No. of Printed Pages—2

**67 (ERS)**

**[ 17–HDGKACRM–M3 ]**

**MA 3rd Semester Exam., 2017**

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 within *50* words) : 2×5=10

*(a)* Write the different categories of the objectives of research.

*(b)* Differentiate between one-tailed and two-tailed test.

*(c)* Which are the three strategies used to analyse educational concepts?

*(d)* Write the common causes of divergence from normality in the curve.

*(e)* Mention any two types of questions which are mostly used in educational research.

*(f)* What are the differences between population and sampling?

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

*(a)* State the reasons for formulating a hypothesis.

*(b)* Explain some characteristics of descriptive survey method.

*(c)* How can we improve the validity of a questionnaire?

*(d)* Explain the factors commonly influencing the choice of the sampling design.

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

*(a)* Mention some characteristics of good research and its importance in the educational field. 4+2=6

*(b)* Highlight the steps to be followed in stratified sampling. State the precautions to be noted while doing stratified sampling.

*(c)* Write the applications of normal probability curve.

*(d)* Describe the different popular methods used for computing coefficient of correlation.

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

*(a)* Define educational research. Explain the steps involved in educational research. 3+7=10

*(b)* Describe the different types of surveys in the descriptive method. 10

*(c)* Write the meaning of 'interview'. Explain in detail the important elements of research interview. 3+7=10

*(d)* Calculate the correlation coefficient from the following data (using product-moment method) : 10

| *Students* | *Maths—X* | *Science—Y* |
|---|---|---|
| *A* | 11 | 11 |
| *B* | 13 | 10 |
| *C* | 18 | 17 |
| *D* | 12 | 13 |
| *E* | 16 | 14 |

*(e)* The following table represents boys and girls who choose each of the three possible answers to an item in an attitude scale :

| | *Agree* | *Disagree* | *Undecided* |
|---|---|---|---|
| *Boys* | 73 | 9 | 41 |
| *Girls* | 22 | 4 | 27 |

Does this data indicate a sex-based difference in attitude? 10

★★★