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Grade	**25.00** out of 35.00 (**71**%)

Question **1**

Correct

Mark 1.00 out of 1.00

What is the difference between Mean, Median and Mode

Select one:

- a. All are one and same
- b. While Mean is the middle one mode is the average and median is the mostly repeated value
- c. Mean is the average of the observations, Median is the middle value when arranged in ascending order and mode is the more repeated value in the group ✔
- d. Mode is the middle value Median is the average of an observation and Mean is the most repeated value in the group

The correct answer is: Mean is the average of the observations, Median is the middle value when arranged in ascending order and mode is the more repeated value in the group

Question **2**

Correct

Mark 1.00 out of 1.00

If two variables are independant , correlation coefficent is zero.

Select one:

- True ✔
- False

The correct answer is 'True'.

Question **3**

Correct

Mark 1.00 out of 1.00

Pooled cross section data differs from cross-section data in that pooled cross section data is observed

Select one:

- a. for a number of different individuals in a given time-period.
- b. for a number of different individuals in a number of different time-periods ✔
- c. for a given individual in a given time-period.
- d. for a number of different individuals in a given time-period.

The correct answer is: for a number of different individuals in a number of different time-periods

Question **4**

Correct

Mark 1.00 out of 1.00

Which of the following is NOT true about OLS Estimators

Select one:

- a. OLS estimators are point estimators, that is, given the sample , each estimator will provide only a single point value of the relevant population parameter
- b. Once the OLS estimates are obtained from the sample data, the sample regression line can be obtained
- c. The OLS estimators are expressed solely in terms of the observable (sample) quantities(X and Y)
- d. The OLS estimators can be used for large sample size where the normality assumption of the probability distribution of error term is mandatory ✔

The correct answer is: The OLS estimators can be used for large sample size where the normality assumption of the probability distribution of error term is mandatory

Question **5**

Correct

Mark 1.00 out of 1.00

The local wants to install cameras that can "catch" drivers who run red lights. They choose a busy intersection, install a test camera, and determine whether each car stops safely or "runs" the light. Choose the correct scale of measurement.

Select one:

- a. Ratio
- b. Ordinal
- c. Interval
- d. Nominal ✔

The correct answer is: Nominal

Question **6**

Incorrect

Mark 0.00 out of 1.00

What distinguishes a mathematical model and econometric model?

Select one:

- a. Error Term
- b. Explanator Variable
- c. parameters ✖
- d. Dependent Variable

The correct answer is: Error Term

Question **7**

Correct

Mark 1.00 out of 1.00

Type 1 Error means

Select one:

- a. The probability of rejecting a false null hypothesis
- b. The beta error
- c. The probability of rejecting a true null hypothesis ✔
- d. The probability of not rejecting a false null hypothesis

The correct answer is: The probability of rejecting a true null hypothesis

Question **8**

Correct

Mark 1.00 out of 1.00

Which of the following statements is correct?

Select one:

- a. an interval estimate describes a range of values that is likely not to include the actual population parameter
- b. none of the statements a are correct
- c. an interval estimate is an estimate of the range for a sample statistic
- d. an interval estimate is an estimate of the range of possible values for a population parameter ✔

The correct answer is: an interval estimate is an estimate of the range of possible values for a population parameter

Question **9**

Correct

Mark 1.00 out of 1.00

The null and alternative hypotheses are written about

Select one:

- a. a population parameter ✔
- b. sample statistic
- c. sample data

The correct answer is: a population parameter

Question **10**

Correct

Mark 1.00 out of 1.00

Which of these is an example of a test statistic?

Select one:

- a. the sample mean
- b. the population mean
- c. a *z*-score ✔

The correct answer is: a *z*-score

Question **11**

Correct

Mark 1.00 out of 1.00

Difference between R square value and F statistic probabilistic value in regression output is

Select one:

- a. R square relates to Cross sectional data but F statistic prob value relate to time series data
- b. While F statistics probability value shows the significance of individual variable R squared value shows the significance of all the variable taken together
- c. While R square explains g\Goodness of Fit of the Model within sample F statistics probability value shows Goodness of Fit of the Model in population ✔
- d. R square detect mistakes in selection of variable but F statistic prob value trace mistakes in the estimator

The correct answer is: While R square explains g\Goodness of Fit of the Model within sample F statistics probability value shows Goodness of Fit of the Model in population

Question **12**

Correct

Mark 1.00 out of 1.00

Along with being unbiased, which of the following is another desired quality of a good point estimator?

Select one:

- a. large mean square error
- b. large expected value
- c. small average
- d. minimum variance ✔

The correct answer is: minimum variance

Question **13**

Incorrect

Mark 0.00 out of 1.00

Imagine a researcher is probing the inflation in Indian Economy from 2019-20 to 2020-21 (Two Observations) considering the following variables

1. Inflation - Dependent Variable
2. Money Supply (M3) - Independent Variable
3. Gross Domestic Product (GDP) - Independent Variable
4. Imports (Independent Variable)
5. Price of Petrol (Independent Variable)

Here which assumption of Classical Linear Regression Model is violated

Select one:

- a. No Perfect Multicollinearity
- b. The number of observations - n must be greater than the number of parameters to be estimated
- c. Homoscedasticity ✖
- d. No Auto Correlation

The correct answer is: The number of observations - n must be greater than the number of parameters to be estimated

Question **14**

Incorrect

Mark 0.00 out of 1.00

When Hypothesis is tested?

Select one:

- a. After Estimating the Econometric Model
- b. After Hypothesis is framed
- c. After data is obtained but before estimating the econometric model ✖
- d. After the forecasting or prediction of the model is done

The correct answer is: After Estimating the Econometric Model

Question **15**

Correct

Mark 1.00 out of 1.00

We must arrange the data before calculating:

Select one:

- a. harmonic mean
- b. Mean
- c. Median ✔
- d. Mode

The correct answer is: Median

Question **16**

Incorrect

Mark 0.00 out of 1.00

What do you mean by Linear Regression?

Select one:

- a. Linearity is not at all an assumption in the Classical Linear Regression Model, its only the first property of BLUE in a linear regression model
- b. It is linear in the variables, the X's but may or may not linear in the parameters, the Bs
- c. It is linear both in parameters, the Bs and in the explanatory variables, the X's ✖
- d. The term "linear regression" will always means a regression which is linear in the parameters - the Bs are raised to the first power only it may or may not be linear in the explanatory variables , the X's.

The correct answer is: The term "linear regression" will always means a regression which is linear in the parameters - the Bs are raised to the first power only it may or may not be linear in the explanatory variables , the X's.

Question **17**

Incorrect

Mark 0.00 out of 1.00

In a simple consumption and income model given below which variables are stochastic in nature

$$Y = B_1 + B_2 X + u$$

Where in Y is the dependent variable of Consumption and X is the income, B_1 and B_2 are coefficients and u is the error term

Select one:

- a. Error Term - u
- b. Income(X) and Consumption (Y)
- c. Consumption (Y) and the Error Term (u)
- d. Y (Consumption)
- e. X (Income) ✖

The correct answer is: Consumption (Y) and the Error Term (u)

Question **18**

Correct

Mark 1.00 out of 1.00

The value of R squared ranges from

Select one:

- a. not necessarily always be positive i.e. it can be negative also
- b. Zero to 1 ✔
- c. <0 but can never be >1
- d. Zero to Infinity

The correct answer is: Zero to 1

Question **19**

Incorrect

Mark 0.00 out of 1.00

The extent or the degree to which data tend to spread around _____ is called the dispersion or variation of data.

Select one:

- a. Percentiles
- b. Average
- c. Range
- d. Quartiles ✖

The correct answer is: Average

Question **20**

Incorrect

Mark 0.00 out of 1.00

What is Skewness of Data refers to?

Select one:

- a. Skewness refers to the standard error in the distribution of data
- b. How far the population mean is distributed compared to that of sample mean ✖
- c. Sample mean distributed over the population mean in a given series
- d. The term 'skewness' is used to mean the absence of symmetry from the mean of the dataset. It is characteristic of the deviation from the mean, to be greater on one side than the other, i.e. attribute of the distribution having one tail heavier than the other. Skewness is used to indicate the shape of the distribution of data.

The correct answer is: The term 'skewness' is used to mean the absence of symmetry from the mean of the dataset. It is characteristic of the deviation from the mean, to be greater on one side than the other, i.e. attribute of the distribution having one tail heavier than the other. Skewness is used to indicate the shape of the distribution of data.

Question **21**

Correct

Mark 1.00 out of 1.00

What is Gauss-Markov Theorem?

Select one:

- a. Given the assumptions of Classical Linear Regression Model (CLRM),, the least square estimators,in the class of unbiashed linear estimators, have minimum variance, i.e. they are BLUE - Best Linear Unbiased Estimators ✔
- b. Gauss is a strong supporter of Kenysian Consumption Function but Markov is a strong supporter of Classical Linear Regression Function
- c. Gauss Markov Theorem supports the Keneysian Consumption Function
- d. Gauss Markov Theorem supports the Type I Error but do not support Type II Error

The correct answer is: Given the assumptions of Classical Linear Regression Model (CLRM),, the least square estimators,in the class of unbiashed linear estimators, have minimum variance, i.e. they are BLUE - Best Linear Unbiased Estimators

Question **22**

Correct

Mark 1.00 out of 1.00

What does the following equation shows?

var (ui |Xi) = E[ui − E(ui |Xi)]2

Select one:

- a. The constant variance arises only if the data is time series data but not in cross sectional data
- b. Data is inadequate
- c. The variance of the error or disturbance term is the same regardless of the value of X - there exist Homoscedasticity or constant variance which is one of the assumptions of CLRM ✔
- d. There is a constant variance in the independent variables, regardless of the dependent variables but not in the error terms

The correct answer is: The variance of the error or disturbance term is the same regardless of the value of X - there exist Homoscedasticity or constant variance which is one of the assumptions of CLRM

Question **23**

Correct

Mark 1.00 out of 1.00

What is your interpretation of constant term in the regression?

Select one:

- a. Constant term in regression explains the intercept concept ✔
- b. Constant term is fixed and dropping of any one explanatory variables does not effect the relationship at all
- c. Constant Term is not compulsory
- d. Constant term is non stochastic
- e. Constant Term captures the unexplained variables in the regression

The correct answer is: Constant term in regression explains the intercept concept

Question **24**

Correct

Mark 1.00 out of 1.00

whaich of the follwing is true about normal distrubtion

Select one:

- a. the parameters of normal curve are sample mean and sample varaince
- b. mean , median and mode of a normal distribution are not equal
- c. the normal curve is symmetrical ✔
- d. the normal curve is skewed

The correct answer is: the normal curve is symmetrical

Question **25**

Correct

Mark 1.00 out of 1.00

$\mu \pm 3\sigma$ covers _____of the items in a data set.

Select one:

- a. 95%
- b. 99.73% ✔
- c. 90%
- d. 68%

The correct answer is: 99.73%

Question **26**

Correct

Mark 1.00 out of 1.00

In a Logistic Regression Model (Logit Model) if the parameters and the independent variables are non-linear, then which estimator is ideal

Select one:

- a. Neither OLS nor MLE
- b. Both OLS and MLE
- c. MLE - Maximum Likelihood Estimator ✔
- d. OLS - Ordinary Least Squared

The correct answer is: MLE - Maximum Likelihood Estimator

Question **27**

Correct

Mark 1.00 out of 1.00

In Normal distribution, the highest value of ordinate occurs at _____

Select one:

- a. Variance
- b. Extremes
- c. Same value occurs at all points
- d. Mean ✔

The correct answer is: Mean

Question **28**

Correct

Mark 1.00 out of 1.00

What is the major difference between Correlation and Regression

Select one:

- a. While Correlation explains the direction and strength of relationship between two variables Regression explains the amount of changes in dependent variable based on the changes of one or more independent variables ✔
- b. While the term stochastic variable plays no role in correlation it is very important in regression
- c. Both are more or less the same
- d. Regression cannot predict future trends but correlation can predict future trends

The correct answer is: While Correlation explains the direction and strength of relationship between two variables Regression explains the amount of changes in dependent variable based on the changes of one or more independent variables

Question **29**

Correct

Mark 1.00 out of 1.00

F statistic probability value test

Select one:

- a. Randomness of the sample
- b. Goodness of Fit of the model in population ✔
- c. Goodness of Fit of the model in a sample
- d. Sample Adequacy Test

The correct answer is: Goodness of Fit of the model in population

Question **30**

Correct

Mark 1.00 out of 1.00

The Marginal Cost Function can be represented in the following regression function.

$$Y = B_1 + B_2 X + B_3 X^2$$

Here Y is Marginal Cost and X is output. This is the case of which regression function

Select one:

- a. Polynomial Regression Function ✔
- b. Simple Regression Function
- c. Multiple Regression Function
- d. Population Regression Function

The correct answer is: Polynomial Regression Function

Question **31**

Correct

Mark 1.00 out of 1.00

Which of these is NOT a correct null hypothesis?

Select one:

- a. $H_0: \mu_1 = \mu_2$
- b. $H_0: \mu_1 - \mu_2 = 0$ ✔
- c. $H_0: \mu_1 < \mu_2$

The correct answers are: $H_0: \mu_1 - \mu_2 = 0$, $H_0: \mu_1 < \mu_2$

Question **32**

Correct

Mark 1.00 out of 1.00

School administrators sponsor a study of bullying on elementary school playgrounds. Trained observers record the number of incidents of aggression that occur during consecutive 10-minute periods. Aggression is measured on which of the following scales of measurement

Select one:

- a. Nominal
- b. Ordinal
- c. Ratio ✔
- d. Interval

The correct answer is: Ratio

Question **33**

Incorrect

Mark 0.00 out of 1.00

X is a random normal variable, with mean μ and variance Invalid <msup> element. The "standardised form" of X is $Z = (X-\mu)/\sigma$.
What are the mean and variance, respectively, of Z ?

Select one:

- a. 0, 1
- b. 1, 0 ✖
- c. 1, 1
- d. 0, 2

The correct answer is: 0, 1

Question **34**

Incorrect

Mark 0.00 out of 1.00

The population mean μ is called:

Select one:

- a. Parameter
- b. Continuous variable
- c. Discrete variable
- d. Statistic ✖

The correct answer is: Parameter

Question **35**

Incorrect

Mark 0.00 out of 1.00

What is the difference between data measured on an interval scale and data measured on a ratio scale?

Select one:

- a. A ratio scale has equal intervals between the points on the scale, whereas an interval scale does not.
- b. A ratio scale puts scores into categories, while an interval scale measures on a continuous scale. ✖
- c. A ratio scale has a true zero point, so zero on the scale corresponds to zero of the concept being measured.
- d. An interval scale has a true zero point, so zero on the scale corresponds to zero of the concept being measured.

The correct answer is: A ratio scale has a true zero point, so zero on the scale corresponds to zero of the concept being measured.

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