Manimegk

Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Master's Degree Examination – June 2021
IV Semester

Class : II M.Sc. **Time: 3 Hours**
Major : Zoology **Max. Marks: 100**

17MZOC21 Biostatistics and Thesis Writing

PART A **10 x 1 = 10**
Choose the Correct Answer

1. Father of frequency distribution (K2)
   a) Heinrich smith b) Sir Francis Galton c) Adam smith d) Euclid

2. A circle in which sectors represents various quantities is called (K1)
   a) Histogram b) Frequency Polygon c) Pie Chart d) Bar Chart

3. The standard deviation is: (K1)
   a. The square root of the variance
   b. A measure of variability
   c. An approximate indicator of how numbers vary from the mean
   d. All of the above

4. Find the mean =? 9, 3, 1,8,3,6 (K3)
   a) 10 b) 5 c) 3 d) 9

5. Poisson distribution is named after_____ (K1)
   a) Simeon Poisson b) Charles Poisson c) Edward Poisson d) Louis Poisson

6. In which of the following types of sampling the information is carried out under the opinion of an expert (K4)
   a) Quota Sampling b) Convenience Sampling
   c) Purposive Sampling d) Judgement Sampling

7. How many dependent variables are there in a two way ANOVA? (K3)
   a) 1 b) 3 c) 2 d) 4

8. Chi-square test is introduced by __ (K1)
   a) Karl Pearson b) Sir William Gosset c) Darwin d) Spearman

9. Tippit table refers to as _____ (K2)
   a) Table of random digits b) The table used in sampling methods
   c) The table used in statistical investigations d) All of the above

10. The format of thesis writing is the same as in (K1)
   a) Writing of Seminar representation b) Preparation of research paper/article
   c) A research dissertation d) Presenting a workshop/conference paper

Part B **5 x 6 = 30**

Answer ALL questions

Each answer should not exceed 400 words or two pages

11.a. Define Bar diagrams with example. (CO1), (K1)

(or)

11.b. Write notes on frequency distribution. (CO1), (K2)

12.a. Describe in detail about mean, median and mode. (CO2), (K2)

(or)

12.b. Differentiate mean deviation and standard deviation. (CO2), (K4)

13.a. Define sampling. Add notes on types and advantages of sampling (CO3), (K1)

(or)

13.b. Differentiate systematic sample, cluster sample and simple random sample (CO3), (K4)

14.a. Explain student's t-test with example. (CO4), (K2)

(or)

14.b. Demonstrate chi-square test with example. (CO4), (K2)

15.a. Define research and write notes on research design and identifying the research problem. (CO5), (K1)

(or)

15.b. Explain the method for the review of literature (CO5), (K2)

Part C **5 x 12 = 60**

Answer ALL questions

Each answer should not exceed 800 words or four pages

16.a. Discuss in detail about Pie chart, Histogram and frequency polygon. (CO1), (K2)

(or)

16.b. Write notes on Line graph, frequency curve and Ogive. (CO1), (K2)

17.a. Define correlation and regression analysis. Explain types and methods of studying correlation. (CO2), (K1)

(or)

17.b. Explain about Karl Pearson's coefficient of correlation. Add notes on least squares Method, regression lines and regression coefficients. (CO2), (K2)

18.a. Describe theoretical distributions. Add notes on binominal distribution and its applications. (CO3), (K2)

(or)

18.b. Discuss in detail about probability and its applications. Add notes on poisson and Normal distributions and its uses. (CO3), (K2)

19.a. Explain one way ANOVA with detailed example. (CO4), (K2)

(or)

19.b. Describe two way ANOVA with example. (CO4), (K2)

20.a. Discuss in detail about thesis writing, presentation use of tables and figures and their Placement. (CO5), (K2)

(or)

20.b. Explain reference system in thesis preparation. Add notes on components of thesis. (CO5), (K2)