

**Ba/Edn-502**

**2 0 2 2**

( 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) What is educational statistics? Discuss the importance of statistics in education. 4+10=14

Or

- (b) Enumerate the sources of educational data and the use of statistics in interpretation of educational data. 9+5=14

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( Turn Over )

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2. (a) Calculate mean, median and mode for the following frequency distribution :  $5+5+4=14$

Scores	Frequency
40-44	2
35-39	3
30-34	4
25-29	5
20-24	10
15-19	15
10-14	6
5-9	5
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$N = 50$	

Or

- (b) Compute standard deviation (SD) from the following grouped data by short method : 14

Scores	Frequency
95-100	2
90-95	0
85-90	5
80-85	9
75-80	11
70-75	10
65-70	12
60-65	7
55-60	3
50-55	1
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$N = 60$	

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3. (a) Explain the concept of normal probability curve. Discuss the properties of normal probability curve.  $4+10=14$

Or

- (b) What is divergence from normality? Explain skewness and Kurtosis and illustrate with diagrams.  $3+11=14$
4. (a) Explain the concept of correlation. Calculate the coefficient of correlation by rank difference method between the marks secured in two tests by 10 students and interpret the results :  $2+10+2=14$

Students	Maths	Physics
A	92	61
B	87	55
C	64	43
D	55	48
E	76	57
F	81	45
G	50	36
H	69	47
I	81	51
J	77	48

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Or

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

Subjects	Test-X	Test-Y
A	67	85
B	65	83
C	50	72
D	58	77
E	62	84
F	66	87
G	53	70
H	59	79
I	62	82
J	58	81

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

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( Continued )

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Or

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

<i>Class Interval</i>	<i>Frequency</i>
80-84	1
75-79	3
70-74	4
65-69	4
60-64	7
55-59	8
50-54	10
45-49	7
40-44	5
35-39	2
30-34	3
25-29	1

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