

2017

(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?
Explain the importance of Statistics in
Education. 4+10=14

Or

Discuss the sources of educational data.
Enumerate the use of Statistics in
interpretation of educational data. 9+5=14

2. Calculate mean, median and mode from the following table : 5+5+4=14

| <i>Score</i> | <i>Frequencies</i> |
|--------------|---|
| 75-79 | 2 |
| 70-74 | 6 |
| 65-69 | 8 |
| 60-64 | 13 |
| 55-59 | 9 |
| 50-54 | 6 |
| 45-49 | 3 |
| 40-44 | 1 |
| 35-39 | 2 |
| 30-34 | 2 |
| | <hr style="width: 50%; margin: 0 auto;"/> |
| | <i>N</i> = 52 |

Or

- Compute standard deviation (SD) from the following grouped data : 14

| <i>Class interval</i> | <i>F</i> |
|-----------------------|---|
| 50-54 | 2 |
| 45-49 | 3 |
| 40-44 | 6 |
| 35-39 | 8 |
| 30-34 | 7 |
| 25-29 | 9 |
| 20-24 | 8 |
| 15-19 | 2 |
| 10-14 | 5 |
| | <hr style="width: 50%; margin: 0 auto;"/> |
| | <i>N</i> = 50 |

3. What is normal probability curve? Discuss the properties of a normal probability curve.

4+10=14

Or

What do you mean by the term 'divergence from normality'? Explain the term 'skewness' and 'kurtosis' along with their main types.

4+(5+5)=14

4. (a) What is coefficient of correlation?
(b) Find the coefficient of correlation between the following two sets of scores using the product moment method :

4+10=14

| <i>Subjects</i> | <i>Test—X</i> | <i>Test—Y</i> |
|-----------------|---------------|---------------|
| A | 40 | 52 |
| B | 45 | 61 |
| C | 42 | 53 |
| D | 39 | 50 |
| E | 46 | 60 |
| F | 36 | 59 |
| G | 49 | 63 |
| H | 35 | 59 |
| I | 50 | 62 |
| J | 41 | 54 |

Or

Calculate the coefficient of correlation by rank difference method between the marks secured in two subjects by 10 students : 14

| <i>Students</i> | <i>Science</i> | <i>Maths</i> |
|-----------------|----------------|--------------|
| <i>A</i> | 33 | 45 |
| <i>B</i> | 45 | 50 |
| <i>C</i> | 42 | 61 |
| <i>D</i> | 51 | 64 |
| <i>E</i> | 39 | 47 |
| <i>F</i> | 57 | 55 |
| <i>G</i> | 60 | 57 |
| <i>H</i> | 29 | 42 |
| <i>I</i> | 48 | 56 |
| <i>J</i> | 62 | 48 |

5. (a) What do you understand by graphical representation of data?
- (b) In a class 8% students failed, 15% obtained third division, 40% obtained second division, 25% obtained first division and 12% obtained distinction. Draw a pie-diagram to show this result.

$$4+10=14$$

Or

Define ogive and describe its uses in Statistics. State the application of computer in data processing. (4+5)+5=14
