2025

(FYUGP)

(5th Semester)

EDUCATION

(MAJOR)

Paper Code : EDN C–11

(Statistics in Education)

Full Marks : 75
Pass Marks : 40%

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. *(a)* What is educational statistics? Explain the importance of statistics in education. 5+10=15

Or

(b) Enumerate the use of statistics in interpretation of educational data and discuss the sources of educational data. 5+10=15

2. *(a)* Calculate mean, median and mode for the following frequency distribution : 5+5+5=15

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 : 15

Class interval	*Frequency*
35–39	3
30–34	5
25–29	7
20–24	18
15–19	4
10–14	5
5–9	2
	$N = 44$

3. *(a)* Distinguish between positive skewness and negative skewness. Explain the uses of normal probability curve in the interpretation of test scores. 5+10=15

Or

(b) State the factors causing divergence in a normal curve. Explain the types of kurtosis along with diagram. 5+10=15

4. *(a)* What is zero correlation? Compute coefficient of correlation by rank difference method between the marks secured by 10 students in two tests and interpret the scores : 3+12=15

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) Find the coefficient of correlation between the following two sets of scores using the product-moment method and interpret the result : 12+3=15

Subjects	*Test X*	*Test Y*
A	67	85
B	65	83
C	50	72
D	58	77

Subjects	*Test X*	*Test Y*
E	62	84
F	66	87
G	53	70
H	59	79
I	62	82
J	58	81

5. *(a)* What do you mean by graphical representation of data? Distinguish between grouped and ungrouped data with examples. 5+10=15

Or

(b) What is a cumulative frequency curve? Compute the cumulative frequencies and cumulative frequency percentage/ ogive from the following distribution : 3+6+6=15

Class interval	*Frequency*
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
	$N = 50$

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