Total No. of Questions : 6]
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M. Ed. (General) (Compulsory) Examination - 2010 PAPER - III
EDUCATIONAL RESEARCH AND METHODOLOGY (2002 Pattern)
Time : 3 Hours]
[Max. Marks : 100

## Instructions :

(1) All questions are compulsory.
(2) Two sections are to be written in separate answer-books.
(3) Figures to the right indicate full marks.
(4) Use of simple calculators and statistical tables is allowed.
(5) Students should follow given word limit.
(6) In any situation, students should not be given supplement.

## SECTION - I

Q.1) What are the Methods of Research ? Explain any one method of Educational Research with suitable examples.
(Word limit 300-400 words)

## OR

Q.1) What is the importance of Selection of Sample ? Explain various methods of Sampling with suitable examples.
(Word limit 300-400 words)
Q.2) What is Action Research ? What are the steps of Action Research ? Explain it with examples. (Word limit 300-400 words)

OR
Q.2) (A) What is the importance of Data Collection Tools and Techniques in Educational Research ?
(B) Explain preparation and administration of Questionnaire.
Q.3) Write short notes on any two of the following :
(a) E-tools
(b) Role of Assumption and Hypothesis in Educational Research
(c) Historical Method of Educational Research
(d) Scientific Thinking

## SECTION - II

Q.4) (A) A researcher administred a test to a group of 100 students before the experiment. Mean of the group was 40 and Standard Deviation was 10. After 6 months the same group was given post test and found Mean 50 and Standard Deviation 15. Wheather the Deviation of Mean is significant or not. Explain coefficient of correlation of two test was 0.70 .
(B) A group of 500 students achievement test was given. Mean is 50 and $\mathrm{SD}=10$. How many students will get marks above 60 ?

## OR

Q.4) (A) Find out Coefficient of Correlation by Pearson's Product Moment Method of the following data :

| Student | A | B | C | D | E | F | G | H | I | J |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Test 1 | 8 | 7 | 15 | 13 | 6 | 9 | 12 | 8 | 11 | 11 |
| Test 2 | 18 | 15 | 25 | 20 | 15 | 18 | 16 | 10 | 15 | 8 |

(B) Find SD of the following data :

| Class <br> Interval | $90-94$ | $85-89$ | $80-84$ | $75-79$ | $70-74$ | $65-69$ | $60-64$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 5 | 7 | 15 | 13 | 5 | 3 | 2 |

Q.5) (A) Find out $P_{40}$ from the following data :

| C.L. | $90-99$ | $80-89$ | $70-79$ | $60-69$ | $50-59$ | $40-49$ | $30-39$ | $20-29$ | $10-19$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{f}$ | 4 | 3 | 8 | 10 | 2 | 5 | 4 | 3 | 1 |

(B) Find Median from the data given below :
[05]

| C.L. | $40-44$ | $35-39$ | $30-34$ | $25-29$ | $20-24$ | $15-19$ | $10-14$ | $5-9$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{f}$ | 6 | 5 | 4 | 12 | 6 | 4 | 3 | 8 |

(C) Explain Ogive.

## OR

Q.5) (A) Find PR of 52 from the given data below :

| C.L. | $90-99$ | $80-89$ | $70-79$ | $60-69$ | $50-59$ | $40-49$ | $30-39$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{f}$ | 8 | 6 | 12 | 4 | 9 | 7 | 4 |

(B) A group is given a test. Mean is 20 and Standard Deviation is 4 . How many students will lie between the scores 32 and 16 ?
(C) Write short note on Kurtosis.
Q.6) Write short notes on any two of the following :
(a) Format of Research Proposal
(b) Importance of Research Proposal
(c) Selection and Finalisation of Educational Research Problem
(d) Regression Equation
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