

2025

RESEARCH AND STATISTICS IN PHYSICAL EDUCATION

Course : CC-403

Full Marks : 70

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

1. Explain in detail, the scope of research in Physical Education and Sports. Classify research with suitable example from the field of physical education. 8+7

**Or**

Explain the term 'Research'. Explain the need and importance of research in Physical Education and Sports. 5+10

2. What do you mean by research proposal? Explain primary sources and secondary sources of data with suitable examples. 5+10

**Or**

Mention the different parts of a research report. What is the purpose of literature review? 8+7

3. Define Statistics. Explain the nature and importance of statistics for research work. 3+12

**Or**

(a) Write down the advantages of graphical representations.

(b) The age in years of 20 persons is given below :

35	38	39	35	38
21	22	23	25	29
26	26	31	32	31
33	34	33	32	34

- (i) Prepare a frequency distribution table taking suitable class limits.  
(ii) Draw histogram.  
(iii) Calculate the value of mode from the histogram. 6+3+3+3

Please Turn Over

(2039)

4. Answer the following questions (**any two**) :

(a) Calculate SD from the following distribution :

class	10-14	15-19	20-24	25-29	30-34	35-39
f	5	10	15	8	7	5

(b) Calculate median from the following distribution :

class	0-9	10-19	20-29	30-39	40-49	50-59
f	7	18	20	15	9	6

(c) Write down the advantages and disadvantages of various measures of central tendency.

(d) Write a brief note on measures of variability.

5. Answer the following MCQs by choosing the correct option from the given alternatives for each question and write it on your answer-script (**any ten**) : 1×10

(a) Mean is the most reliable measure of central tendency because

- (i) it takes highest and lowest scores into account
- (ii) it takes the highest score into account
- (iii) it takes all scores into account
- (iv) it takes middle 50% of scores into account.

(b) In research, reliability refers to

- (i) accuracy of measurement
- (ii) consistency of results
- (iii) validity of conclusions
- (iv) relevance of topic.

(c) The range of the scores 30, 5, 92, 95, 66 is

- (i) 90
- (ii) 66
- (iii) 30
- (iv) 95.

(d) Which of the following is a measure of central tendency?

- (i) Standard deviation
- (ii) Variance
- (iii) Median
- (iv) Quartile deviation.

(e) The most commonly used measure of dispersion is

- (i) Mean
- (ii) Mode
- (iii) Range
- (iv) Standard deviation.

(f) Which graph is most suitable for showing frequency distribution?

- (i) Pie chart
- (ii) Histogram
- (iii) Line graph
- (iv) Scatter plot.

- (g) The square of the standard deviation is called
- (i) Median
  - (ii) Range
  - (iii) Variance
  - (iv) Mean deviation.
- (h) The median of the scores 4,5,3,9,6,8,12 is
- (i) 6
  - (ii) 5
  - (iii) 3
  - (iv) 9.
- (i) Which characteristic is essential for a good researcher?
- (i) Laziness
  - (ii) Curiosity
  - (iii) Carelessness
  - (iv) Impatience.
- (j) What is the first step in writing a research proposal?
- (i) Collecting data
  - (ii) Budgeting
  - (iii) Reviewing related literature
  - (iv) Interpretation of data.
- (k) Literature review helps a researcher to
- (i) create advertisements
  - (ii) understand what has already been studied
  - (iii) copy other studies
  - (iv) skip experimentation.
- (l) The research aimed at finding a solution for an immediate problem is
- (i) basic research
  - (ii) applied research
  - (iii) action research
  - (iv) All of these.
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