Seat No:_____ **Enrollment No:_____**

PARUL UNIVERSITY

FACULTY OF ARTS

B.A Summer 2018-19 Examination

Semester:6 **Date: 18/04/2019**
Subject Code: 15101354 **Time: 10:30am to 1:00pm**
Subject Name: Basic Econometric methods **Total Marks: 60**

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as directed. (08)

A. Multiple choice type questions. (Each of 0.5 mark)

1.In testing of hypothesis how many types of error?
(a) One (c) Three
(b) Two (d) None of the above

2. Auto correlation is maximum at
(a) Unity (c) Infinite point
(b) Origin (d) None of the above

3.Auto correlation is a function of
(a) Time (c) Time difference
(b) Frequency (d) Frequency difference

4.Spectrogram is the graph plotted against?
(a)Frequency domain (c) frequency & time domain
(b)Time domain (d) None of the above

5.Auto correlation function of white noise will have ?
(a)Strong peak (c) Infinite peak
(b)Weak peak (d) None of the above

6.Auto correlation is a _____ function.
(a) Real & even (c) Complex & even
(b) Real & odd (d)Complex & odd

7.The range of the normal distribution is
(a) 0 to n (c) -1 to $+\infty$
(b) 0 to ∞ (d) $-\infty$ to $+\infty$

8.In normal curve the ordinate highest at
(a) Mean (c) standard deviation
(b) Variance (d) quartile deviation

9.In regression analysis there are _____ types of variables.
(a)1 (c) 3
(b)2 (d) None of the above

10.What is the shape of normal curve ?
(a) bell - shaped (c) both (a) and (b)
(b)straight line (d) None of the above

11. Are mean,median,mode equal in normal distribution?
(a) Yes (c) both (a) & (b)
(b) No (d) None of the above

12.In binomial distribution the probability of success is denoted by _____ symbol?
(a)p (c) q
(b)(r) (d) None of the above

13.Which distribution is a example of discrete distribution?
(a)Binomial (c)both (a) and (b)
(b)Normal (d)None of the above

14.Which distribution plays an important role in making inferences regarding the value ofthe population mean from the sample mean?
(a) Normal distribution (c) Poisson distribution
(b) Binomial distribution (d) None of the above

15.Regression analysis is used in which place?

(a) biological and agricultural (c) both (a) and(b)
(b)prediction purpose (d) None of the above

16. The level of significance is conventionally chosen as
(a) 0.05 or 0.01 (c) both (a) and (b)
(b)0.5 or 0.1 (d) None of the above

B. Terms/ Short notes/ Case study/ Charts/ Graphs/ Tables, etc. (Each of 01 mark) **(07)**

1. Define variable.
2. Define independent variable.
3. Define regression.
4. What is distributed lag model?
5. Write a general formula of normal distribution.
6. Write the full form of OLS.
7. Define econometrics.

Q.2 Answer the following.

A. Explain dummy variable. **(04)**
B. Explain multiple regression. **(04)**
C. Explain heteroscedasticity. **(04)**

OR

C. Explain Binomial distribution. **(04)**

Q.3 Answer the following.

A. Write a short note on problems of multicolinearity **(05)**
B. Use of F and t tests in testing various hypothesis. **(05)**
C. Explain OLS method **(05)**

OR

C. Write a short note on properties of OLS estimators **(05)**

Q.4 **Answer the following.**

A. Write a scope of econometrics **(06)**
B. Write a short note on Hypothesis testing **(06)**
C. Explain “Panel data regression model.” **(06)**

OR

C. Explain Type I and type II error. **(06)**