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

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 |
| | N = 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 -4 9 | 6 |
| 40-44 | 8 |
| 35–39 | 8 |
| 30–34 | 7 |
| 25–29 | 5 |
| 20–24 | 9 |
| | N = 50 |

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3. (a) What is Normal Probability Curve? Discuss the properties and uses of normal probability curve in interpretation of test scores. 4+10=14

ent method and interpret

(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 |
| В | 45 | 80 |
| C Sale | 62 | 51 |
| D | 75 | 43 |
| tuderas failed, 7% | 70 5 | d 43 |
| nt, 17% obtained | 9.1111.80 1100 | 35 |
| % obtained second | | 1 42 |
| 30% obtained first | 02 | 46 |
| I | 49 | evib 71 |
| gram, to show the | 32 | 83 |

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 |
| В | 46 | 61 |
| С | 40 | 56 |
| D | 49 | 52 |
| E | 39 | 50 |
| F | 37 | 60 |
| G | 42 | 62 |
| Н | 43 | 58 |
| 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

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
