

2020

( 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) Explain the nature and scope of educational statistics. 7+7=14

*Or*

- (b) Define statistics. Discuss the use of statistics in education. 4+10=14

2. (a) What do you mean by the term 'measures of central tendency'? Calculate the mean, median and mode for the following frequency distribution :

$$2+4+4+4=14$$

<i>Scores</i>	<i>Frequency</i>
100-104	1
95-99	2
90-94	1
85-89	6
80-84	7
75-79	3
70-74	2
65-69	1
60-64	2
55-59	4
50-54	0
45-49	1
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	<i>N</i> 30

( 3 )

Or

- (b) What is standard deviation? Compute standard deviation (SD) from the following grouped data :  $2+12=14$

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
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<i>N</i> 40	

3. (a) Distinguish between positive skewness and negative skewness. Explain the uses of normal probability curve in the interpretation of test scores.  $4+10=14$

Or

- (b) State the factors causing divergence in a normal curve. Explain the types of kurtosis along with diagram.  $5+9=14$

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4. (a) What is zero correlation? Compute the coefficient of correlation by rank difference method between the marks secured in two tests by 10 students and interpret the results :  $2+12=14$

Students	Test—X	Test—Y
A	10	16
B	15	16
C	11	24
D	14	18
E	16	22
F	20	24
G	10	14
H	8	10
I	7	12
J	9	14

Or

- (b) State two uses of correlation in education. Find the coefficient of correlation between the following two sets of scores using the product moment method and interpret the result :  $2+12=14$

Subject	: A	B	C	D	E	F	G	H
Test—I	: 15	18	22	17	19	20	16	21
Test—II	: 40	42	50	45	43	46	41	41

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5. (a) What is data? Distinguish between grouped and ungrouped data with suitable examples.  $4+5+5=14$

Or

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

<i>Class interval</i>	<i>Frequency</i>
65-69	1
60-64	3
55-59	4
50-54	7
45-49	9
40-44	11
35-39	8
30-34	4
25-29	2
20-24	1
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	<i>N</i> 50

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