

2018

( 5th Semester )

EDUCATION

( Honours )

Paper No. : EDN-502

( **Statistics in Education** )

Full Marks : 70  
Pass Marks : 45%

Time : 3 hours

*The figures in the margin indicate full marks  
for the questions*

1. (a) Discuss the meaning, nature and scope  
of educational statistics. 4+4+6=14

Or

- (b) Briefly explain the importance of  
statistics in education and the use of  
educational statistics. 10+4=14

2. (a) What are the different measures of central tendency? Compute mean and median for the following frequency distribution : 6+4+4=14

Score	Frequency
40-44	2
45-49	4
50-54	6
55-59	6
60-64	8
65-69	10
70-74	8
75-79	6
80-84	4
85-89	2
	<hr style="width: 50%; margin: 0 auto;"/> N = 56

Or

- (b) Calculate standard deviation (SD) from the following grouped data : 14

Class Interval	Frequency
60-64	2
55-59	1
50-54	3
45-49	6
40-44	8
35-39	5
30-34	2
25-29	1
20-24	3
15-19	7
10-14	2
	<hr style="width: 50%; margin: 0 auto;"/> N = 40

3. (a) Explain the concept of normal probability curve. Discuss the uses of normal probability curve in interpretation of test scores. 4+10=14

Or

- (b) Define the terms 'skewness' and 'kurtosis'. Explain their main types along with a diagram. 4+5+5=14
4. (a) Explain the concept of correlation. Calculate the coefficient of correlation by rank difference method between the marks secured in two subjects by 10 students. 3+11=14

<i>Students</i>	<i>Maths</i>	<i>Science</i>
A	50	73
B	62	55
C	79	45
D	45	75
E	32	82
F	70	57
G	43	64
H	57	35
I	80	47
J	65	80

Or

- (b) Compute the product moment ( $r$ ) of coefficient of correlation from the two sets of scores : 14

<i>Students</i>	<i>Test—X</i>	<i>Test—Y</i>
<i>A</i>	33	45
<i>B</i>	41	63
<i>C</i>	28	43
<i>D</i>	57	65
<i>E</i>	72	58
<i>F</i>	45	59
<i>G</i>	63	37
<i>H</i>	80	73
<i>I</i>	39	80
<i>J</i>	77	35

5. (a) What is a variable? Explain the types of data. 4+10=14

Or

- (b) Plot a histogram and a frequency polygon from the given data : 7+7=14

<i>Class Interval</i>	<i>Frequency</i>
0-9	5
10-19	12
20-29	15
30-39	22
40-49	14
50-59	4
60-69	2

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