

QUANTITATIVE TECHNIQUES AND RESEARCH METHODS IN BUSINESS (434C1B) QUESTION BANK

PART -A (ONE MARK QUESTIONS)

UNIT -I

- 1. What is Probability?
- 2. Define mathematical Probability?
- 3. What is conditional probability?
- 4. State the axiom of probability?
- 5. State marginal probability?
- 6. What is prior probability?
- 7. Sate bayes theorem?
- 8. Sate addition theorem?
- 9. State multiplication theorem?
- 10. What is meant by sample point?
- 11. What is Experiment?
- 12. Define Trial and outcomes?
- 13. Define the term Event and Sample space?
- 14. What is Dependent Event and Independent Event?
- 15. Define equally likely Events?
- 16. What is Mutually Exclusive Events?
- 17. Define the term Exhaustive events and Complementary Events?
- 18. What is meant by Random Variable?
- 19. Define Discrete random Variable and Continuous random variable?
- 20. What is Discrete Probability distribution function?
- 21. Define Cumulative Probability distribution function?



- 22. What is Probability Mass function?
- 23. What is Probability Density function?
- 24. Define Bernoulli Process?
- 25. What is Binominal Distribution?
- 26. What is Poisson distribution?
- 27. Define Normal Distribution?
- 28. What is standard normal distribution?
- 29. What is Decision tree analysis?
- 30. Define Decision making?
- 31. Define the term Risk, Certainty and Uncertainty?
- 32. What is Course of Action?
- 33. Define State of Nature?
- 34. What is meant by Payoff?
- 35. What is Expected monetary value?
- 36. What is Expected opportunity loss?
- 37. Write the difference between Optimism criterion and Pessimism criterion?
- 38. What is Hurwitz Criterion?
- 39. Define Laplace Criterion?
- 40. What is Regret Criterion?
- 41. What is regret table?

UNIT -II

- 1. Define Research?
- **2.** What is the role of theory in research?
- **3.** State the objectives of research?
- **4.** Identify the criteria of good research.
- **5.** Classify the types of hypothesis.
- **6.** Illustrate the term Hypothesis.



- 7. What is null and alternative hypothesis?
- **8.** What is research problem?
- **9.** Identify the source of research problem?
- **10.** What is review of literature?
- 11. Define Research design?
- 12. Write down the types of Research design?
- 13. Explain Internal Validity
- 14. Content Validity
- 15. Interpret the different types of Validity
- **16.** What is meant by Descriptive Studies?
- **17.** Give meaning for the term Reliability?
- **18.** What is a "Variable" in Research?
- 19. Distinguish between Observable & Latent variable?
- **20.** How would you use the Criterion Variable?
- 21. Interpret the difference between primary data and secondary data.
- **22.** State Pilot Study.
- 23. What do you mean by Observation?
- **24.** What is survey?
- 25. Define structured interview
- **26.** What is Questionnaire?
- **27.** What is sampling?
- 28. What is Sampling Plan?
- 29. Define Sampling frame?
- **30.** What is Sample Size?
- **31.** What is sampling Error?
- 32. Write the difference between probability and non probability Sampling?
- **33.** What is scale?

34. Mention the type of scale?

UNIT -III

- 1. What is Data?
- 2. What is tabulation?
- 3. What is editing and coding?
- 4. What is Univariate Analysis?
- 5. Define Bivariate Analysis?
- 6. What is Multivariate Analysis?
- 7. What is parametric and non parametric test?
- 8. Mention the types of parametric and non parametric test?
- 9. What is correlation Analysis and its types?
- 10. Define Regression Analysis?
- 11. What is regression line?
- 12. Narrate the difference between Correlation and Regression?
- 13. What is chi square test?
- 14. State the conditions for chi square test?
- 15. What is Rank Concordance?
- 16. What is standard Error?
- 17. What is coefficient of determination?
- 18. Define regression coefficient?
- 19. Define level of confidence?
- 20. What is Level of Significance?
- 21. Define Degree of freedom?
- 22. What is Acceptance & Rejection Region?
- 23. Define Type I errors and Type II errors?
- 24. Relate the meaning of One-tail Test and Two-Tail Test.

- 25. Expand ANOVA?
- 26. What is one way and two way Anova?
- 27. What is variance?

UNIT-IV

- 1. What is MDS?
- 2. What is meant by Factor Analysis?
- 3. Point out the meaning of Discriminant Analysis.
- **4.** What is conjoint Analysis?
- 5. Define Cluster Analysis?
- **6.** What is Multiple Regression?
- 7. State the Application of Application of SPSS
- 8. What is meant by Canonical Correlation Analysis?
- **9.** Define Multi-collinearity?
- 10. What Is MANOVA?

UNIT-V

- 1. What is research report and its types?
- 2. What is abstract?
- 3. What is synopsis??
- 4. Distinguish appendices and references?
- 5. Differtiate reference from bibliography?
- 6. What is ethics in research?
- 7. Prioritize the meaning of Interpretation.
- 8. What is meant by the footnotes?
- 9. Compare oral presentation with written presentation?
- 10. What is meant by Glossary?

PART -B (FIVE MARK QUESTIONS)

UNIT -I

- 1. Describe the rules (Theorem) and Approaches of Probability?
- 2. Describe the properties of Binomial Distribution?
- 3. Describe the properties of Poisson distribution?
- 4. Describe the Properties of Normal Distribution?
- 5. Describe how EMV criterion with a decision tree would be used to determine best decision?
- 6. Describe Roll back techniques in decision tree Analysis?
- 7. Explain the construction of Regret table with an example?

UNIT-II

- 1. Write in detail about the factors affecting business research.
- 2. Explain various functional areas that are used in Business Research?
- 3. Analyze the limitations of scientific research in business?
- 4. Explain steps, source and selection criteria of good Research Problems?
- 5. Describe the various types of research problem?
- 6. Explain various research designs that are used in research?
- 7. Bring out the procedure for hypothesis testing.
- 8. Describe the different types of hypothesis in details?
- 9. What are the different types of Observation used for collecting primary data?
- 10. Discuss the Interview as techniques of data collection?
- 11. Discuss the role of theory in Research?
- 12. Distinguish between longitudinal and cross sectional study
- 13. Explain the sequential steps in sampling process?
- 14. Discuss the determinants and approaches in fixing optimal Sample Size?
- 15. Differentiate between questionnaire and Schedule?

16. Discuss the characteristics of good questionnaire?

UNIT -III

- 1. Explain the standard test for hypothesis?
- 2. Discuss various methods of studying correlation?
- 3. Discuss the properties of correlation?
- 4. Annotate in brief the various types of regression Analysis?
- 5. Describe the essential characteristics of Chi Square test?
- 6. Discuss the various uses and limitations of chi square test?
- 7. Annotate in brief the procedure of making a chi square analysis?
- 8. Bring out the characteristics and assumption of ANOVA?
- 9. Discuss the merits and demerits of non-parametric test?
- 10. Elucidate the procedure of Mann Whitney U test?
- 11. Elucidate the procedure of Kruskal Wallis H test?

UNIT-IV

- 1. Sketch the purpose of using Descriptive Analysis?
- 2. Describe the Bivariate Data Analysis procedures?
- 3. Explain in détails Conjoint Analysis and its applications?
- 4. Explain the factors of SPSS with its Features?

UNIT-V

- 1. Describe the function of good research report?
- 2. Explain the characteristics of good research report?
- 3. Distinguish between technical and business report?
- 4. Explain the Principle of Ethics in Writing Business Research?

PART -C (TEN MARK QUESTIONS)

UNIT-I

- 1. Describe the application and Construction of Decision Tree Analysis?
- 2. Describe the different types of Decision Making Techniques?
- 3. Discuss the step involved in the process of decision making?
- 4. State the Application and Prove Bayes Theorem?

UNIT -II

- 1. Discuss the scope, qualities and significance of research in management?
- 2. Explain the different steps involved in a research process?
- 3. Describe briefly the various types of research?
- 4. Explain the role, types and procedure for hypothesis testing with a flow diagram?
- 5. Explain the different scales that are used in management research? Explain the various scaling techniques in measuring the variables?
- 6. Explain various aspects involved in questionnaire design?
- 7. Explain the different types of sampling techniques?
- 8. Suggest suitable methods of data collection by big business houses in recent times.

UNIT -III

- 1. Describe the concept of Editing and coding?
- 2. Explain the application of Parametric and Non –Parametric Tests?
- 3. Explain the various Statistical Techniques used in management research or Managerial Decision making?
- 4. Explain the techniques of analysis of variance for a one way classification?
- 5. Explain the techniques of analysis of variance for a two way classification?
- 6. Analyze Chi square test as goodness of fit as well as test of independence?

UNIT -IV

1. What is a factor analysis? Explain the various methods of factor analysis? Also explain the significance and uses of factor analysis?



- 2. Describe the methods involved in Discriminant Analysis?
- 3. Describe the steps involved in Cluster Analysis and its applications?

UNIT-V

- 1. Explain the steps/investigation involved in writing a research reports and is format of research reports?
- 2. Explain the mechanics \ rules \ Guidelines \criteria \ norms \ factors of writing a research report?
- 3. What points will you keep in mind while preparing a research report? / Explain the precaution for writing a research reports?
- 4. Explain the different types of research reports and its contents