

2017

(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. 4+8+3=15
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 <sup>percentage of</sup> cases are below 80 scores?  
(b) how many <sup>percentage of</sup> 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	B	C	D	E	F	G	H	I	J	K	L	M	N
Hindi	10	12	8	21	25	10	11	20	15	18	7	20	18	11
Maths	20	20	15	18	21	17	19	10	16	22	13	19	22	12

(PTO)

8. a) What is meant by Regression and Prediction.  
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).

$$3+3+9=15$$

9. Write short notes on any **two** of the following.

$$7\frac{1}{2} + 7\frac{1}{2} = 15$$

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