## 2022

(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

(Turn Over)





**2.** (a) Calculate mean, median and mode for the following frequency distribution:

1

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
	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
8590	5
80-85	9
7580	11
70-75	10
65-70	12
60-65	7
55-60	3
50-55	1
	N = 60

L23/72

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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
Α	92	61
В	87	55
C	64	43
D	55	48
E	76	57
F	81	45
G	50	36
Н	69	47
I	81	51
J	77	48

L23/72

(Turn Over)



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10

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
В	65	83
C	50	72
D	58	77
E	62	84
F	66	87
G	53	70
Н	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

L23/72

(Continued)







Or

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

Class Interval	Frequency	
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	
3034	3	
25-29	1	

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