PhD Course Work Question Bank

Subject : Research Methodology & Quantitative Methods

Part	I	II	III	IV	V	VI
Unit	1	1 and 2	2	3	3 and 4	4

Part I (Unit – I)

Q1. What do you mean by research? Explain its significance in modern times.

Q2. Briefly describe the different steps involved in a research process.

Q3. Explain the criteria of a good research.

Q4. "Research is much concerned with proper fact finding, analysis and evaluation." Do you agree with this statement? Give reason in support of your answers

Q5. Explain the types of research in detail.

Q6. Why is it important to define research problem appropriately?

Q7. Write short notes on following (a.) Motivation in research (b) Pilot survey

Q8. Explain the meaning and significance of research design.

Q9. What do you understand by term Research Problem? What are the objectives of Research Problem?

Q10. What is Hypothesis? What is the significance of formulating the hypothesis in research work?

Part II (Unit 1 and 2)

Q 1. Discuss the importance of critical literature review and its uses in planning innovation research.

Q 2. Explain various sources of obtaining data for the selected research problem.

Q 3. Differentiate between exploratory and descriptive research

Q 4. "For any research to be successful it must be well designed." Justify this statement.

Q 5. Why probability sampling is generally preferred comparison to non probability sampling?

Q 6. Under what circumstances stratified random sampling design is considered appropriate? How would you select such sample? Explain with the help of an example.

Q 7. What is the major difference between a sample and a census?

Q 8. Highlight various methods used in selecting a sample from the population. Point out their merits and demerits.

Q 9. Define the appropriate target population and the sampling frame in each of following situation:

    a.The manufacturer of a new cereal brand wants to conduct product usage test in India.
    b.A local TV station wants to determine households' viewing habits and programming preference.

Q 10. How would you differentiate between primary and secondary data?

Part III(Unit 2)

Q 1. The procedure of testing hypothesis requires a researcher to adopt several steps. Describe in brief all such steps.

Q 2. What do you mean by parametric and non parametric test?

Q 3 . What do you mean by one tailed and two tailed test?

Q 4.A bag contains 5 red,2 black,3 yellow and 4 green balls. What is the probability of getting a red or green ball at random in a single draw of one?

Q 5 .A card is drawn at random from a pack of 52 playing cards.Find the probabilitythat a card drawn is either a king or the ace of diamonds.

Q 6 .”Average is a number indicating the central value of a group of observations”. How far is this true about mean,median and mode?

Q. 7 Write a detail note on “observation and survey”.

Q. 8 Write a note on (i) Z test (ii) F test

Q. 9 Explain in detail F test and Chi-square test.

Q 10 What is the difference between simple linear regression and multiple linear regression?

Q.11 What are the methods of measuring index numbers?

Part IV (Unit 3)

Q 1.Define ‘regression’. Why are there two regression lines? Under what conditions can there be only one regression line?
Q. 2 What are the major advantages of non parametric methods over parametric methods?

Q 3 Briefly describe the different non-parametric tests explaining the significance of each such test. Discuss different type of scales?

Q 4. (i) Discuss different type of scales?
     (ii) Distinguish between multidimensional scale and unidimensional scale?

Q 5 Explain the use of Correlation in research?

Q. 6 Explain the use of Regression in research?

Q. 7 Explain the use of Index numbers in research?

Q .8 .”Researcher’s background and philosophy affect the choice of a data analysis strategy” Discuss

Q. 9 (i) What do you understand by absence of correlation?
     (ii) When should be the rank difference method be used?

Q. 10 Write detailed note on Two-factor Evaluation Approaches

Part V (Unit 3 and 4)

Q 1 Explain different types of layout of research report.

Q.2 Write a detail note on "observation and survey".

Q3. Explain types of Research Report.

Q 4. "The task of defining the research problem often follows a sequential pattern" Explain.

Q 5. What are the basic precautions adopted by researcher while making research report.

Q 6 Explain the different parts of a Table in brief.

Q 7 Write the short notes on editing, coding and tabulation of data analysis.

Q 8 Explain different types of layout of resesrch report.

Q 9 "Report writing is more an art that hinges upon practice and experience".Discuss.

Q 10 Analyze different methods of data collection with suitable examples

Part VI (Unit 4)

Q1 .What is meant by dispersion?Explain various measures of dispersion.Discuss their comparative usefulness.

Q 2. Explain snowball sampling

Q 3. "Research is much concerned with proper setting up objectives ,literature review, Data collection , analysis and evaluation." Do you agree with this statement? Give reason in support of your answers

Q 4. Discuss the various formats of writing bibliography in detail.

Q 5 . What do you mean by Questionnaire? Discuss the various format of Question and precaution for designing questionnaire

Q 6 Why tabulation is considered essential in a research study? Give the characterists of a good table

Q 7 Which method is most suitable method for conducting an enquiry regarding a family welfare programme in India? Explain its merits and demerits.

Q 8 A local newspaper wants to ascertain the extent to which the inclusion of a daily stock market page might increase its circulation. Which type of data collection would you like to propose for this? Explain the unit of analysis and the population size for the data collection. Prepare at least eight questions in a questionnaire to collect the pertinent information.

Q 9 What are the different categories of research reports? Explain each of these categories in detail. Also give two examples of reports from each of these categories.

Q 10 Explain the significance of research report and narrate the various steps involved in writing such a report.