# Reg. No.

### II Semester M.P.Ed. Degree Examination, September 2022 (New Syllabus – Semester Scheme) PHYSICAL EDUCATION Applied Statistics in Physical Education and Sports

Time : 3 Hours

## Instructions : 1) Answer all the questions.

2) Each answer shall not exceed 6 pages.

 a) Define statistics. Explain the need and importance of statistics in physical education and sports.
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OR

b) Construct a frequency distribution table for the following scores and compute the central tendencies.

48	73	57	57	69	88	11	80	82	47
46	70	49	45	75	81	33	65	38	59
94	59	62	36	58	69	45	55	58	65
30	49	73	29	41	53	37	35	61	48
22	51	56	55	60	37	56	59	57	36
12	36	50	63	68	30	56	70	53	28

2. a) What is dispersion ? Calculate Standard deviation and Mean deviation of the following data. 15

CI	f					
20 – 24	1					
25 – 29	3					
30 – 34	5					
35 – 39	8					
40 - 44	5					
45 – 49	2					
50 – 54	0					
55 – 59	1					
60 - 64	4					
	OR					

b) Define sigma scale. Explain the purpose, calculation and advantages of scoring sigma scale.

Max. Marks : 70

**MDH 452** 

### MDH 452

#### 3. a) Define probability. Write the principles of normal curve.

OR

b) List out the various types of graph. Draw a histogram and frequency polygon of the following data.

CI	frequency				
30 – 39	6				
40 – 49	8				
50 – 59	12				
60 - 69	14				
70 – 79	7				
80 – 89	5				
90 – 99	3				

4. a) Explain the following.

i) ANOVA ii) ANCOVA iii) SPSS system

OR

b) What is correlation ? Find out Co-efficient of correlation of the following data.

X	55	73	64	76	82	73	56	68	63	59
У	60	82	65	79	78	72	63	54	65	62

- 5. Write short notes on **any two** of the following.
  - a) Population and Sample.
  - b) Percentile ranking.
  - c) Skewness and kurtosis.
  - d) Tests of significance.

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(2×5=10)