

SHIVAJI UNIVERSITY, KOLHAPUR



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Syllabus For

B.Sc.-M.Sc. Economics Integrated (Five Years)

Faculty of Humanities

(B.Sc. Third Year Semester V and VI)

(Subject to the modifications to be made from time to time)

To be implemented from June 2025

A] Ordinance and Regulations: As applicable to B.Sc.-M.Sc. Economics Integrated (Five Years)

B]

Shivaji University, Kolhapur
Syllabus For
B.Sc.-M.Sc. Economics Integrated (Five Years)
Semester with Credits and CIE System of Examination
[Faculty of Humanities]

TITLE: B.Sc.-M.Sc. Economics Integrated (Five Years)
(Under the Faculty of Humanities)

YEAR OF IMPLEMENTATION: 2025

STRUCTURE OF PROGRAMME:

Structure of Programme B.Sc.-M.Sc. Economics Integrated (Five Years) is given below:

Syllabus for B.Sc.-M.Sc. Economics Integrated (Five Years)
Department of Economics-Autonomous, Shivaji University, Kolhapur

B.Sc.-I (Semester I & II) introduced from June 2023

B.Sc.-II (Semester III and IV) introduced from June 2024

B.Sc.-III (Semester V and VI) introduced from June 2025

Shivaji University, Kolhapur
Department of Economics- Autonomous
B. Sc. - M. Sc. Economics Integrated (Five Years)
(As per National Educational Policy 2020 and Resolution of the Government of Maharashtra)
With effect from academic year 2025-26
Structure of Level 5.5 of B.Sc.-M. Sc. Economics Integrated (Five Years)

Semester V									
Teaching Scheme					Examination Scheme				
Sr. No.	Theory		Credits	Practical	Semester-end Examination (SEE)			Internal Assessment (IA)	
	Course TYPE	No of Lectures			Paper Hours	Max	Min	Max	Min
1	Major	4	4		3	70	28	30	12
2	Major	4	4		3	70	28	30	12
3	Major	2	2		1.5	35	14	15	6
4	Elective	4	4		3	70	28	30	12
5	Minor	4	4		3	70	28	30	12
6	VSC	2	2		1.5	35	14	15	6
7	CEP	-	2		30 Hrs	--	--	50#	20
Total		20	22	04		350	140	200	80

Semester VI									
Teaching Scheme					Examination Scheme				
Sr. No.	Theory		Credits	Practical	Semester-end Examination (SEE)			Internal Assessment (IA)	
	Course TYPE	No of Lectures			Paper Hours	Max	Min	Max	Min
1	Major	4	4		3	70	28	30	12
2	Major	4	4		3	70	28	30	12
3	Major	2	2		1.5	35	14	15	6
4	Elective	4	4		3	70	28	30	12
5	Minor	4	4		3	70	28	30	12
6	OJT	-	4		60 Hrs	--	--	100##	40##
Total		20	22	04		315	126	235	94
Grand Total Semester V & VI		38	44	08		665	266	435	174

CEP: For Project Report – 35 Marks and For Viva – 15 marks

OJT – Project Report -70 Marks and Viva – 30 Marks

Abbreviations:

Major	Mandatory
Minor	Minor
Elective	Elective
OE	Open Elective
VSC	Vocational Skill Course
SEC	Skill Enhancement Course
AEC	Ability Enhancement Course
VEC	Vocational Enhancement Course
IKS	Indian Knowledge System
OJT	On Job Training: Internship/ Apprenticeship
FP	Field projects
CEP	Community engagement and service
CC	Co-curricular Courses
RM	Research Methodology

Teaching Scheme for B. Sc. – M. Sc. Economics Integrated (Five Years)
5.5 Level (New)

Semester V						
Sr. No	Course Type	Title of Courses	Theory		Practical	Credits
			No. of Lectures	Hours	Hours	
1.	Major	International Economics-I	4	4	-	4
2.	Major	Statistics for Economics	4	4	-	4
3.	Major	Economics of Innovation (SWAYAM)	2	2	-	2
4.	Elective	1. Rural and Agricultural Economics 2. Demography	4	4	-	4
5.	Minor	Mathematical Economics	4	4	-	4
6.	VSC	English for Economics Advanced –III	2	2	-	2
7.	FP/CEP	Rural Awareness of Public Programmes	-	-	-	2
Total			20	23	04	22
Semester VI						
1.	Major	Development Economics-I	4	4	-	4
2.	Major	Econometrics	4	4	-	4
3.	Major	SWAYAM Course *	2	2	-	2
4.	Elective	1. Urban Economics 2. Managerial Economics	4	4	-	4
5.	Minor	Costs and Financial Accounts	4	4	-	4
6.	OJT	On Job Training/Internship	-	-	-	4
Total			19	23	04	22
Grand Total			38	46	08	44

* Each Batch of 10 students will be 2 Practical hours per week (2 Batch x 2 Hrs. = 4)

Question Paper Pattern for Semester-End Examination (For 4 credits)

B. Sc.-M. Sc. Economics Integrated (Five Years)		
Paper Title:		
Subject Code:		
Day and Date:		Total Marks: 70
Time: 3 Hours		
	Instructions: 1. All question are compulsory. 2. Figures to right indicated Full Marks.	
Q. No.	Type of Question	Marks
1	Objective Type Questions (Each Question carry two marks) A) Objective Type questions. (Five Questions) B) Answer in one or two sentences (Five Questions)	20 10 10
2	Short Answer questions (Any Two out of Three Questions)	15
3	Answer in Brief (Any three out of five Questions)	15
4	Descriptive type question	20

Question Paper Pattern for Semester-End Examination (For 2 credits)

B. Sc.-M. Sc. Economics Integrated (Five Years)		
Paper Title:		
Subject Code:		
Day and Date:		Total Marks: 35
Time: 1 Hour 30 Minutes		
	Instructions: 1. All question are compulsory. 2. Figures to right indicated Full Marks.	
Q. No.	Type of Question	Marks
1	Objective Type Questions (Each Question carry One marks) A) Objective Type questions. (Five Questions) B) Answer in one or two sentences (Five Questions)	10 05 05
2	Short Answer questions (Any Three out of Four Questions)	15
3	Answer in Brief (Any One out of Two Questions)	10

Internal Assessment

Sr. No.	Semester	Type of internal Assessment	
		For 20 Marks	For 10 Marks
1	I	Unit test	Home Assignment
2	II	Unit Test	Seminar Presentation
3	III	Unit Test	Group Discussion
4	IV	Unit Test	Oral Examination
5	V	Unit Test	Review of Article
6	VI	Unit Test	Academic Writing

For Home Assignment, Oral Examination, Seminar Presentation, Group Discussion, Field work/Project work and Review of Article/Academic Writing Maximum marks shall be 10.

Result - The result of each semester shall be declared as Pass or Fail or Allowed to Keep Terms (A.T.K.T. for Semester III & IV as per University Rules) with grade/ grade points and Credits gained.

Rules for Allowing to Keep Term (ATKT):

A) ATKT rules for Undergraduate Programmes:

- i. If a candidate fails in any number of courses (subject heads) of Semester I, shall be allowed to proceed to Semester II.
- ii. A candidate who earns 50% of total credits of Level 4.5 shall be allowed to keep terms in Level 5.0
- iii. If a candidate fails in any number of courses (subject heads) of Semester III, shall be allowed to proceed to Semester IV.
- iv. A candidate who earns 50% of total credits of Level 5.0 shall be allowed to keep terms in Level 5.5.
- v. If a candidate fails in any number of courses (subject heads) of Semester V, shall be allowed to proceed to Semester VI.
- vi. No candidate shall be allowed to proceed to Semester V, unless candidate has passed in all courses of Level 4.5.
- vii. If a candidate opts for a four-year bachelor degree programme and fails in any number of courses (subject heads) of Semester VII, shall be allowed to proceed to Semester VIII.
- viii. If a candidate opts for four year bachelor degree programme, such candidate shall not be allowed to proceed to Semester VII, unless candidate has passed three year bachelor degree with 7.5 CGPA or 75%.
- ix. In case if the rules of any Apex body differ from these rules, then the rules of that apex body will be applicable.

B) ATKT rules for Postgraduate Programmes:

- i. If a candidate fails in any number of courses (subject heads) of Semester I, shall be allowed to proceed to Semester II.
- ii. A candidate shall be allowed to proceed to Semester III, even if he/she fails in any number of courses at Level 6.0.
- iii. A candidate shall be allowed to proceed to Semester IV even if a candidate fails in any number of courses (subject heads) of any previous Semesters.
- iv. In case if the rules of any Apex body differ from these rules, then the rules of that apex body will be applicable.

SHIVAJI UNIVERSITY, KOLHAPUR
DEPARTMENT OF ECONOMICS-AUTONOMOUS
B.Sc.-M.Sc. Economics Integrated (Five Years)
B. Sc Economics Third Year

Semester-V		
Sr. No	Course Type	Title of Courses
1.	Major	International Economics-I
2.	Major	Statistics for Economics
3.	Major	Economics of Innovation (SWAYAM)
4.	Elective	1.Rural and Agricultural Economics 2.Demography
5.	Minor	Mathematical Economics
6.	VSC	English for Economics Advanced –III
7.	FP/CEP	Rural Awareness of Public Programmes

B. Sc. Part III Semester-V
Major
International Economics-I
(Total Credits: 4)

Course Outcomes:

1. Students understand basic theories of International Trade.
2. Understand the concept and the working of the Exchange Rate.
3. Analyse the concept and causes, and consequences of the balance of payments.
4. Identify the role of International Institutions in trade and development.

Unit-I Theory of International Trade (15 Periods)

- 1.1 Distinction between Internal and International Trade - Exports and Imports of Goods and Services
- 1.2 Theories of International Trade: Classical Theory of Trade;
 - i) Absolute Cost Advantage Doctrine of Adam Smith
 - ii) Comparative Cost Advantage Theory of Trade of Ricardo
- 1.3 Modern Theory / Heckscher–Ohlin Theory of International Trade
- 1.4 Trade Policy: Arguments for Free Trade – Arguments for Protective Trade

Unit-II Theory of Rate of Exchange (15 Periods)

- 2.1 Concept of the Rate of Exchange Rate
- 2.2 Types: Fixed Rate of Exchange: Meaning- Merits and Demerits
Flexible Rate of Exchange: Meaning- Merits and Demerits
- 2.3 Floating Rate of Exchange: Meaning- Merits and Demerits
- 2.4 Purchasing Power Parity Theory

Unit-III Balance of Trade and Balance of Payments (15 Periods)

- 3.1 Balance of Trade: Meaning and Components
- 3.2 Balance of Payments: Meaning and Components
- 3.3 Disequilibrium in Balance of Payments: Causes and Consequences
- 3.4 Measures to correct disequilibrium in Balance of Payments

Unit-IV International Institutions (15 Periods)

- 4.1 IMF: Objectives and Functions
- 4.2 IBRD: Objectives, Functions
- 4.3 WTO: Objectives, Functions
- 4.4 BRICS: Objectives, Functions

References/Reading List:

1. Kindleberger, C. P. (1973), International Economics, R. D. Irwin, Homewood.
2. Kindleberger, C. P. (1996), A History of Financial Crisis: Manias, Panics and Crashes (3rd Edition), John Wiley and Sons, New York.
3. King, P. G. (1995), International Economics and International Economic Policy: A Reader, McGraw Hill International, Singapore.
4. Krugman, P. R. and M. Obstfeld (1994), International Economics: Theory and Policy, Ienview, Foresman.
5. Manmohan Singh (1964), India's Export Trends and the Prospects for Selfsustained Growth, Oxford University press, New Delhi.
6. Mithani, D.M. (1997), International Economics, Himalaya Publishing House, Delhi.
7. Mundell, R. (1968), International Economics, The Macmillan Company Ltd., New York.
8. Nayyar, D. (1976), India's Exports and Export Policies in the 1960s , Cambridge University Press.
9. Panchmukhi, V. R. (1978), Trade Policies of India – A Quantitative Analysis, Concept Publishing Company, New Delhi.
10. Patel, S. J. (1995), Indian Economy Towards the 21st Century, University Press, Ltd., India.
11. Pomfret, R. (1996), International Trade: An Introduction to Theory and Policy, Basil Blackwell, Oxford.
12. Rana and Verma (2010), International Economics , Vishal Publishing Company, Delhi.
13. Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N. J. New York.
14. Satyanarayan, B. (1986), India's Trade with Asia and The Far East Countries, B. R. Pub. Corp., New Delhi. 27
15. Soderstrom, Bo (1991), International Economics, The Macmillan Press Ltd., London.
16. Soloman, R. (1982), The International Monetary System 1945-1981, Harper and Row Publishers, New York.
17. Verma, M. L., (1995), International Trade, Vikas Publishing House Pvt. Ltd., Delhi.
18. Francis Cherunilum, International Trade and Export Management, Himalaya Publishing House, Delhi.

B. Sc. Part III Semester-V
Major
Statistics for Economics
(Total Credits: 4)

Course Outcomes:

1. To understand and apply advanced statistical methods in economic research.
2. To analyze economic data using appropriate statistical tools.
3. To interpret and communicate statistical results effectively.
4. To use statistical tools for data analysis in economic studies.

Unit-I Regression Analysis: (15 Periods)

- 1.1 Regression: Meaning, Concept, and Importance –Comparison of Correlation and Regression
- 1.2 Methods of estimating regression: Graphic Study of Regression, Freehand Curve Method, Method of Least Squares
- 1.3 Regression Equations: Properties of Regression Coefficients, Properties of Regression Lines
- 1.4 Standard Error of estimate.

Unit-II Index Numbers: (15 Periods)

- 2.1 Index Number: Meaning, Concept, Importance, Characteristics and Uses
- 2.2 Types of Index Numbers and Problems in the Construction of Index Numbers
- 2.3 Methods of Constructing Index Numbers: Unweighted Index Numbers-Simple Aggregative Method, Simple Average of Relatives Method
- 2.4 Methods of Constructing Index Numbers: Weighted Index Numbers- Laspeyers Method, Paasche Method, Dorbish and Bowley's Method, Fisher's Ideal Method, Marshall-Edgeworth Method, and Kelly's Method

Unit-III Time Series Analysis: (15 Periods)

- 3.1 Time Series: Meaning, Concept, and Importance
- 3.2 Components of Time Series
- 3.3 Measurement of Trend-Freehand or Graphic Method, Method of Semi Averages, Method of Moving Averages, Method of Least Squares
- 3.4 Measuring Trend by Logarithms

Unit-IV Interpolation and Extrapolation: (15 Periods)

- 4.1 Interpolation and Extrapolation-Introduction, Meaning, Significance and Assumptions
- 4.2 Methods of Interpolation-Graphic Method, Algebraic Methods and Newton's Method
- 4.3 Methods of Interpolation-Lagrange's Method and Parabolic Curve Method
- 4.4 Inverse Interpolation and Extrapolation

References/Reading List:

1. Allen, R. G. D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.
2. Baumol, W. J. (1984), Economic Theory and Operations Analysis, Prentice Hall, Englewood Cliffs, New Jersey.
3. Chiang, A. C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
4. Croxton, Crowden and Klein (1971), Applied General Statistics, Prentice Hall of India, New Delhi.
5. Elhance, D.N., Elhance, Veena and Aggarwal, B. M. (2015) Fundamentals of Statistics, KitabMahal, Allahabad
6. Goon, A. M., M. K. Gupta and B. Dasgupta (1993), Fundamentals of Statistics, Vol. 1, The World Press Ltd., Calcutta.
7. Gupta, S. C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons., New Delhi.
8. Gupta, S.P. (2016) Statistical Methods, Sultan Chand & Sons, New Delhi
9. Handry, A. T. (1999), Operations Research, Prentice Hall of India, New Delhi.
10. Hogg, R. V. and A. T. Craig (1970), Introduction to Mathematical Statistics (3rd Edition), Macmillan Publishing Co., New York.
11. Millar, J. (1996), Statistics for Advanced Level, Cambridge University Press, Cambridge.
12. Monga, G. S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
13. Nagar, A. L. and R. K. Das (1993), Basic Statistics, Oxford University Press, New Delhi.
14. Reddy, C. R. (1990) : Quantitative Methods for Management Decision, Himalaya Publishing House, Mumbai.
15. Singhal Mohan (2005:06) : Elements of Statistics, Lakshmi Narain Agrawal, Agra.
16. Spiegel, M. R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.
17. Sukhatme, P. V. and B. V. Sukhatme (1970), Sampling Theory of Survey with Applications, Iowa State University Press, Ames.
18. Taha, H. A., (1997), Operations Research: An Introduction (6th Edition), Prentice Hall of India Pvt. Ltd., New Delhi.
19. Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.

B. Sc. Part III Semester-V
Major
Economics of Innovation (SWAYAM)
(Total Credits: 2)

Course Outcomes:

1. Explain the concept, history, and types of innovation in economics.
2. Evaluate technological innovation, systems approach, and the role of IPR in India.
3. Examine innovation and economic development through R&D, partnerships, and technology transfer.
4. Analyze diffusion of technology, service sector innovation, and India's STIP 2020 policy.

Unit-I Innovation and Technology **(15 Periods)**

- 1.1 What is innovation; Innovation in the history of economics thought,
- 1.2 Types of innovation like drastic vs non-drastic innovation; disruptive innovation; user-based innovation; frugal and inclusive innovation,
- 1.3 Technological innovation and the theory of firm, Innovation: A systems approach
- 1.4 Intellectual property rights and innovation; Case of product patent introduction in India and its impact on innovation

Unit-II Innovation and Economic Development **(15 Periods)**

- 2.1 University research and public-private interaction; Case study of Silicon Valley in India, Geography of innovation; MNCs and Internationalization of R&D.
- 2.2 Markets for technology and issues related to technology transfer; Financing R&D,
- 2.3 Innovation and economic development; Innovation and employment
- 2.4 Diffusion of technology; Innovation in service sector, Science, Technology, and Innovation policy; India's STIP 2020 (Discussion on Draft Proposal)

Course Link: https://onlinecourses.nptel.ac.in/noc25_ec11/preview

References/Reading List:

1. S. Scotchmer. Innovation and Incentives. Cambridge MA: MIT Press, 2004.
2. B. Hall and N. Rosenberg. Handbook of Economics of Innovation. Netherland: Elsevier, 2010. Selected chapters.
3. W. D. Nordhus. Invention, Growth, and Welfare: A Theoretical Treatment of Technological Change. Cambridge, MA: MIT Press, 1969.
4. A. Arora, A. Fosfuri and A. Gambardella. Markets for Technology. Cambridge, MA: MIT Press, 2002.
5. J. Watal. Intellectual property Rights in the WTO and Developing Countries. New Delhi: Oxford University Press, 2001.
6. R. Basant. The Black Box: Innovation and Public Policy in India. India: Penguin Portfolio, 2021
7. Atkinson, R.D. and Ezell, S.J., 2012. Innovation economics. Yale University Press.
8. Sources: Desai, A (1980), The origin and direction of Industrial R&D in India, Research Policy 9 (74-96)
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10. Forbes, N. (2016), India's National Innovation System: Transformed or Half-formed, No. WP/16/01, CTIER Working Papers
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13. Dhanora, Madan, Ruchi Sharma and M. Jose. 2020. Two-way relationship between innovation and market structure: Evidence from Indian high and medium technology firms. Economics of Innovation and New echnology. 29(2):147-168.
14. Jha, S.K., Dhanaraj, C. and Krishnan, R.T 2018). Arbitrage to Global Innovation: Evolution of Multinational R&D in Emerging Markets. Management International Review, 58(4): 633-661.
15. Sharma, Ruchi, A. Paswan, S. Kumar and M. Dhanora, 2018. Impact of Patent Policy Changes on R&D Expenditure by Industries in India. Journal of World Intellectual Property. 21(1-2): 52-69.

B. Sc. Part III Semester-V
Elective
Rural and Agricultural Economics
(Total Credits: 4)

Course Outcomes:

1. Explain the nature, scope, features, and challenges of the rural economy in India.
2. Analyze concepts, indicators, measures, and theories of rural development.
3. Evaluate the role of agriculture in economic development and its linkages with industry.
4. Assess agricultural policies, modernization efforts, and recent issues in Indian agriculture.

Unit-I Rural Economy of India (15 Periods)

- 1.1 Nature and Scope of the Study of Rural Economy, Need for the Study of the Rural Economy, Features of Rural Economy, Economic Backwardness, Comparison of Rural and Urban Economy
- 1.2 Rural Income - Sources of Household Income, Income Differences between Rural and Urban; Poverty - Causes and Consequences
- 1.3 Agriculture - Size of Land Holdings, Land Tenure and Land Reforms
- 1.4 Problems of Small and Marginal Farmers, Agricultural Labour - Labour Problems

Unit-II Rural Development (15 Periods)

- 2.1 Concept of Development, Indicators of Development
- 2.2 Measures of Development, Determinants of Rural Development
- 2.3 Development Theories: The Modernization Theory, Dependency Theory
- 2.4 Lewis Model of Economic Development

Unit-III Agricultural Economics (15 Periods)

- 3.1 Agricultural Economics: Definition, Nature and Scope, Agriculture and Economic Development
- 3.2 Role of Agriculture in Economic Development: Agriculture in a Developing Economy, - Share of Agriculture in National Income
- 3.3 Changing Phase of Agriculture, Interdependence and Complementarities between Agriculture and Industry
- 3.4 Characteristics of Land - Factors affecting the Productivity of Land

Unit-IV Agriculture and Economic Development (15 Periods)

- 4.1 Characteristics of the Indian Economy - Causes of Agricultural Backwardness
- 4.2 Present Position of Agriculture - Causes of Low Productivity in Agriculture
- 4.3 Agricultural Policies and Programmes in India
- 4.4 Modernization of Agriculture - Green Revolution, Recent Issues in Indian Agriculture

References/Reading List:

1. Ashok Rudra, (1982) Indian Agricultural Economics, Myths and Realities, Allied Publishers Mumbai.
2. Bilgrami S. A.R. (2000) An Introduction to Agricultural Economics, Himalaya Publishing House, Mumbai.
3. Dalip S Thakur, (1985) Poverty, Inequality and Unemployment in Rural India, B R Pub., Corporation, Delhi.
4. Dandekar V.M (1996) The Indian Economy 1947-92 Vol 1: Agriculture, Sage Publishing House, Mumbai.
5. Datt and Sundaram (2020), "Indian Economy", S. Chand & Company, New Delhi.
6. Government of India, Five-Year Plan Documents- from Fifth Plan to Tenth Plan.
7. Jain Gopal Lal, (1998) Rural Development, Mangal Deep Publications, Jaipur.
8. Katar Singh, (2009) Rural Development: Principles, Policies and Management, Sage Publications, New Delhi.
9. Lekhi R.K., & Joginder Singh, (2011) Agricultural Economics, Kalyani Publishers, New Delhi.
10. Mishra and Puri, (2020), "Indian Economy"Himalaya Publishing House, New Delhi.
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12. Satya Sundaram I, (2011) Rural Development, Himalaya Publishing House, Mumbai.
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14. Shriram Maheshwari, (1995) Rural Development in India: A Public Policy Approach, Sage Publications, New Delhi.

B. Sc. Part III Semester-V
Elective
Demography
(Total Credits: 4)

Course Outcomes:

1. To know the relationship between population dynamics and economic development, with a focus on how population structures influence and are influenced by development processes.
2. To analyse the structure of populations with other demographic variables and their implications for societal development.
3. To identify the factors affecting fertility, marriage patterns and mortality rates, and their impacts on population growth and demographic transitions.
4. To understand the causes and consequences of migration and urbanization in India, and utilize India's demographic database to understand regional and national demographic patterns.

Unit-I Population and Development (15 Periods)

- 1.1 Population Growth and Development and their inter-dependence- Factors Affecting Population Change
- 1.2 Measures of population change- Structure and distribution of population data- Demographic Dividend I and II
- 1.3 Theories of Population: Malthus and the Theory of Demographic Transition – The Idea of Maximum Population
- 1.4 Views of Meadows, Enke, and Simon on Population and Development

Unit-II Structure of Population (15 Periods)

- 2.1 World Population Trends in the Twentieth Century- Population Explosion Threatened or real- distant or imminent
- 2.2 International aspects of population growth and distribution
- 2.3 Pattern of age and sex structure in developed underdeveloped and less developed countries
- 2.4 Determinants and Demographic effects of sex and age structure- economic and social implications- Age pyramids and projections – Individual aging and population aging.

Unit-III Fertility, Nuptiality and Mortality (15 Periods)

- 3.1 Importance of study of fertility – Total fertility rate, Gross and net reproduction rate- trends in fertility in developed and less developed countries- Factors affecting fertility
- 3.2 Nuptiality: Concept and analysis of marital status- single mean age at marriage- Synthetic cohort methods- Trends in age at marriage
- 3.3 Death rates- crude and age-specific -Mortality at birth and infant mortality rate- levels and trends in more and less developed countries Sex and age pattern of mortality

- 3.4 Factors for the decline in mortality in the recent past- Life table – Concepts of the stable population- Methods of population projection

Unit-IV Migration, Urbanization, and Demographic Database in India (15 Periods)

- 4.1 Migration: meaning, types, temporary, internal, and international- International migration: effect on population growth and pattern- Factors affecting migration
- 4.2 Urbanization – Growth and distribution of rural-urban population in India
- 4.3 Study of the census in India – Methodology and characteristics- 2011 census in India
- 4.4 Functional Organization of Census of India- Changing characteristics of population in India- National Population Policy-2000, Demographic Dividend and Economy

References/Reading List:

1. Agarwal, S. N. (1972), *India's Population Problem*, Tata McGraw Hill Co., Bombay.
2. Agnihotri, S. B. (2000), *Sex ratio in Indian Population: A Fresh Exploration*, Sage, New Delhi.
3. Amsden, A. H. (Ed.) (1980), *The Economics of Women and Work*, Penguin, Harmondsworth.
4. Bogue, D. J. (1971), *Principles of Demography*, John Wiley, New York.
5. Bose, A. (1996), *India's Basic Demographic Statistics*, B. R. Publishing Corporation, New Delhi.
6. Chiang, C. L. (1974), *Life Tables and Mortality Analysis*, W. H. O., Geneva.
7. Choubey, P. K. (2000), *Population Policy in India*, Kanishka Publications, New Delhi.
8. Coale, A. J. and E. M. Hoover (1958), *Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospects*, Princeton University Press, Princeton.
9. Gulati, S. C. (1988), *Fertility in India: An Econometrics Study of a Metropolis*, Sage, New Delhi.
10. Gupta, J. A. (2000), *New Reproductive Technologies, Women's Health and Autonomy, Indo Dutch Studies on Development Alternatives*, Sage, New Delhi.
11. Jhabvala, R. and R. K. Subramanya (2000) (Eds.), *The Unorganized Sector: Work Security and Social Protection*, Sage, New Delhi.
12. Krishnaji M., R. M. Sudarshan and A. Shariff (1999), *Gender Population and Development*, Oxford University Press, New Delhi.
13. Mishra, S. (2000), *Voluntary Action in Health and Population: The Dynamics of Social Transition*, Sage, New Delhi.
14. Mitra, A. (1979), *Implications of Declining Sex Ratio in India's Population*, Allied, New Delhi.
15. Novell, C/ (1988), *Methods and Models in Demography*, Belhaven Press, London.
16. Seth, M. (2000), *Women and Development: The Indian Experience*, Sage, New Delhi.
17. Simon, J. L. (1992), *Population and Development in Poor Countries*, Princeton University Press.
18. Srinivasan, K. (1998), *Basic Demographic Techniques and Applications*, Sage, New Delhi.
19. Srinivasan, K. and A. Shariff (1998), *India: Towards Population and Demographic Goals*, Oxford University Press, New Delhi.
20. Skyrock, H. et. al. (1973), *the Methods and Materials of Demography*, US Department of Commence, Washington, D. C.
21. Sudarshan and A. Shariff (1999), *Gender Population and Development*, Oxford University Press, New Delhi.

B. Sc. Part III Semester-V
Minor
Mathematical Economics
(Total Credits: 4)

Course Outcomes:

1. The student will be able to make the application of Mathematics to consumer behavior.
2. The student will be able to do the application of Mathematics in producer behavior.
3. The student will be able to make the application of Mathematics in the cost function.
4. The student will be able to make the application of Mathematics in the market.

Unit-I Consumer Behavior (15 Periods)

- 1.1 Utility: Cardinal and Ordinal utility, Utility Functions: Homogeneous, Homothetic, Indirect, CES & Cobb-Douglas
- 1.2 Demand function, Ordinal utility maximization, Compensated Demand function, Slutsky equation, income, substitution, and price effects
- 1.3 Elasticity: Meaning, Concept, Types, and Its Applications
- 1.4 Consumer's Surplus: Meaning, Concept, and Its Applications

Unit-II Producer Behavior (15 Periods)

- 2.1 Production function: Short Run and Long Run, Homogeneous and Non-homogeneous
- 2.2 Cobb-Douglas production function, and its properties, CES production function, and its properties
- 2.3 Producer's Surplus: Meaning, Concept, and Its Applications
- 2.4 Producer's equilibrium: Constrained optimization of a producer-Output maximization and Cost minimization

Unit-III Theory of Cost (15 Periods)

- 3.1 Cost function-Meaning and its types
- 3.2 Short-run cost function- simple derivation of the short-run cost function, the modern theory of cost, and the relation between AC and MC in a short period.
- 3.3 Long-run cost curves and properties
- 3.4 Cost Minimization applications

Unit-IV Market Structure (15 Periods)

- 4.1 Market Structure- Types of various markets
- 4.2 Price and output determination in Perfect Competition, Monopoly
- 4.3 Price and output determination in Monopolistic Competition
- 4.4 Price and output determination in a Duopoly, Oligopoly

References/Reading List:

1. Allen, R.G.D. (1974), *Mathematical Analysis for Economists*, Macmillan Press, London.
2. Chiang, A.C. (1986), *Fundamental Methods of Mathematical Economics* (3rd Ed), Tata McGraw Hill, New Delhi.
3. Mukherji, B. and V.P. andit (1982), *Mathematical Method of Economic Analysis* Allied Publishers, New Delhi.
4. Chiang, A.C., *Elements of Dynamic Optimization*, McGraw-Hill, 1992.
5. Intriligator, Michael D., *Mathematical Optimization and Economic Theory*, Prentice Hall, 1971
6. Abel, A., B. S. Bernanke and B. Mcnabb (1998), *Macroeconomics*, Addison Wesley, Massachusetts.
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8. Arrow, K. J. and M. Intriligator (Eds.) (1982), *Handbook of Mathematical Economics*, Volumes I, II and III, North Holland, Amsterdam.
9. Barro, R. J. and H. Grossman (1976), *Money, Employment and Inflation*, Oxford University Press, Oxford.
10. Chung, J. W. (1993), *Utility and Production: Theory and Applications*, Basil Blackwell, London.
11. Ferguson, C. E. (1976), *Neo-classical Theory of Production and Distribution*.
12. Hadley, G. 91962), *Linear Programming*, Addison Wesley Publishing Co., Massachusetts.
13. Henderson, J. M. and R. E. Quandt (2003), *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New Delhi.
14. Hiller, F. S. and G. J. Lieberman (1985), *Operations Research*, C. B. S., NewDelhi.
15. Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
16. Jones, H. G. (1976), *An Introduction to the Modern Theory of Economic Growth*, McGraw Hill-Kogakusha, Tokyo.
17. Kothari, C. R. (1992), *an Introduction to Operations Research*, Vikas Pub. House, New Delhi.
18. Kuhn, Harold W. (Ed.) (1997), *Classics in Game Theory*, Princeton, University Press, Princeton.
19. Mankiw, N. G. and D. Romer (Eds.) (1991), *New Keynesian Economics* (2 Vols.), MIT Press, Cambridge, Mass.
20. Mustafi, C. K. (1992), *Operations Research: Methods and Practice*, Wiley Eastern, New Delhi.
21. Nash, J. F. (1996), *Essays on Game Theory*, Cheltenham, U. K.

B. Sc. Part III Semester-V
VSC
English for Economics Advanced –III
(Total Credits: 4)

Course Outcomes:

Course Outcomes:

1. The students will comprehend lectures, and speeches of economics, written and oral budget analysis, and Economics articles.
2. The students will use correct English for spoken and written communication at the workplace.
3. The students will give competent presentations using visual aids in slides.
4. The students will develop their word power related to business and economics.

Unit-I Listening and Reading Skills **(15 Periods)**

- 1.1 Comprehending budget analysis.
- 1.2 Reading news articles and research articles on Economics.
- 1.3 Expressing opinions and disagreements, asking for and giving suggestions and advice, handling queries and complaints.
- 1.4 Preparing presentation slides.

Unit-II Speaking and Grammar Skills **(15 Periods)**

- 2.1 Giving presentations using visual aids and answering questions on your presentations.
- 2.2 Using modal verbs, avoiding fragments and run-on sentences.
- 2.3 Use of present simple, past simple, present perfect tenses in academic writing.
- 2.4 Economic and business vocabulary banking, financial statement, accounting, monetary policy, exchange rates. (From Ian MacKenzie's English for Financial Sector)

References/Reading List:

1. Whitby, Norman. 2006. Business Benchmark: Pre-Intermediate to Intermediate. Cambridge University Press.
2. MacKenzie, Ian. 1997. English for Business Studies: A Course for Business Studies and Economics Students. Cambridge University Press.
3. MacKenzie, Ian. 1997. English for Financial Sector Students. Cambridge University Press.
4. Murphy, Raymond. 1994. Intermediate English Grammar. Cambridge University Press
5. Mascull, Bill. 2002. Business Vocabulary in Use. Cambridge University Press.

B. Sc. Part III Semester-V
FP/CEP
Rural Awareness of Public Programmes
(Total Credits: 4)

SHIVAJI UNIVERSITY, KOLHAPUR
DEPARTMENT OF ECONOMICS-AUTONOMOUS
B.Sc.-M.Sc. Economics Integrated (Five Years)
B. Sc Economics Third Year

Semester-VI		
Sr. No	Course Type	Title of Courses
1.	Major	Development Economics-I
2.	Major	Econometrics
3.	Major	SWAYAM Course
4.	Elective	1.Urban Economics 2.Managerial Economics
5.	Minor	Costs and Financial Accounts
6.	OJT	On Job Training/Internship

B. Sc. Part III Semester-VI
Major
Development Economics-I
(Total Credits: 4)

Course Outcomes:

1. Students are able to identify the difference between economic growth and development
2. Students are able to analyze stages of economic development
3. Students are able to understand the need and importance of sustainable development
4. Students are able to evaluate the role of government and economic development

Unit-I Basic concepts of economic development (15 Periods)

- 1.1 Meaning of economic development- Distinction between economic development and growth
- 1.2 Why Study Development Economics? Indicators of economic development
- 1.3 Obstacles to economic development
- 1.4 Sustainable and green development

Unit-II Theories of economic development (15 Periods)

- 2.1 Classical approach to development- Ricardian Theory
- 2.2 Myrdal's theory of economic development
- 2.3 Rostow's stages of economic growth
- 2.4 Theory of balanced and unbalanced growth

Unit-III Resources for economic development (15 Periods)

- 3.1 Capital formation, Technology and economic development
- 3.2 Human capital and economic development
- 3.3 Role of state in economic development
- 3.4 Development status of Indian Economy

Unit-IV Financing Economic Development (15 Periods)

- 4.1 Financing Economic Development -Concept, need and objectives
- 4.2 External resources - FDI, Foreign aid vs. trade, technology inflow
- 4.3 MNC activity in developing countries; Borrowings - domestic and external
- 4.4 Burden of borrowing - IMF and World Bank, policies in developing countries

References/Reading List:

1. Adelman, Irma (1962), Theories of Economic Growth and Development, Stanford University Press, Stanford.
2. Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 1 to 3, Elsevier, Amsterdam. Economics 31
3. Ghatak, Subrata (1986), Introduction to Development Economics, Allen and Unwin, London.
4. Hayami, Yujiro and Yoshihisa Godo (1997), Development Economics, Oxford University Press, New York.
5. Higgins, Benjamin (1980), Economic Development, Norton, New York.
6. Kindleberger, C.P. (1965), Economic Development, 3e, McGraw Hill, New York.
7. Meier, Gerald M. and James E. Rauch (2005), Leading Issues in Economic Development, Oxford University Press, New Delhi.
8. Myint, Hla (1965), The Economics of Underdeveloped Countries, Preager, New York.
9. Myint, Hla (1971), Economic Theory and Under Developed Countries, Oxford University Press, New York.
10. Thirlwal, A.P. (1999), (6th Edition), Growth and Development, Macmillan, London.
11. Bhagwati, J. and P. Desai (1970), India: Planning for Industrialization, Oxford University Press, London.

B. Sc. Part III Semester-VI
Major
Econometrics
(Total Credits: 4)

Course Outcomes:

1. The student will be able to Formulate an Econometric Model.
2. The student will be able to estimate different Econometric Models.
3. The student will be able to interpret the Econometric Model.
4. The student will be able to Compare the Econometric Models.

Unit-I Multiple Regression Analysis: The Problem of Estimation (15 Periods)

- 1.1 Three-Variable Model: Notation and Assumptions
- 1.2 Multiple Regression Equation-Interpretation, Partial Regression Coefficients
- 1.3 OLS and ML Estimation of the Partial Regression Coefficients
- 1.4 Multiple Coefficient of Determination and the Multiple Coefficient of Correlation

Unit-II Multiple Regression Analysis: The Problem of Estimation (15 Periods)

- 2.1 Simple Regression in the Context of Multiple Regression: Introduction to Specification Bias
- 2.2 R^2 and the Adjusted R^2
- 2.3 Polynomial Regression Models
- 2.4 Partial Correlation Coefficients

Unit-III Multiple Regression Analysis: The Problem of Inference (15 Periods)

- 3.1 Hypothesis Testing in Multiple Regression: Testing the Overall Significance of the Sample Regression, Testing the Equality of Two Regression Coefficients
- 3.2 Restricted Least Squares: Testing Linear Equality Restrictions-t-Test and F-Test Approach
- 3.3 Testing for Structural or Parameter Stability of Regression Models: The Chow Test
- 3.4 Prediction with Multiple Regression

Unit-IV Dummy Variable Regression Models (15 Periods)

- 4.1 Meaning and Nature of Dummy Variables
- 4.2 ANOVA Models -ANOVA Models with Two Qualitative Variables ANCOVA Models: Regression with a Mixture of Quantitative and Qualitative Regressors
- 4.3 The Dummy Variable Alternative to the Chow Test, Interaction Effects Using Dummy Variables, and Use of Dummy Variables in Seasonal Analysis
- 4.4 Piecewise Linear Regression, Panel Data Regression Models, Some Technical Aspects of the Dummy Variable Technique

References/Reading List:

1. Damodar Gujarati: Basic Econometrics, McGraw Hill, New York.
2. Badi H Baltagi: Econometrics, Springer, New York.
3. G S Maddala: Introduction to Econometrics, John Williams and Sons, New York.
4. Amemiya, T. (1985), Advanced Econometrics, Harvard University Press, Cambridge, Mass.
5. Dougherty, C. (1992), Introduction to Econometrics, Oxford University press, New York.
6. Goldberger, A. S. (1998), Introductory Econometrics, Harvard University Press, Cambridge, Mass.
7. Kennedy, P. (1998), A Guide to Econometrics, MIT press, New York.
8. Kmenta, J. (1997), Elements of Econometrics (Reprint Edition), University of Michigan Press, New York.
9. Koutsoyiannis, A. (1977), Theory of Econometrics (2nd ed.), The Macmillan Press Ltd., London.
10. Krishna, K. L. (Ed.) (1997), Econometric Applications in India, Oxford University Press, New Delhi.
11. Theil, H. (1981), Introduction to Econometrics, Prentice Hall of India, New Delhi.
12. Johnston (1984) Econometrics Methods, MacGraw Hill, New York

B. Sc. Part III Semester-VI
Major
SWAYAM Course*
(Total Credits: 4)

The course will be chosen as per availability

B. Sc. Part III Semester-VI

Elective

Urban Economics

(Total Credits: 4)

Course Outcomes:

1. To comprehend the processes and implications of urbanization and the development of human settlements.
2. To analyse the economic factors influencing city size and growth, including economies and diseconomies of scale.
3. To identify major urban problems such as congestion, pollution, and housing, and propose viable solutions.
4. To understand the principles and practices of urban planning and management to create sustainable and liveable cities.

Unit-I Urbanisation and Human Settlements (15 Periods)

- 1.1 Urbanization: Meaning – World Urbanisation - Urbanization in India; urban size and growth - Pattern of urbanization
- 1.2 Urban morphology- factors of urbanization.
- 1.3 Human Settlements: urban spatial structure
- 1.4 Agglomeration economics – urban sprawl

Unit-II Economics of City Size (15 Periods)

- 2.1 Smart city: Concept – Problems and Prospects
- 2.2 Market forces in the development of cities- size of city
- 2.3 Economics of location: Central place theory-Industrial location theory
- 2.4 Economic base theory and economic base multiplier

Unit-III Urban Problems (15 Periods)

- 3.1 Housing and Slums -Drinking Water - Sanitation system
- 3.2 Urban crime-- Poverty and inequality – Urban quality of life measurement
- 3.3 Transport and Communication
- 3.4 Urbanization and Climate change

Unit-IV Urban Planning and Management (15 Periods)

- 4.1 Concept of town and urban planning – Urbanization Policy –Role of real estate.
- 4.2 Financing of urban infrastructure: Municipal bonds
- 4.3 Role of civil society in Planning and Management
- 4.4 Urban Local government – Role – revenue sources - Municipal Administration

References/Reading List:

1. Alonso, W. (1965), Location and Land Use, Harvard University Press, Cambridge.
2. Batty, M. (1976), Urban Modelling, Cambridge University Press, Cambridge.
3. Berry B. J. L. and J. Kasarda (1977), Contemporary Urban Ecology, Macmillan, London.
4. Berry, B. J. L., City Size Distribution and Economic Development, Economic Development and Cultural Change, Vol. 9.
5. Cherunilum, Francis (1984), Urbanisation in Developing Countries, Himalaya Publishing
6. Global report on human settlements (2011) Cities and Climate Change, United Nations Human Settlements Programme.
7. Hirsch, W. E. (1978), Urban Economic Analysis, McGraw Hill Book Company, New York.
8. Holmes, T. (2000) "The Location of Industry: Do States' Policies Matter," Regulation,
9. Vol. 23, No. 1, 47-50
10. Ingram, G., J. F. Kain and J. R. Ginn (1972), The Detroit Prototype of the NBER
11. Jan K Brueckner (2013): Lectures on Urban Economics, PHI Learning Pvt. Ltd. Delhi.
12. Johnson, E. A. J. (1970), The Organization of Space in Developed Countries, Harvard University Press, Harvard.
13. O, Sullivan A (2002) Urban Economics, McGraw-Hill Irwin. press, Baltimore. Publishers.
14. R. Ramachandran (2013): Urbanisation and Urban System in India, Oxford University Press.
15. Report of the Task Forces on Housing and Urban Development-I, Planning of Urban
16. Science Research, A Survey of Research in Economics, Vol. 6, Infrastructure, Allied
17. Shukla V (1996) Urbanisation and Economic Growth, Himalaya PUBLISHERS Pvt. Ltd. Mumbai
18. Systems, Vienna, International Institute of Applied Systems Analysis.
19. Urban simulation Model, National Bureau of Economic Research, New York.

B. Sc. Part III Semester-VI

Elective

Managerial Economics

(Total Credits: 4)

Course Outcomes:

1. Enrich the knowledge of the principles, laws, and theories in economics that will be useful for a manager at the firm level in the decision-making process.
2. Dealing with the resource utilisation problem and choosing the optimal resource at the firm or industry.
3. Seek solutions to questions like how much should be produced, what price should be charged, and how to become successful businessmen.

Unit-I Introduction and Demand and Supply Analysis (15 Periods)

- 1.1 Meaning, Nature, Scope and Chief Characteristics of Managerial Economics,
- 1.2 The Demand Function, Demand Curve, The Law of Demand, Factors that Affect Demand
- 1.3 Law of Supply, Supply Function, Determinants of Supply, Equilibrium of Demand and Supply
- 1.4 Demand forecasting- Steps involved in forecasting, Methods of demand forecasting, Trend Analysis

Unit-II Elasticity of Demand and Supply (15 Periods)

- 2.1 Elasticity of Demand: Meaning, Factors Influencing Elasticity of Demand, Uses of Elasticity of Demand
- 2.2 Classification of Elasticity of Demand- 1. Price Elasticity 2. Income Elasticity of Demand 3. Cross Price Elasticity of Demand.
- 2.3 Methods of Measuring Elasticity.
- 2.4 Elasticity of Supply - Types of Elasticity of Supply, Factors Affect The Elasticity of Supply.

Unit-III Cost Concepts (15 Periods)

- 3.1 Types of Costs
- 3.2 Nature of Cost Curves in the Short Run
- 3.3 Nature and Behaviour of Long Run Cost Curves, Relationship Between Short Run and Long Run Cost Curves
- 3.4 Economies and Diseconomies of Scale

Unit-IV Attributes of Production Function (15 Periods)

- 4.1 Short Run Production Function: Law of Variable Proportions.
- 4.2 Long Run Production Function: Law of Returns to Scale
- 4.3 Optimum Combination of Inputs, Expansion Path, Homogeneous production function-Cobb-Douglas and CES Production Function
- 4.4 Short Run Production Function: Law of Variable Proportions.

References/Reading List:

1. W. B. Allen, (2009), *Managerial Economics Theory, Applications, and Cases*, 7th Edition. Norton. Contents.
2. William J. Baumol, (1961), What Can Economic Theory Contribute to Managerial Economics?, *American Economic Review*, 51(2), pp. 142-46. Abstract.
2. Ivan Png and Dale Lehman (2007), *Managerial Economics*. Wiley. Description and chapter-preview links.
3. M. L. Trivedi, (2002), *Managerial Economics: Theory & Applications*, 2nd ed., Tata McGraw-Hill. Chapter-preview links.
4. NA, (2009), Managerial economics, *Encyclopedia Britannica*. Cached online entry.
5. Carl Shapiro (1989). "The Theory of Business Strategy," *RAND Journal of Economics*, 20(1), pp. 125-137.
6. Thomas J. Webster (2003). *Managerial Economics: Theory and Practice*, ch. 13 & 14, Academic Press. Description.
7. James O. Berger (2008), *Statistical Decision Theory*," *The New Palgrave Dictionary of Economics*, 2nd Edition. Abstract.
8. Keisuke Hirano, (2008), *Decision Theory in Econometrics*, *The New Palgrave Dictionary of Economics*, 2nd Edition. Abstract.
9. Vassilis A. Hajivassiliou, (2008), *Computational Methods in Econometrics*, *The New Palgrave Dictionary of Economics*, 2nd Edition. Abstract.
10. Trefor Jones, (2004), *Business Economics and Managerial Decision Making*, Wiley. Description and chapter-preview links.
11. Nick Wilkinson, (2005), *Managerial Economics: A Problem-Solving Approach*, Cambridge University Press. Description and preview.
12. Maria Moschandreas, (2000), *Business Economics*, 2nd Edition, Thompson Learning. Description and chapter-preview links.
13. Prof. M.S. Bhat, and M.K. Rau, *Managerial economic and financial analysis*.Hyderabad.ISBN 978-81-7800-153-1

B. Sc. Part III Semester-VI
Minor
Costs and Financial Accounts
(Total Credits: 4)

Course Outcomes:

1. To understand the basic concepts of cost and financial accounting.
2. To prepare and analyze financial statements.
3. To explore various costing methods and their applications.
4. To apply accounting information to support economic decision-making.

Unit-I Introduction to Financial Accounting (15 Periods)

- 1.1 Introduction to Business -an economic activity, important Terms in financial accounting, Overview of book keeping and financial accounting, Importance of accounting in economics
- 1.2 Basic accounting concepts and principles, Accounting Cycle
- 1.3 Principles of double entry accounting and application in business
- 1.4 Recording of transactions, journal, ledger and subsidiary books

Unit-II Financial statements- Analysis and Interpretation (15 Periods)

- 2.1 Trial balance - types of trial balance, rectification of errors preparation of trial balance
- 2.2 Preparation of financial statements for sole proprietorship-Trading and Profit and Loss Account, Balance Sheet
- 2.3 Introduction to Companies Act 2013, preparation of income statement or Profit and Loss account and Balance Sheet.
- 2.4 Analysis and interpretation of financial statements -common size. Statement, comparative statements, ratio analysis, introduction to cash flow and funds flow statements

Unit-III Cost Concepts and Classifications (15 Periods)

- 3.1 Definition and importance of cost accounting, Types of costs
- 3.2 Elements of cost - Material, Labour and Overhead
- 3.3 Preparation of Cost sheet, tender and estimates
- 3.4 Introduction to methods of costing - job, batch, process and contract costing (only theory)

Unit-IV Cost Volume Profit Analysis (15 Periods)

- 4.1 Concept of CVP analysis, need and objectives , P/V ratio and contribution
- 4.2 Advantages and limitations of CVP analysis
- 4.3 Break even analysis, Margin of safety, Buy and make decisions
- 4.4 Graphical presentation of BEP

References/Reading List:

1. M. N. Arora (2022), Cost Accounting, Vikas Publishing
2. P C Tulsian and Bharat Tulsian (2016), Financial Accounting, S Chand
3. M. G. Patkar (2021) Management Accounting, Phadke Prakashn
4. Jain, Narang and Agarwal (2016), Cost Accounting Principles and Practice, Kalyani Publishers
5. S.N.Maheshwari (2013), Cost and Management Accounting, S.Chand publication
6. M C Shukla, S C Gupta and T S Grewal (2018), Advanced Accouts, Volume I and II, S. Chand
7. S.N.Maheshwari (2022), Advanced Accountancy Volume-I, Vikas Publishing
8. Paul D. Kimmel, Jerry J. Weygandt, and Donald E. Kieso (2006), Financial Accounting: Tools for Business Decision Making, John Wiley & Sons
9. Srikant Datar and Madhav Rajan (2017), Horngren's Cost Accounting: A Managerial Emphasis, Pearson
10. Paul D. Kimmel, Jerry J. Weygandt, and Donald E. Kieso, (2018), Financial Accounting: Tools for Business Decision Making, John Wiley & Sons
11. Charles T. Horngren, Srikant M. Datar, and Madhav V. Rajan, (2012), Cost Accounting: A Managerial Emphasis, Pearson
12. Chartered accountant - journal
13. Management accountant journal

B. Sc. Part III Semester-VI
OJT
On Job Training/Internship
(Total Credits: 4)