



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

Bachelor's Degree Examination – January 2021
Semester V

Class : III UG
Major : Physician Assistant

Time : 3 Hours
Max. Marks : 100

18BPAC25 Bio Statics and Research

PART A
Choose the Correct Answer

10 x 1 = 10

1. What is the aim of Research in Physical Assistant course?
a. Personal Growth
b. become good educationist
c. good Job offers
d. Professional development
2. Number of persons participating in research study is called
a. Sample
b. Target Population
c. Study Population
d. Individual
3. Tentative assumption of the study is called as
a. Variable
b. Sample
c. Hypothesis
d. Error
4. The Population census carried out by the Government can be an example of :
a. Exploratory Research
b. Casual Research
c. Descriptive Research
d. Experimental
5. Mean, Median and Mode are
a. Measures of Dispersion
b. Measures of variation
c. Measures of Central Tendency
d. Measures of Dataset
6. A common test in research demands much priority on
a. Reliability
b. Useability
c. Objectivity
d. All the above
7. Research initiated to solve the immediate problem- this is called
a. Applied Research
b. Action Research
c. Exploratory
d. Survey
8. Which of the following is **NOT** a "Graphic representation" ?
a. Bar Diagram
b. pie Chart
c. Table
d. Histogram
9. Which of the following sampling technique is the example of Probability type?
a. Cluster
b. Judgemental
c. Purposive
d. Snow ball
10. Which of the following is example of Non parametric statistical technique?
a. Paired t test
b. Unpaired t test
c. Pearson test
d. Wilcoxon Test

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 11.a. Define Research and explain its need.
(or)
11.b. Write short notes on vital statistics.
- 12.a. Explain factors influencing sampling process.
(or)
12.b. Pilot study.
- 13.a. What is Validity and Reliability?
(or)
13.b. Brief note on methods of data collection
- 14.a. Systematic Review and Meta analysis
(or)
14.b. Explain – Probability.
- 15.a. Scope of Research.
(or)
15.b. Calculate median from the following data : 6,10,17,20,25,28,30.

Part C

5 x 12 = 60

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 16.a. Describe steps of Research process
(or)
16.b. Calculate the correlation between Age & BMI

Age	22	34	42	43	21	50
BMI	22	29	29	24	19	29

- 17.a. Write about True Experimental designs with 2 examples.
(or)
17.b. Probability Sampling Techniques.
- 18.a. Non probability sampling Designs.
(or)
18.b. Data collection procedures.

- 19.a. Calculate the mean

Age	25-30	30-35	35-40	40-45
No. of people	20	25	45	65

(or)

- 19.b. Calculate the median

Income/day	100	150	200	250	300	350
No. of Households	05	29	13	11	16	09

- 20.a. Explain about research problem and identification of problem area. Write on criteria of a good research problem.

(or)

- 20.b. Describe about Quantitative and Qualitative designs.
