M. P. Ed $2^{\text {nd }}$ Semester Examination 2017

Statistics in Physical Education and Sports

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\text { MPCC - } 201
$$

The figurs in the margin indicates full Marks. The candidates are required to give their answers in their own words as far as practicable. Illustrate the answer wherever necessary.

Group - A
Answer any three questions

1. What is bio statistics? Give your own definition of statistics. What do you mean by the term Sample? Explain properties of normal curve. Describe the step for construction for norms. $1+2+3+4+5=15$
2. What is variable? What are the measures of variability? When do we use the quartile deviation? Calculate the SD data from Table - I . Make a frequency polygon of the frequencies from Table - I

$$
1+2+3+4+5=15
$$

3. 

Table- I

| Scores | $\frac{f}{3}$ |
| :---: | :---: |
| $14-16$ | 8 |
| $12-13$ | 15 |
| $10-11$ | 20 |
| $8-9$ | 10 |
| $6-7$ | 4 |

Calculate the N of the above table. Calculate of of the Table- 3. Describe the use of mean, median and mode, Calculate mean ad median of the data from the Table -I
4. What do you mean by probability? What are the types of correlation? Calculate the ' $r$ ' from the scores of the Table- II (Deviations to be taken from the assumed mean) Explain about regression.

$$
2+3+7+3=15
$$

Table - II

| Subjects: | A | B | C | D | E | F | G | H | I | J | K | L |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| X : | 50 | 54 | 56 | 59 | 60 | 62 | 61 | 65 | 67 | 71 | 71 | 74 |
| Y: | 22 | 25 | 34 | 28 | 26 | 30 | 32 | 30 | 28 | 34 | 36 | 40 |

5. What is standard error? Distinguish between one tailed test and two tailed test. Following are the scores of regular endurance test and motivated endurance test of varsity basket-ball players. Do you think that performance differ significantly? What is degree of freedom?

$$
2+3+8+2=15
$$

| Regular Endurance Test: | 45 | 33 | 59 | 32 | 30 | 27 | 29 | 59 | 44 | 40 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Motivated Endurance: | 54 | 50 | 58 | 38 | 42 | 35 | 38 | 66 | 48 | 49 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  | $(\mathrm{P} \geq 3.25$ | at | 0.01 level of confidence $)$ |  |  |  |  |  |  |

## Group- B

Answer any two (2) of the following
6.
a) Divergence from normality
b) Regression and prediction
c) Non parametric test
d) T-scale

## Group- C

Write short note on any four (4)
7. a) Ogive
b) Range
c) Level of significance
d) Magnitude of correlation
e) Partial correlation
f) Dependent variable

