PC–51153/MK

P–12/2052

METHODOLOGY OF EDUCATIONAL RESEARCH–II–P–III

(Semester–II)

(Regular & Distance Education)

Time : Three Hours]   [Maximum Marks : 70

Note :   Attempt **two** questions each from Section A & B carrying 10 marks each and the entire Section C consisting of 10 short answer type questions carrying 3 marks each.

SECTION—A

I.   Define sampling. Discuss the types of sampling in detail. *Prob. & non Prob.*

II.   What do you understand by observation? Write down the major merits and demerits of observation as a tool of research.

III.   What do you understand by Descriptive method of research? Discuss the major steps, merits and demerits of Descriptive method.

IV.   What do you understand by Research Report? What are the major aspects of a good Research Report?

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V. What do you mean by parametric and non-parametric statistics? Discuss the difference between parametric and non-parametric statistics in detail.

VI. Compute the t-test for the scores of male and female students in Science as given below :

Sr. No.	Marks in Science	
	Male Students	Female Students
1.	10	4
2.	4	6
3.	3	8
4.	2	2
5.	4	9
6.	2	1
7.	5	12
8.	10	13
9.	5	10
10.	5	10

Critical Value : 2.10 at 0.05 level of confidence

Critical Value : 2.88 at 0.01 level of confidence.

VII. In a Certain hospital, an experiment conducted to test the efficacy of a drug in checking typhoid gave the following results. Find out the effectiveness of drug in checking typhoi by applying chi-square test :

Treatment	Typhoid	No Typhoid	Total
Drug	200	300	500
No Drug	280	20	300
Total	480	320	800

Table Value at 0.05 Level = 3.84

Table Value at 0.01 Level = 6.63.

Pearson's r

VIII. Compute product moment coefficient of correlation between Academic Achievements and Mental Health scores as given below :

Sr. No.	Scores	
	Academic Achievements	Mental Health
1.	25	34
2.	45	47
3.	61	57
4.	58	68
5.	33	40
6.	47	55
7.	63	71
8.	41	38
9.	49	57
10.	53	49

SECTION—C

(Compulsory Question)

IX.   Write brief answers of the following :

1. What are the limitations of non-probability sampling?

2. What are the advantages of Interview as tool of data collection?

3. Difference between validity and reliability.

4. External criticism of data.

5. What do you mean by descriptive method of research?

6. What are major steps of a research report?

7. Advantages of factorial design.

8. What are the limitations of Analysis of variance (Anova two way)?

9. Uses of Chi-square test.

10. What are the uses of Pearson's product moment coefficient of correlation?