

**Avinashilingam Institute for Home Science and Higher Education for Women
[Deemed to be University] Coimbatore – 641 043**

Bachelor's Degree Examination – November 2018

II Semester

Class : II UG

Major : Physician Assistant

Time : 3 Hours

Max. Marks : 100

15BPAC12 Bio Statistics and Research

Part – A

10 x 1 = 10

Choose the Correct Answer

1. Sampling reduces

a. cost	b. time
c. sampling error	d. deviation

2. The survey conducted before the main survey to find out the problems is called as

a. sample survey	b. census survey
c. pilot study	d. sampling design

3. A portion of the population that is studied to learn about the characteristics of the population is

a. sample	b. parameter
c. statistic	d. enumeration

4. Judgment sampling is a

a. Probability sampling	b. Non – probability sampling
c. snow – ball sampling	d. Quota sampling

5. A statistical table is a systematic arrangement of statistical data in

a. columns only	b. rows only
c. both rows and columns	d. diagrams

6. The most popular method of measuring the representative value is

a. Arithmetic mean	b. Harmonic mean
c. Geometric mean	d. mean

7. When the value of mode is greater than mean, it is called

a. Positive skewnes	b. Negative skewnes
c. kurtosis	d. variance

8. The calculated value of chi – square is

a. always positive	b. always negative
c. either positive or negative	d. symmetrical

9. The range of 5, 15, 20, 30, 40, 60, 100 is

a. 5	b. 40
c. 95	d. 100

10. The range of probability is

a. $-\infty$ to 0	b. 0 to ∞
c. 0 to 1	d. -1 to 1

Part – B

5 x 6 = 30

Answer the following

Answer should not exceed 400 words or two pages

- 11.a. Explain the features of a good design.
(Or)
- 11.b. Explain Pilot study.
- 12.a. Write a note on census and sample survey.
(Or)
- 12.b. Explain judgment sampling and accidental sampling.
- 13.a. Explain the characteristics of statistics.
(Or)
- 13.b. Distinguish diagrams and graphs.
- 14.a. State the characteristics of a normal distribution.
(Or)
- 14.b. Explain the procedure of the chi – square test of goodness of fit.
- 15.a. Discuss the communication of research findings.
(Or)
- 15.b. Write briefly about the functions and uses of hospital statistics.

Part – C

5 x 12 = 60

Answer the following

Answer should not exceed 800 words or four pages

- 16.a. Explain the basic principles and methods of research design.
(Or)
- 16.b. Explain the method and designing of writing a research project.
- 17.a. Discuss the various types of probability and non probability sampling methods.
(Or)
- 17.b. Explain the types of instruments used in validity and reliability.
- 18.a. Discuss the importance of the study of statistics in health science.
(Or)
- 18.b. Explain the various measures of central tendency.
- 19.a. Weigh
- | | | | | |
|----------------|---------|---------|---------|---------|
| | 60 – 64 | 64 – 68 | 68 – 71 | 71 – 74 |
| No.of Subjects | 10 | 9 | 7 | 7 |
- Calculate the standard deviation from continuous frequency of data.
(Or)
- 19.b. A dice is tossed 120 times with the following results.
- | | | | | | | |
|---------------|----|----|----|----|----|----|
| No.turned up: | 1 | 2 | 3 | 4 | 5 | 6 |
| Frequency : | 30 | 25 | 18 | 10 | 22 | 15 |
- Using chi – square test, test the hypothesis that the dice is unbiased.
- 20.a. Explain the method of writing a research report and utilization of research findings.
(Or)
- 20.b. Discuss the concepts behind the hospital morbidity and mortality.
