

C 25716

(Pages : 2)

Name.....

Reg. No.....

Ph.D. PRELIMINARY QUALIFYING EXAMINATION, JULY 2022

Economics

Paper I—RESEARCH METHODOLOGY AND DATA ANALYSIS

Time : Three Hours

Maximum : 70 Marks

Part A*Very Short Answer Questions.**Answer **all** questions.**Each question carries 2 marks.*

1. Compare and contrast : (i) Explorative research, and (ii) Action research.
2. 'Any research should have something new; or else, it is not research'. Critically comment.
3. What is Plagiarism ? What is Self Plagiarism ? Briefly discuss.
4. Distinguish between Primary and Secondary data. Enumerate the limitations of secondary data.
5. What is Random sampling ? How will you ensure 'Randomness' in primary data collection ?
6. What is optimum sample size ? Enumerate a few methods to choose optimum sample size.
7. Briefly discuss Multiple Correlation and Partial Correlation.
8. Distinguish between Parametric and Non-Parametric tests. Give examples for both.
9. What is Level of Significance (LOS) ? What does '5 percent LOS' mean ? What LOS would you prefer ?
10. What is a Hypothesis ? Is it necessary that all research studies should have hypotheses ?
(10 × 2 = 20 marks)

Part B*Short Essay Questions.**Answer any **four** questions.**Each question carries 5 marks.*

11. What is a Research Problem ? How is it formulated ?
12. Discuss the features of a good Research Report.
13. Explain Normal distribution, its major properties and importance. What are its demerits?
14. What is Estimation ? Distinguish between Point estimation and Interval estimation.
15. Describe the process of Hypothesis Testing.

Turn over

16. Analysis of the examination results of a sample of 200 students has revealed that 46 students have failed, 68 secured III Class, 62 secured II Class, and the rest have passed in I Class. Are these figures commensurate with the general pattern of results which is in the ratio 2 : 3 : 3 : 2 for the four categories ? [Table value of Chi-square at 5% significance level for 3 degrees of freedom is 7.815].

(4 × 5 = 20 marks)

Part C

*Long Essay Questions.
Answer any **two** questions.
Each question carries 15 marks.*

17. Explain the different methods of Sampling.
18. Discuss ANOVA and its use. Explain the assumptions and about the Null hypothesis while using it.
19. It is claimed that a random sample of 100 tyres with mean life 15269 km is drawn from a population of tyres which has a mean life of 15200 km and standard deviation of 1248 km. Test the validity of the claim. [Table value of z at 5 percent level of significance is 1.96].
20. From the following data on the values of x and y , find the regression equation of y on x , and x .

x	36	23	27	28	28	29	30	31	33	35
y	29	18	20	22	27	21	29	27	29	28

(2 × 15 = 30 marks)