(b) You are given the following data

XY

Arithmetic Mean 36 85

Standard deviation 11 8

Correlation coefficient between X and Y = 0.66.

Find out two repression equations.

9. (a) Discuss the precautions to be taken while interpreting data.

Or

- (b) Enumerate the steps involved in writing a research report.
- 10. (a) Explain with reference to the following fields with suitable examples.
 - (i) Role of Teacher
 - (ii) Method of Teaching
 - (iii) Evaluation procedure

Or

(b) Explain the role of Mass Media in Adult education. How will you make effective use of Television and Newspaper in Adult education programme.

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M.Phil. DEGREE EXAMINATION, NOVEMBER 2022.

First Semester

Commerce

RESEARCH AND TEACHING METHODOLOGY

(For those who joined in July 2018-2019 onwards)

Time: Three hours Maximum: 75 marks

PART A — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

1. (a) Define Research. State its objectives.

Or

- (b) Enumerate the basic principles of experimental research design.
- 2. (a) What do you mean by primary data? Listout the methods of collecting primary data.

Or

(b) What is tabulation? Describe the rules for preparing statistical labels.

3. (a) In a sample of 500 people from a village in Punjab, 280 are found to be rice eaters and 220 wheat eaters. Can we conclude that both the foodgrains are equally popular? Test at 1% level of significance.

Or

(b) From the following data test the significance of the difference between 2 correlation coefficient using Fisher's Z transformation.

Sample Size	Value of	
5		0.87
12		0.56

4. (a) What are the precautions to be considered by a Researcher while preparing a research report?

Or

- (b) What are the characteristics of a good research report?
- 5. (a) Explain steps of Instructional Design for on-line learning with suitable examples.

Or

(b) What are the physical and emotional characteristics of students during the period of Adolescence?

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PART B — $(5 \times 10 = 50 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

 (a) Briefly explain the steps involved in research process.

Or

- (b) Discuss the different components of a Research Design.
- 7. (a) Discuss the various steps involved in the sampling process.

Or

- (b) Describe how the following scales are constructed.
 - (i) Likert scale (ii) Thurstone's scale
- 8. (a) A manufacturer of readymade garments conducts a market survey to know the choice of brands A, B, C and D of 100 prospective customers. The results show

$$A = 20$$
 $B = 30$ $C = 18$ $D = 32$

Use χ^2 test at 5% level of significance to know if customers have any distinct brand preference.

Or

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