



Naveef

Avinashilingam Institute for Home Science and Higher Education for Women

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

**Bachelor of Physical Education Degree Examination – May 2024
IV Semester**

Class: II B.P.Ed. / 2021 Batch (Repeater)

**Time : 3 Hours
Max. Marks : 100**

**21BPDE4A Discipline Specific Elective (DSE) - IV: Research and Statistics
in Physical Education**

Course Outcomes:

- CO1: Identify the research problem in the field of physical Education and sports
CO2: Know to Summarize the various research literature
CO3: Understand and apply the basics of statistics in research.
CO4: Organize the samples and sampling techniques which is relevant to the study
CO5: Apply the basics of statistics in minor research project for evaluation

Part A

10 x 1 = 10

Choose the Correct Answer

1. Define research CO1 K1
 - a. Formulating hypotheses without empirical testing
 - b. Conducting experiments to prove preconceived notions
 - c. A systematic investigation aimed at discovering new knowledge or validating existing knowledge
 - d. Collecting data without any specific aim or objective

2. The scope in research is indicated by CO1 K1
 - a. Limitations of the study
 - b. Delimitations of the study
 - c. Definition and explanation of terms
 - d. Interpretation of research results.

3. Which statement describes the purpose of historical research in the field of physical education? CO2 K2
 - a. To analyze current trends in physical activity among different age groups
 - b. To investigate the effects of different teaching methods on student performance
 - c. To examine the development and evolution of physical education over time
 - d. To explore the psychological factors influencing athletes' performance in sports

4. What is the main purpose of doing a case study in physical education research? CO2 K2
 - a. To deeply explore a particular situation in its real-life situation
 - b. To make general conclusions about a large group of people
 - c. To conduct controlled experiments to test theories
 - d. To summarize existing research findings in the field

5. What is the key purpose of a project report? CO3 K3
 - a. To present the raw data collected during the research process
 - b. To analyze the findings and draw conclusions based on the research objectives
 - c. To list all references used in the literature review section
 - d. To provide an overview of the project team members' qualifications

6. What is the best way to conduct thorough literature research for a project report? CO3 K3
 - a. Skim a few articles, highlight key points
 - b. Conduct interviews with field experts
 - c. Use library databases to find academic journals and books related to your topic
 - d. Depend only on personal experiences and observations

7. What is the primary objective of statistics? CO4 K4
 - a. To manipulate data for presentation purposes
 - b. To summarize and interpret data for decision-making
 - c. To perform arithmetic operations on data.
 - d. To collect raw data from various sources

8. What is the characteristic of a single-group pretest - posttest design? CO5 K5
 - a. Two separate groups are compared
 - b. Participants are measured only once
 - c. There is no pretest involved
 - d. Participants are measured both before and after an intervention

9. What is the mean of the given data set: 20, 20, 20, 40? CO5 K5
 a. 25 b. 20 c. 30 d. 100
10. Which sampling method demonstrates the principles of probability sampling? CO5 K5
 a. Convenience sampling b. Snowball sampling
 c. Simple random sampling d. Quota sampling

Part B 5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 11.a. Explain the scope of research in physical education. CO1 K1
 (or)
- 11.b. What are the meanings of "limitation" and "delimitation" in research? CO1 K1
- 12.a. Why is it important to survey related literature and engage in library reading for research purposes CO2 K2
 (or)
- 12.b. Explain the literature sources with suitable illustrations. CO2 K2
- 13.a. Write short note on frequency polygon. CO3 K3
 (or)
- 13.b. Write short note on Pie Diagram. CO3 K3
- 14.a. Write down the 'Meaning of Experimental Research' CO4 K3
 (or)
- 14.b. Write down the 'static group comparison design'. CO4 K3
- 15.a. Calculate mean from the following scores. CO5 K4
 16, 18, 21, 23, 24, 28, 34, 36, 38 and 40
 (or)
- 15.b. Calculate median from the following scores. CO5 K4
 54, 59, 64, 70, 72, 73, 75, 78, 83 and 90

Part C 5 x 12 = 60

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 16.a. Discuss criteria for selecting a good research problem. CO1 K1
 (or)
- 16.b. Explain the concept of research classification? CO1 K1
- 17.a. Prepare a model project proposal with suitable illustrations. CO2 K2
 (or)
- 17.b. Prepare a summary for model survey report on physical fitness of school students in an rural area CO2 K2
- 18.a. How are frequency polygons used to effectively represent data distribution patterns? CO3 K3
 (or)
- 18.b. Explain the need and importance of statistics in physical education CO3 K3
- 19.a. Describe the types of non-Probability sampling CO4 K4
 (or)
- 19.b. Describe the types of Probability sampling CO4 K4
- 20.a. Compute Standard deviation from the following data CO5 K4

CI	90-99	80-89	70-79	60-69	50-59
F	2	12	20	14	2

(or)

- 20.b. Compute Quartile deviation from the following data CO5 K4

CI	14-15	12-13	10-11	8-9	6-7	4-5
F	3	8	15	20	10	4
