

S-VC ORDER CIRCULAR

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- 1] *The Principal, Model College, Ghansawangi, Dist-Jalna, affiliated to Dr. Babasaheb Ambedkar Marathwada University.*

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Dr. Babasaheb Ambedkar Marathwada University,
Aurangabad.

SYLLABUS OF

B. Com (Applied)

FOR

Model College - Ghansavangi

June / July 2011

BACHELOR OF COMMERCE (APPLIED)

O- 879

A candidate shall be admitted to the First Semester of the B. Com (Applied) Course only if he satisfies the following conditions:

- (a) He must have passed H.S.C Examination conducted by the Board of Higher Secondary Examinations, Maharashtra State or any other examination recognized as equivalent thereto in any stream including the Bi-focal or MCVC etc.

OR

Three year Diploma Course in Engineering, Pharmacy or any other stream, conducted by the Board of Technical Examinations, Maharashtra State or any other examination recognized as equivalent thereto.

- (b) A candidate migrating from any of the Statutory Universities situated in Maharashtra or outside after successfully completing First Year B.Com (Applied) (I & II Semester) Examination or an examination recognised as equivalent thereto shall be admitted to the Second Year (Third Semester) of B.Com(Applied). His performance in the First Year (I & II Semester) at the previous University shall be taken into consideration and shall be added to the marks he obtains in the subsequent semesters in order to declare his final results.

Provided that such students shall not be entitled for Prizes or awards.

O- 880

A candidate who has passed the B.Com(Applied) examination of this University may be allowed to present himself subsequently at a degree examination in a subject or subjects other than those he had taken earlier, provided that he attends the course for the required period as a regular student in the subject or subjects concerned, excluding the compulsory English, Second Language. A candidate is not allowed to appear for such examination if he has passed the higher examination.

R- 1883

The Degree of Bachelor Of Commerce(Applied) shall be conferred on a candidate who has pursued a regular course of study consisting of three years(Six Semesters) as prescribed and has appeared and passed all examinations prescribed for the Degree Course in the Faculty.

R- 1884

When a candidate appears for all the subjects prescribed at the examination without availing any benefit of exemptions and passes the B.Com(Applied) examination, he shall be awarded the degree in the Faculty and shall be entitled to a Division.

Q-1885 The course of study of B.Com (Applied) examination shall consist of the following subjects:-

I Yearly Structure

1. Language Curriculum
 - A. Indian Language
 - B. English
2. Major Curriculum
 - A. Major (Core)
 - B. Major (Supportive)
 - C. Major (Applied / Innovative)
3. Life Skill Curriculum
 - A. Job Oriented Soft Skills
 - B. Value Oriented Courses

II One Language should be selected from Indian Language.

- | | |
|-------------|------------------------|
| 1) Hindi | 9) Kannada |
| 2) Marathi | 10) Telugu |
| 3) Urdu | 11) Bengali |
| 4) Persian | 12) Additional English |
| 5) Arabic | 13) Russian |
| 6) Sanskrit | 14) French |
| 7) Pale | 15) German |
| 8) Tamil | 16) Chinese |

Q-1886 There shall be University examination at the end of each semester in the subjects prescribed for that semester.

Q-1887 The minimum marks for passing in each paper shall be 40% of the maximum marks prescribed for each paper.

Following shall be structure and scheme of examination of B.Com (Applied) course.

Total Credits for the degree

Q-1888 There will be separate passing for theory and Sessional / Practical. A candidate who secured 35% or more but less than 45% of aggregate marks for all the six semesters of the course shall be awarded Pass Division.

Q-1889 A candidate who secured 45% or more marks but less than 60% of the aggregate marks for all the six semester of the course shall be awarded Second Division.

O-1890 A candidate who secured 60% or more aggregate marks for all the six semester of the course shall be awarded First Division.

FIRST SEMESTER (90 Teaching Days)

Pa pe r N o.	Title	Theo- ry lect Per Week	Duratio n Of Theory Exam	Mark s For Theor y	Marks Practica l/ Session al	Total Mark s	Total Periods Of Teaching in a Semester	Total Credits
1	<u>LANGUAGE CURRICULUM</u> Indian Language	4	3	60	40	100	60	4
2	<u>LANGUAGE CURRICULUM</u> English	4	3	60	40	100	60	4
3	<u>MAJOR (CORE)</u> Business Economics	10	3	60	40	100	150	10
4	<u>MAJOR (SUPPORTIVE)</u> Business Environment & Entrepreneurship	4	3	60	40	100	60	4
5	<u>MAJOR (APPLIED)</u> Business Maths & Stat.	4	3	60	40	100	60	4
6.	<u>LIFE SKILL CURRICULUM</u> Job Oriented Soft Skills	2	2	30	20	50	30	2
7.	<u>LIFE SKILL CURRICULUM</u> Value Oriented Courses	2	2	30	20	50	30	2

Total Credits for First Semester _____ 30

SECOND SEMESTER (90 Teaching Days)

Pa pe r N o.	Title	Theo- ry lect Per Week	Duratio n Of Theory Exam	Mark s For Theor y	Marks Practica l/ Session al	Total Mark s	Total Periods Of Teaching in a Semester	Total Credits
1	<u>LANGUAGE CURRICULUM</u> English	4	3	60	40	100	60	4
2	Indian Language	4	3	60	40	100	60	4
3	<u>MAJOR</u> Business Economics	10	3	60	40	100	150	10
4	<u>SUPPORTIVE</u> Business Environment & Entrepreneurship	4	3	60	40	100	60	4
5	<u>APPLIED</u> Business Maths & Stat.	4	3	60	40	100	60	4
6.	<u>LIFE SKILL</u> Job Oriented Soft Skills	2	2	30	20	50	30	2
7.	<u>LIFE SKILL</u> Value Oriented Courses	2	2	30	20	50	30	2

Total Credits for First Semester _____ 30

- R- _____ Medium of Instruction shall be English only.
 R- _____ The intake capacity shall be 60 student.
 R- _____ Following shall be the detailed syllabus of the course.

B.Com First Year
Subject: Business Economics (Major Core)
(First Semester 2011 - 12)

Objectives:

To expose Students of Commerce to basic Micro & Macro Economic Concepts and inculcate an analytical approach to the subject matter.

To stimulate the Students interest by showing the relevance and use of various economic Laws.

To apply economic reasoning to problems of business.

Course Inputs:

SECTION A: MICRO ECONOMICS

Unit Topics

1. Introduction

1.1 Meaning and Scope of Business Economics

1.2 Micro and Macro Economics.

1.3 Tools for Analysis.

1) Functional relationship.

2) Schedules

3) Graphs

4) Equations

1.4 Goals of Firms

1) Economic Goals

2) Non-economic Goals.

2. Demand Analysis

2.1 Law of Demand

2.2 Elasticity of Demand

2.3 Consumer behaviors

1) Marginal Utility Approach

2) Indifference Curve Analysis

3) Consumers equilibrium

2.4 Demand estimation and Demand forecasting

1) Meaning and Objective

2) Methods of demand forecasting

3. Production and Cost Analysis

3.1 Law of Supply

3.2 Production Function

1) Law of variable proportion

2) Law of returns to scale

3) Internal and External economies and diseconomies of scale.

3.3 Cost Analysis

A) Concepts of Costs.

- 1) Historical Cost and replacement Cost.
- 2) Direct Cost and indirect Cost.
- 3) Opportunity Cost.
- 4) Incremental Cost and Marginal Cost.

B) Behavior of Cost Curve.

- i) In the short run
- ii) In the long run

3.4 Revenue Behavior

Total revenue, Average revenue and marginal revenue – their relationship.

4. Pricing under various Market Conditions.

4.1 Pricing Theory (Short-run and long run)

- 1) Perfect Competition.
- 2) Monopoly.
- 3) Monopolistic Competition.
- 4) Oligopoly and Duopoly.

4.2 Pricing Practices

1. Cost plus pricing
2. Multiple product pricing
3. Price skimming
4. Penetration pricing
5. Transfer pricing
6. Price Discrimination

SECTION B: MACRO ECONOMICS

5. Introduction to Macro Economics

Meaning, Nature, Scope, Significance and Limitation of Macro Economics.

Circular Flow of Income : Closed (two and three sector models) and open Economy models.

Trade cycle – features and phases of trade cycle.

Policy for trade cycle – Monetary and Fiscal measures.

6. Economy in the Short - Run

Meaning of National Income (NI), Concept of National Income. (a) Gross National Income (GNP) (b) Net National Product (NNP) (c) National Income at factor cost or National Income. (d) Personal Income (PI). (e) Disposable Income (DI). Meaning of Aggregate Demand and Equilibrium National Income ($Y=E$).

7. Concept of Multiplier

Meaning and function of money. Demand for money – Classical and Keynesian Approach.

Supply of money: Constituents, Determinants, velocity of circulation of money. RBI's Approach of money supply – Demand for money, Liquidity preference Approach. IS = LM Frame Work.

8. Issues in inflation, Employment and unemployment

Inflation and Deflation meaning, causes and effects, Demand pull and cost push inflation. Measures to control Inflation in India. Inflationary Gap – Causes and effects, philip's curve. Impact of Globalization on employment in India. Nature of unemployment in India. Employment policy since 1991.

Practical's:

1. Visit to five Industrial units to understand their short run and long run goals.
2. Demand forecasting for two fast moving (Milk, bread etc) consumer goods.
3. Demand forecasting for consumer durable goods (washing machine, T.V., etc.)
4. Study of production behavior of one consumer product and one of capital goods.
5. Cost Analysis of manufacturing unit. (process industry, Assembly industry etc.)
6. Study of effect of inflation on wage earned.
7. Study of self help group (any one)

Reference Books:

1. Economics – Samuelson P. A. and Nordhaus W. D. Tata Mcgraw Hill Publishing Co. Ltd. New Delhi.
2. Modern Economic Theory- K.K.Dewett, S.Chand, New Delhi
3. A text,Book of Economic Theory – Stonier A. W. and Hague D. C. Longman Green and Co. London.
4. Business Economics - V. G. Mankar, Macmillan India Ltd, New Delhi.
5. Vyavasaik Arth Shastra (Sukshm) Dr. T. G. Gite, Atharv Publication , Pune.
6. Modern Micro Economics – Theory and Applications H.L. Ahuja S. Chand and Co. N. Delhi.
7. Business Economics – Dr. Girirja Shankar – Atharv Publication, Pune.
8. Business Economics – Adhikari M. Excel Books, N. Delhi.
9. Understanding Microeconomics – Robert L. Helibroner and Lester C. Thurow. Prentice Hall Internationla Inc. London.
10. Micro Economic Theory An Analytical Approach – J.M. Joshi and R. Joshi Wishwa Prakashan (Division of Wiley Eastern Limited) N. Delhi.
11. Business & Managerial Economics (in the global Context) Sampat Mukherjee, New Central Book Agency, Calcutta.
12. Ackely, G. (1976), Macroeconomics: Theory and Policy, Macmilan Publishing Company, New York.
13. Day, A.C.L. (1960), Outline of Monetary Economics, Oxford University Press, Oxford.
14. Gupta, S.B. (1994) Monetary Economics, S. Chand and Co. Delhi.
15. Heijdra, B. J. and F. V. Ploeg (2001), Foundation of Modern Microeconomics, Oxford University Press, Oxford.
16. Lewis M.K. And P.D. Mizan (2000) Monetary Economics Oxford University Press, New Delhi.
17. Shapiro E. (1996) Macroeconomics Analysis, Gaigotla Publications, New Delhi.

B.Com First Year
Subject: Business Environment & Entrepreneurship
(Major - Supportive) (First Semester – 2011-12)

Objective:

- To make students aware of the business environment and explain about financial institution and markets.
- To learn the legal and ethical context of how the internal and external environment affect business decision-making.
- To develop practical materials on business environment and a working knowledge of the legal environments for business transactions and decision-making.
- To know the impact of LPG on Indian Business.

Course Contents:

1. Theoretical Framework of Business Environment:

- Meaning, Definitions, Nature and Scope of Business Environment.
- Concepts, Characteristics, Components and types of Business Environment (Internal & External).
- Various aspects / elements of Business Environment.
- Significance of Business Environment.
- Changing dimensions of business environment;
- Techniques of environmental scanning and monitoring.
- Business environment and Economic growth.
- Indian Business environment.

2. Government Policies:

- Monetary Policy;
- Fiscal Policy;
- Industrial Policy – 1991;
- FEMA.
- Export-Import Policy;
- Patent, Trade Marks Laws;
- Central Government Finance Budget.

3. Financial Market Structure:

- Credit Market,
- Foreign Exchange Market,
- Debt Market,
- Derivatives Market,
- Stock Exchange – BSE, NSE,

4. Economic Reforms:

- Government And Business, Disinvestments policies.

- Meaning, Definitions, Importance of Liberalization, Privatization and Globalization (LPG).
- Impact of LPG policies on Industrial and Indian Economy.
- Post reforms scenario.

5. Institutional Environment:

- Role of Money & Capital Markets,
- Debt & Equity Markets,
- Mutual Fund Market,
- Depository Institutions,
- Investment Intermediaries
- Major Financial Institutions – Savings, Banking, Developmental, Agricultural Micro, Life/Non-Life, Mutual Funds, Post Office etc.

6. International Business Environment:

- Foreign Capital: Types, Needs and Importance.
- India's policies towards foreign capital.
- Foreign Investment & Collaborations.
- Foreign Trade and Balance of payment.
- Multinational Corporations.
- International Monetary Fund. (IMF)
- World Bank.
- World Trade Organization. (WTO)

Reference Books:

1. Bhosale & Kate – Vaysaik Paryavaran – Phadake Prakashan, Kolhapur.
2. Dutt R. and Sundharam K.P.M., Indian Economy, S. Chand, Delhi.
3. Franchis Cherunilam – Business Environment – Himalya Publishing House, Mumbai.
4. Gangadhar Kayande – Business Environment – Chaitanya Publications, Nashik.
5. J. F. Patil, P. K. Deshmukh, V. B. Kakade, R. A. Waingade – Business Environment – Phadke Prakashan, Kolhapur.
6. Jitendra Ahirrao, Kalyan Laghane & Ramdas Wanare – Vyavsay Paryavaran – Kailash Publications Aurangabad.
7. Justin Paul – Business Environment Text and Cases Tata McGraw Hill, Mumbai.
8. Misra S.K. and Puri V.K. Indian Economy, Himalaya Publishing House, New Delhi.
9. Prof. Shrinivas Joshi & Vilas Chavan – Business Environment – Vidya Prakashan Nagpur.
10. Sudhir Bodhankar – Business Environment – Shri. Sainath Prakashan, Nagpur.
11. Suresh Bedi – Business Environment – Excel Books, New Delhi.

Practical Work:

1. Two Seminars to be conducted on unit No. 2 & 3.
2. Two Group discussion on Unit No. 4 & 5.

3. Preparation of observation Report of Local Business Environment.
4. Two Guest lecture to be arrange on Unit No. 7 & of an eminent person.
5. Critical analysis of 11th Five year Plan – Preparation of Paper.
6. Review of Central General Budget and preparation of report.
7. To collect secondary data on FDI in India.

(Records shall be maintained for all practical work.)

B. Com First Year
Subject: Business Mathematics & Statistics (Major-Applied)
(First Semester – 2011 - 12)

Objectives: This course is designed to enable students to learn and apply mathematics skills to a business setting. Use mathematical procedures to analyze and solve business problems for such areas as: Taxation, Savings and Investments, Payroll Records, Cash Management, Financial Statements, Credit Management, Purchases, Sales, Inventory Records, Depreciation, Cost Recovery, and Depletion.

Mathematics:

1. **Linear Programming:** Introduction, definition of related terminology such as constraints, objective function, optimization, different types of linear programming (L.P.) problems, mathematical formulation of L.P. problems, graphical method of solution for problems in two variables, feasible and infeasible regions, feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).
2. **Probability:** Definition, Laws of Probability Set theory, Permutations & Combinations, Conditional probability, Independent and Dependent events, total probability, Baye's theorem, random variable. Repeated independent (Bernoulli) trials and Binomial distribution.
3. **Matrix and Determinants:** Meaning and types of matrix – operations of addition, subtraction, multiplication, Zero matrix, problems transpose and determinant of a square matrix – minor of an element co-factor an element of a determinant. Problems application of determinants of business problems, adjacent of a square matrix, Singular and non-singular matrix – inverse of square matrix.
4. **Commercial Arithmetic:** (Interest, Commission, Discount and Interest) Simple interest, compound interest including half yearly and quarterly, Equated Monthly Installments (EMI) calculation. Percentages, bills discounting, Calculation of Commission, Brokerage and Discount. Simple problems involving discount, commission and discount, calculation of annuity & present value.

Practicals:

1. Use of MS-Office, MS-Word, MS-Excel, MS-Access, MS-Power Point for graphical presentation.
2. Practical problems on Linear Programming.
3. Practical Problem on Probability.
4. Practical Problem on Material & discount.
5. Calculation of EMI, Discount Interest etc. in MS. Excel

Reference Books:

1. Agarwal B.M. – Basic Mathematics & Statistics – Sultan Chand Publications, New Delhi.
2. Agrawal N.P. & Tailor R. K. – Business Mathematic – R.B.S.A. Publishers, New Delhi.
3. Aswale Sanjay & Jadhav B.B. – Business Mathematic & Statistics – Chinmay Prakashan, Aurangabad.
4. Jitendra Ahirrao & Bhosle P.T. – Business Mathematic & Statistics – Kailash Publication, Aurangabad.
5. John E Freund – Prentice Hall of India, New Delhi.
6. Khandgave N.G. & Transhette – Business Mathematic & Statistics – Prashant Prakashan, Udgir.
7. Nag N.K. – Basic Mathematics & Statistics – Kalyani Publishers.
8. Sawlikar, Ingole & Lanjewar – Statistical Analysis – Payal Publication, Nagpur.
9. Shah R.J. – Mathematical & Statistical Techniques – Sheth Publisehrs, Mumbai.

B.Com First Year
Subject: Business Economics (Major Core)
(Second Semester 2011 - 12)

Course Inputs:

SECTION A: MICRO ECONOMICS

Unit Topics

1. Factor Pricing

- 1.1 Meaning of distribution, Significance of Factor Pricing
- 1.2 Marginal Productivity theory of distribution

RENT

- 1.3 Concept of economic rent
- 1.4 Theories of rent
 - 1) Ricardian theory of rent.
 - 2) Modern theory of rent.

1.5 Quasi Rent

2. Wages

- 2.1 Concepts of Wages
- 2.2 Demand and Supply of labour.
- 2.3 Theories of wages
 - i) Marginal Productivity Theory of Wages
 - ii) Modern Theory of Wages

3. Interest

- 3.1 Nominal and real rate of interest.
- 3.2 Theories of interest.
 - 1) Loanable fund theory of interest.
 - 2) Liquidity preference theory of interest.

4. Profit

- 4.1 Concept of Profit
- 4.2 Theories of Profit
 - 1) J. B. Clark's Dynamic theory of Profits
 - 2) Knights risk and uncertainty bearing theory of profit.
 - 3) Schumpeter's innovation theory of Profits.

SECTION B: MACROECONOMICS

5. Investment Function

- 1) Marginal Efficiency of capital – meaning and definition.
- 2) Investment multiplier – concept, importance and limitations.
- 3) Principle of acceleration – concept, working and limitations.
- 4) Disinvestment – Policies and issues.

B. Com. First Year

Subject: Business Environment & Entrepreneurship (Major - Supportive) (Second Semester – 2011 - 12)

Objective: The purpose of this paper is to prepare a ground where the students view Entrepreneurship as a desirable and feasible career option. In particular the paper seeks to build the necessary competencies and motivation for a career in Entrepreneurship. It provides exposure to the students to the entrepreneurial culture and industrial growth so as to prepare them to set up and manage their own small units.

Course Inputs:

1. Concepts of Entrepreneurship:

- Meaning, Nature and Importance of Entrepreneurship.
- Characteristics of Entrepreneurship.
- Theories and models of entrepreneurship development.
- Role of Entrepreneurship in Economic Development.
- Barriers to Entrepreneurship.
- Interrelationship between business environment and entrepreneurship.

2. Entrepreneur:

- Definitions, Characteristics and Qualities of Entrepreneur,
- Types of Entrepreneur.
- Entrepreneurial behaviour.
- Factors promoting to entrepreneur.
- Entrepreneur competencies.
- Entrepreneur motivation.
- Performance and Rewards.
- Role and Functions of entrepreneur with reference to new economic policy.
- Social responsibility of entrepreneur.
- Entrepreneur and Intrapreneur.

3. Entrepreneurship Development Programs (EDP):

- Meaning, Need and Objectives of EDP.
- Role / Importance of EDP's
- Role of Government in organizing EDP's
- Organizations for entrepreneurship development programs – Central and State Level Organizations.
- Critical evaluation EDPs.

4. Institutional and Financial Support to New Ventures:

- District Industrial Centers. (DIC)
- Maharashtra Industrial Development Corporation. (MIDC)
- Khadi and Village Industries Commission (KVIC)
- Maharashtra Small Scale Industries Development Corporation (MSSIDC)

- Maharashtra Industrial and Technical Consultancy Organization (MITCON)
- Maharashtra State Financial Corporation (MSFC)
- Commercial Banks. (CB)
- Small Industries Development Bank of India. (SIDBI)

5. Set up a new Venture:

- Business Planning
- Search for Business Ideas
- Project Identification
- Product Selection
- Legal requirement for establishment of a new unit
- Raising of funds
- SWOT Analysis

6. Project Report:

- Meaning, Objectives, Characteristics and Importance of Project Report.
- Project Classification
- Project Management
- Project Selection
- Project Appraisal
- Preparation of Project Report
- Pro-forma of a Project Report

7. Practical Work:

1. The teachers should emphasize to students the desirability as well as feasibility of a career in Entrepreneurship in the Indian scenario.
2. To prepare a business plan for a company based on theoretical knowledge.
3. To develop a structured instrument / questionnaire for conducting surveys of the various aspects of entrepreneur / enterprise.
4. To conduct an interview of any successful entrepreneur in your local area.
5. Preparation and complete financial projections for a business venture.
6. To undertake a case stud of any successful / Unsuccessful business.
7. To arrange one industrial visit.
8. To arrange one guest lecture of any financial institutions.
9. To conduct one seminar on unit no. 8.
10. To prepare a project report for any innovative products or services.

Reference Books:

1. Desai Vasant – Management of small scale enterprises, Himalaya Publishing House, New Delhi.
2. Desai Vasant – Entrepreneurship Development – Himalaya Publishing House, Mumbai.
3. Jitendra Ahirrao – Udyojakta – Kailash Publications, Aurangabad.
4. Kadvekar, Kothavade and Deokar – Vyavsayik Udyojakta – Gaaj Prakashan, Ahmednagar.

5. Pande G. B. – A complete guide to successful entrepreneurship – Vikas Publishing House, New Delhi.
6. Pandey I. M. – Venture Capital – The Indian Experience, Prentice Hall, New Delhi.
7. Prasanna Chandra – Project preparation, Appraisal, Implementation Tata McGraw Hill, New Delhi.
8. Satish Taneja & S.S. Gupta – Entrepreneur Development – New Venture Creation – Galgotiya Publishing Company, Karol Bagh, New Delhi.
9. Srivastawa S.B.A. Practical Guide to Industrial Entrepreneurs, Sultan Chand and Sons, New Delhi.
10. Tandon B.C. Environment and Entrepreneur, Chugh Publications Allahabad.

B.Com First Year
Subject: Business Mathematics & Statistics (Major - Applied)
(Second Semester – 2011-12)

Objectives: This course is designed to enable students to learn and apply mathematics skills to a business setting. Use mathematical procedures to analyze and solve business problems for such areas as: Taxation, Savings and Investments, Payroll Records, Cash Management, Financial Statements, Credit Management, Purchases, Sales, Inventory Records, Depreciation, Cost Recovery, and Depletion.

Statistics:

1. **Arranging data to convey meaning, Tables, Graphs & Frequency:** Introduction, Definition of Statistic, Scope of Population and sample Methods of Sampling, sources of data collection, methods of data collection, classification of data frequency distribution. Tabulation of data, Presentation of data Graphical Presentation.
2. **Operation Research:** Introduction, Definitions, Characteristics, significance & Technique of Operation Research, Models of Operation Research, Models of Operation Research & Decision making, Applications of Models of Operation Research technique, Limitation of Models of Operation Research.
3. **Measures of Central Tendency:** Frequency distribution: Raw data, attributes and variables, Classification of data, frequency distribution, cumulative frequency distribution, Histogram & Ogive curves. Concept of central tendency, Desirable Properties for good measures of central tendency. Measures of central tendency: Arithmetic mean, median and mode for grouped and ungrouped data, Combined mean for two groups. Appropriate choice for measures.
4. **Measures of Dispersion:** Concept of dispersion, Measures of dispersion: Range, Variance, Standard deviation for grouped and ungrouped data, combined Standard Deviation Measures of relative dispersion: coefficient of range, coefficient of variation.
5. **Correlation and Regression:** Concept and types of correlation. Scatter diagram, Interpretation with respect to magnitude and direction of relationship. Karl Pearson's coefficient of correlation for ungrouped data. Spearman's rank correlation coefficient. Concept of regression. Lines of regression for ungrouped data, predictions using lines of regression. Regression coefficients and their properties.
6. **Sampling Distributions:** Introduction, The distributions of means, the chi-square test, the t distributions, the f distributions.
7. **Index Numbers:** Concept of index number, price index number, price relatives. Problems in construction of index number. Construction of price index number: Weighted index Number, Laspeyre's, Passche's and Fishers method. Cost of living/consumer price index number, family budget and aggregate expenditure method.

Practical Work:

- Knowledge of Microsoft Excel, spread sheet, features and functions of commonly used spreadsheet software – workbook, worksheet, rows, column, cells, data, text, formulae, formatting, printing, graphics and macros. Use of spreadsheet software in the day to day work of the Chartered Accountant – budgeting, reporting, performance.
- Uses of various statistical software available in market.
- Any research project assigned to the students based on primary data collection, analysis of data with the help of statistical tools and techniques.
- To collect the secondary data from various sources, analysis and tabulation of the data and apply various statistical test, chi-square test, correlations, Mean, Standard Deviations, etc.

Preference Books:

1. Agrawal B.M. – Basic Mathematics & Statistics – Sultan Chand Publications, New Delhi.
2. Agrawal N.P. & Tailor R.K. – Business Mathematic – R.B.S.A. Publishers, New Delhi.
3. Aswale Sanjay & Jadhav B.B. – Business Mathematic & Statistics – Chinmay Prakashan, Aurangabad.
4. Jitendra Ahirrao & Bhosle P.T. – Business Mathematic & Statistics – Kailash Publication, Aurangabad.
5. John E Freund – Prentice Hall of India, New Delhi.
6. Khandgave N.G. & Tanshette – Business Mathematic & Statistics – Prashant Prakashan, Udgir.
7. Nag N.K. – Basic Mathematics & Statistics – Kalyani Publishers.
8. Sawlikar, Ingole & Lanjewar – Statistical Analysis – Payal Publication, Nagpur.
9. Shah R.J. – Mathematical & Statistical Techniques – Sheth Publishers, Mumbai.