(December)

## **EDUCATION**

Course No. EDNC: 104

## Research Methodology in Education -I

Full marks: 75

Time: 3 hours

The figures in the margin indicate full marks for the questions.

## Answer any five questions

1. Explain the different Methods of Acquiring Knowledge.

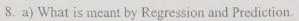
15

- 2. What is Action Research? Discuss the steps involved in Action Research with a suitable example. State the benefits of Action research.
- 3. What is qualitative and quantitative type of data? Discuss in detail Interview as a technique of collecting qualitative data. 5+10=15
- 4. What is non-probability sampling? Explain purposive and incidental sampling methods used in research. 3+6+6=15
- 5. Explain Kurtosis and Skewness. What conditions lead to establish of Kurtosis and Skewness of a distribution. 8+7=15
- 6. (i) Describe the characteristics of Normal Probability Curve.
  - (ii) In a distribution the mean is 100 and S. D is 20. Assume that the distribution is normal.

    (a) how many cases are below 80 scores?

    - (b) how many cases are above 125 scores?
    - (c) Calculate the percentage of cases lies in between 80 and 120 scores of the distribution. 6+9=15
- 7. (i) What is meant by coefficient of correlation? What are the uses of Pearson's Correlation of co-efficient?
  - (ii) Apply Pearson's method of assumed mean for calculating coefficient correlation of the obtained scores in Maths and Hindi of class X students.. 6+9=15

Students	A	В	С	D	E	F	G	Н	I	J	K	L	M	N
Hindi	10	12	8	21	25	10	11	20	15	18	7	20	10	11
Maths	20	20	15	18	21	17	19	10	10	10	1	-	10	11
	200	120	12	10	41	1/	19	10	10	22	13	19	22	12



- b) State the uses of Regression and Prediction.
- c) Given the following data for two tests

Maths (X) Science (Y)  

$$M_x = 65$$
  $M_y = 60$   
 $\sigma_x = 13$   $\sigma_y = 12$   
 $r = .60$ 

- (i) Student score in Maths (X) is 75, predict the probable score in Science (Y)
- (ii) Student Score in Science (Y) is 70, predict the score in Maths (X).

9. Write short notes on any  $\underline{two}$  of the following.

$$7^{1}/_{2} + 7^{1}/_{2} = 15$$

- (a) Partial and Multiple Correlation.
- (b) Concept of probability-distribution.
- (c) Questionnaires.
- (d) Educational Research.