Syllabus for Pre-Ph.D. Course Work in Commerce

Under

Tripura University Rules & Regulations
for
Doctor of Philosophy (Ph.D.)-2016
based on
UGC-2016 Guidelines

Department of Commerce,
Tripura University,
(A Central University)
2018

Department of Commerce
Tripura University

Coursework for Ph.D. in Commerce
Session: 2018-2019

<u>Course Structure:</u>

Sl. No.	Course Name	Course Code	Credit	Nature
Paper-I	Research Methodology I	PHD9001	4	Core
Paper-II	Research Methodology II	PHD9002	4	Core
Paper-III (Any One)	A. Accounting	PHD9013	4	Elective
	B. Finance	PHD9023	4	Elective
	C. Advanced Econometrics	PHD9033	4	Elective
Paper-IV	Term Paper	PHD9004	4	Core

PHD9001: Research Methodology I

Marks: 100; Credit: 4

Course Inputs

Fundamentals of Research

Definition and Objectives of Research – Motivation, Types of Research – Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical, Research Process- Meaning of research problems, Identification and Formulation of research problem, Research objectives, Formulation of Hypothesis, Pilot study.

Review of Literature
Need for Reviewing Literature, Planning of Review work, Sources of Literature, Literature Review Procedure, Identifying Research Gap

Data and Methodology
Sources of Data - Use of Primary Data and Secondary Data; Methods of Collecting Primary Data and Secondary Data, Questionnaire, Features of good Questionnaire. Processing of data; Methodological Issues in research problem.

Report Writing
Structure and Components of Research Report, Types of Report, Planning of Report Writing, Layout of Research Report, Characteristics of a good report, referencing in academic writing.

Research Ethics

Meaning, Approaches to Research Ethics, Ethical Issues in Research, Measures to make research more ethical, Legal Aspects.

Suggested Readings:

1. Bryman, A. *Social Research Methods.* New York: Oxford University Press.

2. Kothari, C. R. *Research Methodology: Methods and Techniques.* New Delhi: New Age International.

3. Marcoulides, G. A. (Ed.). *Modern Methods for Business Research.* Psychology Press.

4. Zikmund, W. G., Babin, Carr, J. C., & Gri, M. *Business Research Methods.* Mason: Cengage Learning.

PHD9002: Research Methodology II

Marks: 100; Credit: 4

(First Half: Theory, Marks: 50)

Course Inputs

Entering, Describing & Obtaining Data
Methods of Data Collection, Sources of Data, Classification of Data, Description and representation of Data, Probability and Probability Distributions

Issues in Sampling
Concept of Population and samples; Types of Sampling; Sampling and Sampling Distributions; Sampling from a Population; Sampling Error and Non-sampling Error; Selection of a Random Sample; Sampling of variables- small and large samples; Sampling of Attributes; Population Point Estimation and Population Interval Estimation; Some other continuous Probability distribution based on Normal Population

Hypothesis Testing
Concept and Errors of Hypothesis Testing, Hypothesis Test Construction and Testing Procedure, Parametric vs. non-parametric tests of difference
Parametric Tests, The Power of a Test, The Power Function and the Operating-Characteristics Curve, Some non-parametric (distribution free) Tests

Chi-square Tests and Factorial Experiments
Chi-Square Tests- Tests of association and Tests of Goodness of Fit, Concept and Types of factorial experiments, Single Factor Experiments- Single factor (or one-way) ANOVA, Kruskal-Wallis test; Two factor experiments with No Replication- Two-way ANOVA with no repeated measures (or one factor with repeated measures), Friedman's Test; Two factor experiments with Equal Replication- Two-way ANOVA with equal replications, Friedman's Test with equal replicates in each cell

Forecasting Techniques
Linear Correlation Analysis- Scatter Plot, Covariance, Pearson's Correlation Coefficient (r), Spearman's rank Correlation Coefficient (rs), Testing the significance of 'r' and 'rs'
Linear Regression Analysis- Sample versus Population Regression Models, The Least-Square estimation of α and β, the standard error of estimate and the coefficient of Determination, test of significance of α and β, test of significance of ρ
Time Series Data Analysis- Classical Time Series component Model, moving average and seasonally adjusted time series, Forecasting Model for Seasonal and non-seasonal time series data.

Multiple Linear Regressions
Introduction to Multiple Linear Regression- Assumption, Model; Multicollinearity-Definition and Effect, Rules of Thumb in Determining the Degree of Collinearity; Heteroskedasticity-Definition and Concept, Evaluating the Existence of Heteroskedasticity ; Autocorrelation-Basic Concept, The Durbin–Watson Statistics; Model Specification and Specification Bias

(Second Half: Practical, Marks: 50)

Computer Applications- Solution using Spreadsheet & R

Suggested Readings:

1. Bryman, A. *Social Research Methods.* New York: Oxford University Press.

2. Kothari, C. R. *Research Methodology: Methods and Techniques.* New Delhi: New Age International.

3. Marcoulides, G. A. (Ed.). *Modern Methods for Business Research.* Psychology Press.

4. Zikmund, W. G., Babin, Carr, J. C., & Gri, M. *Business Research Methods.* Mason: Cengage Learning.

5. Lee, Cheng F., John C. Lee, and Alice C. Lee. *Statistics for business and financial economics.* Singapore: Springer World Scientific, 2010.

6. Kerns, G. J. *Introduction to Probability & statistics using R,* Singapore: Springer World Scientific, 2010.

PHD9013: Accounting

Marks: 100; Credit: 4

Course Inputs

Accounting Theory

Evolution and Types of Accounting Theories, Accounting Concepts and Conventions, Accounting Policies.

Accounting Fundamentals

Conceptual Framework, Evolution of Accounting, Indian GAAP, GAAP Avoidance, Consequences and Techniques to managing the GAAP Avoidance, IFRSs, Accounting standards (AS) setting procedures and different Ass, IFRSs Convergence Issues, Indian Accounting Standards (Ind AS).

Financial Reporting Practices

Financial Reporting practices, Narrative Accounting, Financial Performance Evaluation and Financial Irregularities.

Auditing and Assurance

Multi-dimensional concept of auditing, Going Concern, Audit Evidence, Audit Sampling, Internal Control, Audit Risk, Standards on Auditing (SA), Audit under CIS Environment, Company Audit, Government Audit, Peer Review, Audit Reports.

Recent Trends in Accounting

Social Responsibility Accounting, Environmental Accounting, Green Accounting, Integrated Reporting and other contemporary issues in accounting and auditing.

Suggested Readings:

1. *Abacus: A Journal of Accounting, Finance and Business Studies*.Wily Publications.
2. Ghosh, T. P. (2016). *IFRSs for Finance Executives*, 1st Edition. Taxmann Publications Pvt. Ltd., New Delhi.
3. Lal, J. (2009). *Accounting Theory and Practice*. Himalaya Publishing House, 3rd Edition, Mumbai.
4. Miriyala, R. K., & Miriyala, S. (2018). Commercial's Ind AS Made Easy. 2nd Edition. Taxmann Publications Pvt. Ltd., New Delhi.

5. Oswal, V. (2018). *Comprehensive Approach To Advanced Auditing And Professional Ethics*. Wolters Kluwer India Private Limited; Thirteenth edition, Mumbai.

6. Rawat, D. S. (2018). Students' Guide to Ind ASs (Converged IFRSs), 2nd Edition. Taxmann Publications Pvt. Ltd., New Delhi.

7. Sekar, G. (2017). *Professional Guide To Ind ASs*. Sree Guru Publications, Chennai.

8. Sekar, G., & Prasath, S. (2018). *Padhuka's Students Handbook on Auditing & Assurance*. Sree Guru Publications, Chennai.

9. *The Chartered Accountant*. Monthly Magazine of The Institute of Charted Accountants of India (ICAI), New Delhi.

10. *The Accounting Review*. Bi-monthly Journal of American Accounting Association.

PHD9023: Finance

Marks: 100; Credit: 4

Course Inputs

Banking

Fundamentals in Banking, Banks' Financial Statements and its Analysis, Non-Performing Assets, Risk Management and Basel Accord, Priority Sector Lending, Recent Trends in Banking

New Financial Services

Development in Financial Services, Venture Capital Funds, Mutual Funds, Merchant Banking, Derivatives, Factoring and Forfaiting

Security Market and Analysis

Securities Market, Trading System in Stock Exchanges, Risk and Return Analysis, Security Analysis, Portfolio analysis and management.

Financial Management

Capital Structure Theories, Working Capital Management, Capital Budgeting Decisions, Dividend Policy

International Financial Management

Overview of IFM, Balance of Payments, Exchange Rate Mechanism, Foreign Exchange Market, International Investment Decisions, Management of Short-term Funds

Suggested Readings:

1. Apte, P. G. (2016). *International Financial Management.* New Delhi: McGraw Hill Education Pvt. Ltd.

2. Chandra, P. (2017). *Financial Management: Theory and Practice.* New Delhi: McGraw Hill Education.

3. Chandra, P. (2017). *Investment Analysis and Portfolio Management.* McGraw Hill Education: New Delhi.

4. Elton, E. J., Gruber, M. J., Brown, S. J., & Goetzmann, W. N. (2010). *Modern Portfolio Theory and Investment Analysis.* New Jersey: Wiley.

5. Fischer, D. E., & Jordan, R. J. (2006). *Security Analysis and Portfolio Management.* Mumbai: Pearson Education India.

6. Gordon, E., & Natarajan, K. (2016). *Financial Markets and Services.* Mumbai: Himalaya Publishing House Pvt. Ltd.

7. Iyengar , V. (2007). *Introduction to Banking.* New Delhi: Excel Books.

8. Khan, M. Y., & Jain, P. K. (2017). *Financial Management.* New Delhi: McGraw Hill Education.

9. Pandey, I. M. (2016). *Financial Management.* New Delhi: Vikas Publishing House.

10. Pandian, P. (2009). *Financial Services and Markets.* New Delhi: Vikas Publishing House Pvt. Ltd.

11. Pathak, B. V. (2018). *Indian Financial System: Markets, Institutions and Services.* Chennai: Pearson India Education Services Pvt. Ltd.

12. Sharan, V. (2016). *International Financial Management.* Delhi: PHI Learning Pvt. Ltd.

13. Suresh, P., & Paul, J. (2017). *Management of Banking and Financial Services.* Noida: Pearson India Education Services Pvt. Ltd.

PHD9033: Advanced Econometrics

Marks: 100; Credit: 4

Course Inputs

Introduction: Handling of Data Set, Data for Econometric analysis- Cross-Sectional data, Time series data & Panel data. Sources of data. Basics of Data Analysis using Spreadsheet, & R.

The Simple Linear Regression Model: Definition, specification and Assumptions, OLS Estimation, Properties of OLS Regression Line, Properties of Estimators, Properties of OLS Estimators, Measuring goodness of Fit, Analysis of Variance on OLS Regression, outliers.

The Multiple Linear Regression Model: Definition, Specification and Assumptions, OLS Estimation, Properties of OLS Estimators, Measuring goodness of Fit, Some Problems of Inference in MLRM.

Heteroskedasticity: Definition, Sources of Heteroskedasticity, Consequences of Heteroskedasticity, Detection of Heteroskedasticity, Remedial Measures.

Autocorrelation: Definition, Specification of Autocorrelation relationship, Consequences of Autocorrelation, Test of Autocorrelation, Remedial Measures.

Multicollinearity: Definition, Sources of Multicollinearity, Consequences of Multicollinearity, Teat of Multicollinearity, Remedial Measures.

Panel Data Regression Models: Definition and Usefulness, Panel Data models, The Constant coefficients model (CCM), The Fixed-Effects Model, The Random Effects Model, Choosing between FEM and REM: The Hausman Test.

Time series Econometrics: Background, Some important concepts, Tests for Stationarity, Spurious regression Problem. Forecasting Methods for time series data-Moving Averages, Exponential smoothing. Decomposition. Measuring forecast accuracy.

Suggested Readings:

1. Bhaumik, S.K. *Principles of Econometrics.* New Delhi: Oxford University Press, 2015
2. Dielman, T.E. *Applied Regression Analysis.* New Delhi: Thomson 2007.
3. Andreß, Hans-Jürgen, Katrin Golsch, and Alexander W. Schmidt. *Applied panel data*
    analysis for economic and social surveys. Springer Science & Business Media, 2013.
4. Zikmund, W. G., Babin, Carr, J. C., & Gri, M. *Business Research Methods.* Mason: Cengage Learning.
5. Lee, Cheng F., John C. Lee, and Alice C. Lee. *Statistics for business and financial economics*. Singapore: Springer World Scientific, 2010.
6. Kerns, G. J. *Introduction to Probability & statistics using R,* Singapore: Springer World Scientific, 2010.

PHD9004: Term Paper

Marks: 100 (Submission = 70, Viva-Voce = 30); Credit: 4

1. Submission of an Annotated Bibliography

2. Preparation and Submission of a report on Methodological Issues on Proposed Research Topic

3. Writing of Seminar Research Paper.

4. Preparing a Plan of Work on Proposed Research Topic.

5. Presentation.

After which the Candidate has to prepare and submit a term paper on the proposed research topic to the department followed by Viva-voce on the submitted Term Paper.