No. of Printed Pages—4

67 (ERS)

[16–HRAGDA–M3]

MA 3rd Semester Exam., 2016

EDUCATION

[MED (S3) 09]

(Educational Research and Educational Statistics)

Full Marks : 80

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer any *five* from the following questions (each in around *50* words) : 2×5=10

(a) Write two characteristics of research.

(b) Which are the hypotheses based on the scope of relationship?

(c) What is content analysis?

(d) What are the guidelines for using sociometric matrix?

(e) Write the causes of sampling errors.

(f) What do you mean by skewness?

2. Answer any *three* from the following questions (each in around *150* words) : 4×3=12

(a) What are the characteristics of a good hypothesis?

(b) Highlight the characteristics of descriptive survey.

(c) What are the steps to be taken to improve questionnaire?

(d) What are the uses of normal probability curve?

3. Answer any *three* from the following questions (each in around *250* words) : 6×3=18

(a) State different recording techniques of observation.

(b) Write a detailed note on stratified sampling.

(c) Compute the coefficient of correlation of the following data :

Students	*Test–I*	*Test–II*
A	20	40
B	25	30
C	30	35
D	24	25
E	35	10
F	40	20

Interpret the result.

(d) What do you mean by 'confidence intervals' and 'degrees of freedom'?

4. Answer any *four* from the following questions (each in around *500* words) : 10×4=40

(a) What is educational research? Discuss the scope of educational research. 3+7=10

(b) What is questionnaire? Describe the steps involved in preparing and administering the questionnaire. 10

(c) What is nonprobability sampling? Discuss any two types of non-probability sampling with their merits and demerits. 2+4+4=10

(d) Compute biserial r from the data given below : 10

Scores	*Training Group*	*Non-training Group*	*Total*
85–89	5	6	11
80–84	2	16	18
75–79	6	19	25
70–74	6	27	33
65–69	1	19	20
60–64	0	21	21
55–59	1	16	17
	$N_1 = 21$	$N_2 = 124$	$N = 145$

(e) Calculate the analysis of variance from the following data : 10

Groups

	A (X_1)	*B* (X_2)	*C* (X_3)	*D* (X_4)	
	14	19	12	17	
	15	20	16	17	
	11	19	16	14	
	10	16	15	12	
	12	16	12	17	
ΣX	62	90	71	77	300
ΣX_2	786	1634	1025	1207	4652

★ ★ ★