

C 5837

(Pages : 2)

Name.....

Reg. No.....

Ph.D. PRELIMINARY QUALIFYING EXAMINATION, JULY 2021

Economics

Paper I—RESEARCH METHODOLOGY

Time : Three Hours

Maximum : 70 Marks

Part A (Very Short Answer Questions)

*Answer all questions.
Each question carries 2 marks.*

1. Distinguish between Explorative research and Action research.
2. Explain the concepts of Degree of freedom and Level of significance.
3. Write a short note on reviewing the literature.
4. Describe the important methods choosing for finding optimum sample size.
5. Define Standard error.
6. Explain Spearman Rank correlation test.
7. Describe the various Scales of measurement.
8. Explain Kruskal Wallis Test.
9. Write a short note on Non-parametric tests.
10. Write a short note on Plagiarism.

(10 × 2 = 20 marks)

Part B (Short Essay Questions)

*Answer any four questions.
Each question carries 5 marks.*

11. How to identify research problem and setting research questions in the Research Process ?
12. Explain the various Referencing styles.
13. Describe the various types of Economic data.
14. The screws produced by certain machine were checked by examining samples. The following table shows the distribution of 128 sample according to the number of defective items they contained.

No. of Defectives	:	0	1	2	3	4	5	6	7
No. of Samples	:	7	6	19	35	30	23	7	1

Turn over

Fit a binomial distribution to find the mean and variance of the distribution.

15. Write a short note on ANOVA. Point out its assumptions and importance.
16. Distinguish between Point estimation and Interval estimation.

(4 × 5 = 20 marks)

Part C (Long Essay Questions)

Answer any two questions.

Each question carries 15 marks.

17. What is Hypothesis testing ? Explain the important steps in Testing of hypothesis.
18. A Behavioural economist is conducting a survey to determine if the financial benefits in terms of total salary influences the level of satisfaction of the employees or whether there are other factors such as the work environment, which are more important than money. A random sample of 300 employees of an organization are given a test to determine their level of satisfaction. Each employee's total salary is also recorded. The information is tabulated as follows.

Level of satisfaction	Annual salary		
	Under \$30000	\$30000 - \$50000	Over \$50000
High	30	20	15
Medium	80	60	25
Low	50	15	5

Using Chi-square test at 0.05 level of significance, test to determine if salary and job satisfaction are independent.

19. Describe the methods of Random and Non-random sampling in detail.
20. Explain the concept of Scientific Research. What are the important stages involved in Research Methodology ?

(2 × 15 = 30 marks)