

(6 pages)

Reg. No. :

Code No.: 10398 E Sub. Code: AMPE 63

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2023.

Sixth Semester

Physical Education – Core

**ELEMENTARY STATISTICS IN PHYSICAL
EDUCATION**

(For those who joined in July 2020 only)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Standard deviation represents
 - (a) Central tendency of the data
 - (b) Correlation of the data
 - (c) Dispersion of the data
 - (d) Probability

2. The term which indicates relationship existing between parts of measures is
 - (a) Standard deviation
 - (b) Correlation
 - (c) Degree of freedom
 - (d) Range
3. Which of the following is not an average?
 - (a) Mean
 - (b) Median
 - (c) Mode
 - (d) Standard deviation
4. The average amount by which the quartile differ from the median is represented by the
 - (a) Range
 - (b) Inter - quartile range
 - (c) Quartile deviation
 - (d) Mean deviation
5. The concept of standard deviation was introduced by
 - (a) Karl Pearson
 - (b) Fisher
 - (c) Gauss
 - (d) Spearman
6. In the positively skewed distribution value of
 - (a) Mean is maximum and mode least
 - (b) Mean least and mode maximum
 - (c) Mean least and median maximum
 - (d) Mode least and median maximum



7. The formula $3 \text{ median} - 2 \text{ mean}$ is used to compute
 (a) Arithmetic mean (b) Weighted mean
 (c) Median (d) Mode
8. First moment about origin measures
 (a) Mean (b) Variance
 (c) Skewness (d) Kurtosis
9. Statistics does not deal with
 (a) Aggregates
 (b) Individuals
 (c) Groups
 (d) Mass quantoff
10. Data collected from published books are called
 (a) Primary data (b) Secondary data
 (c) Tertiary data (d) none of the above

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions, choosing either (a) or (b).
 Each answer should not exceed 250 words.

11. (a) Explain the nature of statistics.
 Or
 (b) Write the meaning and definition of statistics.

Page 3 Code No. : 10398 E

12. (a) Short notes on frequency distribution.

Or

- (b) Define mean and explain the merits and demerits of mean.

13. (a) Compute the mean deviation for the following data.

12, 13, 14, 15, 16, 17, 18

Or

- (b) Define range and the merits and demerits of range.

14. (a) The scores of student are 40, 45, 49, 53, 61, 65, 71, 79, 85, 91 what is the percentile for score 71.

Or

- (b) Write the meaning of quartiles in statistics.

15. (a) Explain the properties of the normal curve.

Or

- (b) Briefly explain kurtosis in statistics.

Page 4 Code No. : 10398 E

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PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b)
Each answer should not exceed 600 words.

16. (a) Describe data and the classification of data.

Or

- (b) Write the need and importance of statistics.

17. (a) Find out the mean, median, mode and range of the following scores.

28, 20, 7, 11, 11, 20, 15

Or

- (b) Discuss the specific characteristics of measure of central tendency.

18. (a) The wheat production (in kg) of 20 acres is given as

1120, 1240, 1320, 1040, 1080, 1200, 1440, 1360, 1680, 1730, 1785, 1342, 1960, 1880, 1755, 1720, 1600, 1470, 1750 and 1885 find the quartile deviation.

Or

- (b) Calculate standard deviation for the following data.

23, 25, 28, 31, 38, 40, 46,

Page 5 Code No. : 10398 E

19. (a) Compute the T scale for the following data.

17, 25, 21, 33, 17, 19, 24, 22, 27

Or

- (b) Compute the Hull scale for the following data.

17, 25, 21, 33, 17, 19, 24, 22, 27

20. (a) Explain the divergence from normality skewness and kurtosis.

Or

- (b) Describe the principles of normal curve.

Page 6 Code No. : 10398 E

