is the difference between that individual's score and the mean of the distribution, divided by the standard deviation of the distribution

- A. p value
- B. z score
- C.  $\alpha$  value
- D.  $\beta$  value

Options :

28860712613. 1

28860712614. 2

28860712615. 3

28860712616. 4

Question Number : 87 Question Id : 2886073161 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The \_\_\_\_\_ is the average amount by which the scores differ from the mean.

A. Standard Deviation

B. Range

C. Correlation

D. Confidence

Options :

28860712617. 1

28860712618. 2

28860712619. 3

28860712620. 4

Question Number : 88 Question Id : 2886073162 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The difference between the highest and lowest scores in the distribution is known as

A. Standard Deviation

B. Range

C. Variance

D. Interquartile range

Options :

28860712621. 1

28860712622. 2

28860712623. 3

28860712624. 4

Question Number : 89 Question Id : 2886073163 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

'Determining whether each of the measuring items matches any given conceptual domain of the concept' refers to:

- A. Face validity
- B. Discriminant validity
- C. Variability
- D. Coherence

Options :

28860712625. 1

28860712626. 2

28860712627. 3

28860712628. 4

Question Number : 90 Question Id : 2886073164 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ is the extent to which a measure "covers" the construct of interest.

- A. Construct validity
- B. Content Validity
- C. Variation
- D. Face validity

Options :

28860712629. 1

28860712630. 2

28860712631. 3

28860712632. 4

Question Number : 91 Question Id : 2886073165 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

Evidence that one concept is different from other closely related concepts refers to

- A. Discriminant validity
- B. Convergent validity
- C. Content Validity
- D. Variation

Options :

28860712633. 1

28860712634. 2

28860712635. 3

28860712636. 4

Question Number : 92 Question Id : 2886073166 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ is the extent to which people's scores on a measure are correlated with other variables (known as criteria) that one would expect them to be correlated with.

- A. Reliability
- B. Criterion validity
- C. Discriminant validity
- D. Face validity

Options :

28860712637. 1

28860712638. 2

28860712639. 3

28860712640. 4

Question Number : 93 Question Id : 2886073167 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ is supposed to be present when different measures of the same concept yield similar results.

- A. Convergent validity
- B. Criterion validity
- C. Discriminant validity
- D. Coherence

Options :

28860712641. 1

28860712642. 2

28860712643. 3

28860712644. 4

Question Number : 94 Question Id : 2886073168 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0



In conjoint analysis \_\_\_\_\_ designs are employed to reduce the number of stimulus profiles to be evaluated in the full profile approach

- A. Cyclical
- B. Fractional factorial
- C. Rectangular
- D. Ordinal

Options :

28860712645. 1

28860712646. 2

28860712647. 3

28860712648. 4

Question Number : 95 Question Id : 2886073169 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ is a class of procedures for representing perceptions and preferences of respondents spatially by means of a visual display.

- A. Multidimensional Scaling
- B. Conjoint Analysis
- C. Factor Analysis
- D. Logistic Regression

Options :

28860712649. 1

28860712650. 2

28860712651. 3

28860712652. 4

Question Number : 96 Question Id : 2886073170 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

In MDS \_\_\_\_\_ approaches require the respondents to rate the brands or stimuli on the identified attributes using semantic differential or Likert scales.

- A. Derived
- B. Direct
- C. Compositional
- D. Ordinal

Options :

28860712653. 1

28860712654. 2

28860712655. 3

28860712656. 4

Question Number : 97 Question Id : 2886073171 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

In MDS \_\_\_\_\_ approaches to gathering perception data, require the respondents to judge how similar or dissimilar the various brands or stimuli are, using their own criteria.

- A. Derived
- B. Direct
- C. Ordinal
- D. Compositional

Options :

28860712657. 1

28860712658. 2

28860712659. 3

28860712660. 4

Question Number : 98 Question Id : 2886073172 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

If the correlation between two variables is - 0.75, this means that:

- a. there is a weak positive relationship between the variables
- b. there is a strong inverse relationship between the variables
- c. there is a weak negative relationship between the variables
- d. there is a strong positive relationship between the variables

Options :

28860712661. 1

28860712662. 2

28860712663. 3

28860712664. 4

Question Number : 99 Question Id : 2886073173 Question Type : MCQ Option Shuffling : No  
Correct Marks : 1 Wrong Marks : 0

The \_\_\_\_\_ is a measure obtained by squaring the correlation coefficient.

- a. t-statistic
- b. coefficient of determination ( $R^2$ )
- c. F-ratio
- d. Pearson coefficient

Options :

28860712665. 1

28860712666. 2

28860712667. 3

28860712668. 4

Question Number : 100 Question Id : 2886073174 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

If the t-test is used to test the significance of a correlation coefficient, the null hypothesis is:

- a.  $r = +1.00$
- b.  $r = 0$
- c.  $r = -1.00$
- d.  $r = 100$

Options :

28860712669. 1

28860712670. 2

28860712671. 3

28860712672. 4