2015

(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. What do you mean by educational statistics? State the importance of statistics in education. 4+10=14

Or

Discuss the sources of educational data. Briefly explain the use of statistics in interpretation of educational data. 10+4=14

2. Compute mean, median and mode for the following frequency distribution : 5+5+4=14

Scores	*Frequencies*
27–30	1
24–27	3
21–24	6
18–21	11
15–18	30
12–15	26
9–12	12
6–9	8
3–6	3
0–3	2
	$N = 102$

Or

(a) What are the different measures of variability? State them.

(b) Calculate standard deviation (SD) from the following grouped data : 4+10=14

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

(Continued)

3. What is a normal curve? Discuss the uses of normal probability curve in interpretation of test scores. 2+12=14

Or

Define the terms skewness and kurtosis. Describe the characteristic properties of a normal probability curve. 4+10=14

4. *(a)* What do you mean by linear correlation?

(b) Calculate the coefficient of correlation by rank difference method between the marks secured in two subjects by 10 students : 4+10=14

Students	*English*	*Maths*
A	39	68
B	45	80
C	62	51
D	75	43
E	70	43
F	80	35
G	67	42
H	62	46
I	49	71
J	32	83

Or

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

Subjects	*Test—X*	*Test—Y*
A	41	63
B	46	61
C	40	56
D	49	52
E	39	50
F	37	60
G	42	62
H	43	58
I	45	59
J	36	52

5. What is a variable? Distinguish between continuous and discrete variables with suitable examples. 4+(5+5)=14

Or

(a) What do you understand by graphical representation of data?

(b) 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 this result. 4+10=14

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