

**2024**

**( 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) Discuss the meaning and nature of educational statistics. Enumerate the sources of educational data. 4+4+7=15

**Or**

- (b) How is statistics important in interpretation of educational data? 15



( 2 )

2. (a) Compute mean and median from the following grouped data. Outline the utility of median.  $6+6+3=15$

| Class Interval | Frequency |
|----------------|-----------|
| 23-25          | 4         |
| 26-28          | 8         |
| 29-31          | 22        |
| 32-34          | 10        |
| 35-37          | 8         |
| 38-40          | 5         |
| 41-43          | 6         |
| 44-46          | 4         |
| 47-49          | 3         |
| 50-52          | 3         |
| 53-55          | 3         |
| $N = 76$       |           |

Or

- (b) Calculate standard deviation from the following data : 15

| Class Interval | Frequency |
|----------------|-----------|
| 78-79          | 3         |
| 76-77          | 5         |
| 74-75          | 6         |
| 72-73          | 8         |
| 70-71          | 7         |
| 68-69          | 14        |
| 66-67          | 11        |
| 64-65          | 2         |
| 62-63          | 5         |
| 60-61          | 4         |
| $N = 65$       |           |



3. (a) Discuss the concept of normal probability. Outline the characteristics of normal probability curve in interpretation of test sources. 6+9=15

Or

- (b) State the concept of divergence from normality. Mention two popular types of divergence from normality. 3+6+6=15

4. (a) Discuss the different types of correlation. What are the uses of correlation in educational measurement? State the interpretation of correlation. 9+3+3=15

Or

- (b) Ten students scored on two tests X and Y as given below. Compute the value of co-efficient of correlation by rank difference method. 15

|        |    |    |    |    |    |    |    |    |    |    |    |
|--------|----|----|----|----|----|----|----|----|----|----|----|
| Test-X | 31 | 35 | 36 | 37 | 40 | 40 | 41 | 41 | 41 | 43 | 47 |
| Test-Y | 73 | 71 | 37 | 81 | 74 | 80 | 77 | 77 | 84 | 86 | 82 |

5. (a) The following table reflects the distribution of marks obtained in two subjects, English and Mathematics in the school



( 4 )

examination. Draw a histogram and frequency polygon.

| Class Interval | Frequency |
|----------------|-----------|
| 40-44          | 1         |
| 45-49          | 1         |
| 50-54          | 4         |
| 55-59          | 10        |
| 60-64          | 5         |
| 65-69          | 3         |
| 70-74          | 3         |
| 75-79          | 2         |
| 80-84          | 1         |

Also, draw a pie diagram from the following scores :

| Class     | No. of Students |
|-----------|-----------------|
| Class-V   | 45              |
| Class-VI  | 30              |
| Class-VII | 25              |

$$6+6+3=15$$

Or

(b) Discuss different types of variables in statistical data analysis. Outline the application of computer in statistical data.

15

★ ★ ★