2021

(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 do you mean by Educational Statistics? Explain the nature and scope of Educational Statistics. 4+10=14

Or

(b) Discuss the sources of Educational data. Explain the use of Statistics in interpretation of Educational data. 9+5=14

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(Turn Over)

2. (a) Compute Mean, Median and Mode for the following frequency table: 5+5+4=14

Class Interval	Frequency
45-49	2
40-44	3
35–39	6
30–34	9
25–29	13
20–24	8
15–19	6
10–14	2
5–9	1
	<i>N</i> = 50

Or

(b) State the different measures of variability. Calculate Standard Deviation (SD) from the following group data:

2+12=14

Class Interval	Frequency
60-64	2
55–59	3
50–54	2
45-49	6
40-44	8
35–39	8.65.
30–34	7
25–29	5.
20–24	9
	N = 50

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(Continued)

3. (a) What is Normal Probability Curve?

Discuss the properties and uses of normal probability curve in interpretation of test scores.

4+10=14

Or

(b) What do you understand by the term 'divergence from normality'? Explain skewness and kurtosis with diagram.

4+5+5=14

4. (a) What is coefficient of correlation?

Calculate the coefficient of correlation by rank difference method between the marks secured in two subjects by 10 students and interpret the result.

2+10+2=14

Students	English	Mathematics
A	39	68
B 3	45	80
1 C	47 A 62 H	51
D	75	43
$oldsymbol{E}$	70	43
$oldsymbol{F}$	80	35
G	67	42
Н	62	s Ho 46
. In the second of $m{I}_{B}$, we have	49	71
J	32	83

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(Turn Over)

Or

(b) Mention the kinds of correlation. Find the coefficient of correlation between the following two sets of scores by using the product moment method and interpret the result! 2+10+2=14

Subjects	Test—X	Test—Y
A	41	63
\boldsymbol{B}	46	61
\boldsymbol{c}	40	56
\boldsymbol{D}	49	52
$oldsymbol{E}$	39	50
F	37	60
\boldsymbol{G}	42	62
H	43	58
$m{I}$	45	59
J	36	52

- 5. (a) (i) What is a variable?
 - (ii) In a class 5% students failed, 7% got compartment, 17% obtained third division, 42% obtained second division and 29% obtained first division.

Draw a pie diagram to show the result. 4+10=14

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(Continued)

Or

- (b) (i) What is cumulative frequency curve?
 - (ii) Draw a cumulative frequency curve for the following distribution of the wages of 95 workers (less than method):

Weekly Wages	Workers
100–109	7
110–119	13
120–129	15
130–139	32
140–149	20
150–159	8

4+10=14

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