

NORTH MAHARASHTRA UNIVERSITY, JALGAON

SYLLABUS FOR M.A. PART-I ECONOMICS

[W.E.F. 1997-98]

SCHEME OF PAPERS AT M.A. ECONOMICS

First year M.A.

COMPULSORY PAPERS :

EC-1 : Theory of price

EC-2 : Public Finance

Optional Papers [Any two of the following]

EC-3 : Models of Economics Growth

EC-4 : Economic System and Thinkers

EC-5 : Agricultural Economics and Finance

EC-6 : Economics of Labour

EC-7 : Economics of Population and Demography

EC-8 : Environmental Economics

M.A. Economics Part-1

[From 1997-98]

EC-1 Theory of Price

SECTION - FIRST

1. The scope and methodology of Micro-Economics, Economics models, Comparative static and Dynamic models.
2. Demand - Determination of consumers equilibrium under utility analysis. Measurement of utility - Cardinal, ordinal concepts. Indifference Curve approach - Characteristics, Equilibrium of the consumer under indifference curves analysis. Income-Effect, Price-Effect, Substitution effect. Measurement of Demand and derivation of demand curve. The Slutsky theorem, Revealed Preference Theorem. Measurement of elasticities.
3. Supply - Production function. The Law of Diminishing Returns. Theory of Cost - Short-Run, Long-Run, Cost Curves. U-shape, L-shape, Average Cost Curve. Economics of scale, External economics and diseconomies.
4. Market Equilibrium - Partial Equilibrium and General Equilibrium. Perfect Competition - Equilibrium in short and Long-Run. Optimal resource allocation. Dynamic changes and Industry Equilibrium - (a) Shift in the Market Demand, (b) Shift in the Cost, (c) Imposition of the Tax by the Government. Pricing under monopoly, discriminating monopoly dynamic changes & equilibrium (a) shift in the market demand, (d) shift in the cost, (c) Imposition of the tax.
5. Monopolistic Competition - Chamberlin's model of monopolistic competition, equilibrium of the Firm, Excess Capacity, Selling cost, Product-Differentiation.

SECTION SECOND

6. Duopoly and Oligopoly - Duopoly model of Cournot, Bertrand and Stackelburg, Pricing and output under Oligopoly. Kinky demand Curve model, Price Leadership, Limit pricing, Cost plus pricing.
7. Factor pricing - Derived Demand, Marginal productivity of demand for factors of production. Marginal productivity theory of Distribution. Enlers Theorem and Adding up problem.
8. Rent - Ricardian and Modern theory of Rent. Wages - Modern theory, modern theory of interest [New Keynesian theory of interest] profit, Innovative theory of Wage determination, Supply of Labour, backward. Sloping supply Curve of labour, Exploitation of Labour, Collective bargaining. Interest - Liquidity preference theory of profit, Dynamic theory of profit Modern Theory of Profit.
9. Research Methodology - Importance of Social Research - Elements of scientific methods and their application. Limitations and difficulties of social research. Hypothesis - Definition, Formulation and its role. Research Design - Sampling Techniques - Simple, Random, Random and Non-Random

Sampling. Stratified random sampling, by regular intervals sampling. Research Tools - Observation, interview, Questionnaire. Survey method. Case study. Methods of Data Collection and Data processing and analysis.

Note- A Question minimum of 20 (Twenty) marks, including the internal OR necessarily be asked on topic No.9 (Nine).

**BOOKS :**

1. Amacher and Sweeny - Principles of Micro-Economics.
2. E. Mansfield (5th Ed.) - Micro Economic Theory and Applications.
3. J. R. Hicks - Value and Capital.
4. J. Hirshelifer - Price Theory and its Applications
5. A. Koutsoyianus (2nd Ed.) - Modern Micro-Economics.
6. J. J. Stigler - Theory of Price.
7. E. H. Chamberlin - Theory of Monopolistic competition.
8. W. J. Baumol - Economic Theory and Operations Analysis.
9. W. L. Jhingan - Advanced Economic Theory.
10. American Economic Association (1950) - Readings in Price Theory.
11. J. Bain (1956) - Barriers of New Competition.
12. C. R. Kothari - Research Methodology - Method and Techniques.
13. Young Pauline - Scientific Social Survey and Research.
14. Goode and Hatt - Methods of Social Research.
15. Madge John - Tools of Social Research.
16. Selltitz Jahodo Varshaya - Research Methods in Social Relations.

17. डॉ. पु. ल. भांडारकर " सामाजिक संशोधन पद्धती.

**EC-2 Public Finance**

**SECTION FIRST**

1. Evolution of Public Finance :- Old and New theories for the changing perspective about the role of the Government - Major Fiscal Functions, Allocation Functions, Distributive Functions and Stabilization Functions.
2. Public Expenditure :- Welfare and Developmental Functions of the Government. Theory of public wants, social wants, merit wants, provision for the Satisfaction of the Social Wants. Theories of growth of public expenditure. Wagner's hypothesis, Peacock and Wiseman's hypothesis - Effects of public expenditure - Effects on employment, growth and development, stability, distribution of income and wealth.
3. Taxation :- Structure of Taxation, tax Ratios - Determinants of tax ratios in developing countries. Role of direct and indirect taxes in economic development, in acceleration of economic growth. Taxation and level of Savings. Taxation and distribution of income and wealth, Taxation and Stability.

4. Principles of Taxation :- (a) Fiscal Neutrality principle - Excess burden doctrine. Measuring the Welfare Costs. (b) Principle of Equity, Benefit Principle, Lindahl, Bowen and Samuelson models (c) Principle of ability to pay - Index of ability to Pay, Concept of equal sacrifice, equal sacrifice in Welfare terms. (d) Objectives of taxation - Functional Finance, Learner's Views.
5. Incidence of Taxation :- Traditional Concept. Musgrave's Concept of incidence. Economic effects of taxation - effect on allocation existing resources. Effects on supply of resources, supply of labour of savings. Analysis of incidence and effects with reference to, Income tax, Corporation tax and Commodity taxes. Case for agricultural income tax in India.

#### SECTION SECOND

6. Public Borrowing :- Classical view of public debt. Keynesian and post-keynesian views. Role of public borrowing in a developing economy. Sources of borrowing, problems of borrowing, Economic effects of public debt, Concept of burden of public debt. Transfer of burden to future generations and economic growth.
7. Fiscal Policy :- (a) Theory of Fiscal Policy. Increase Government expenditure, deficit spending, Increase in taxation, in Built-in-flexibility, Discretionary Fiscal Policy. (b) Stabilization Fiscal Policy classical and keynesian systems. Anti-inflationary Fiscal policy and economic growth. Indian Fiscal Policy.
8. Indian Federal Finance:- Union and state distribution of Taxes with special reference to (a) Personal income tax (b) Corporation Tax (c) Union excise duties (d) VAT and MODVAT. Role of Finance Commissions. Recommendations of last two Finance Commissions. Planning Commission and Finance Commission.
9. Government Budgeting :- Components of Budget. Economic and Functional Classification of Budgets. Indian experience. Government Consumption, Saving and Investment. Zero base budgeting. Different concepts of Budgets - revenue, Budgetary and Fiscal deficits with reference to Indian Budgets. India's last two budgets.

#### BOOKS :

- |     |                                    |   |   |
|-----|------------------------------------|---|---|
| 1.  | Musgrave R.A.                      | - | Theory of Public Finance                      |
| 2.  | Musgrave R.A. and<br>Musgrave P.A. | - | Public Finance in Theory &<br>Practice.       |
| 3.  | Buchanan J.M.                      | - | Public Finance                                |
| 4.  | Herber B.P.                        | - | Modern Public Finance                         |
| 5.  | Haughton R.W.                      | - | Public Finance                                |
| 6.  | Mathew T.                          | - | Economics of Public<br>Expenditure            |
| 7.  | Sahani B.S.                        | - | Public Expenditure Analysis                   |
| 8.  | Buchanan J.M.                      | - | Principles of Public Debt                     |
| 9.  | Prest A.R.                         | - | Public Finance in<br>Underdeveloped countries |
| 10. | Tripathy R.N.                      | - | Public Finance in<br>Underdeveloped Countries |
| 11. | Orelliah R.J.                      | - | Fiscal Policy in<br>Underdeveloped Countries  |

- |     |                               |   |  |
|-----|-------------------------------|---|--|
| 12. | Andley & K.P.M.<br>Sundharam  | - | Theory & Practice of Public Finance    |
| 13. | Ganguli Subroto               | - | A Normative Approach in Public Finance |
| 14. | Tyagi                         | - | Public Finance                         |
| 15. | Bhatia H.L.                   | - | Public Finance                         |
| 16. | Dr. Joshi P.L.                | - | Zero base budgeting                    |
| 17. | Alak Ghosh (Recent Ed.)       | - | Indian Economy (Nature & Problems)     |
| 18. | American Economic Association | - | Readings in Public Finance             |
| 19. | Mithani                       | - | Fundamentals of Public Finance         |

### EC-3 Models of Economic Growth

#### SECTION FIRST

1. Concepts and Methods :- Macro-economic variables and problems of aggregation. Rates of growth, basic factors in growth - population, Capital and technology. Statics and Dynamics.
2. Growth Models :- General framework for analysis.
3. Pre-classical View on Growth :- Mercantilists and Physiocrats.
4. Classical Growth Models with Special Reference to Adam Smith, Ricardo, Malthus and Mill.
5. Schumpeterian Model.
6. Marxian Model.
7. New-Classical Economics and their growth theories - roughly covering the period 1870-1920.
8. Essentials of Harrod - Domar Growth Model.
9. The Summing up - a comparison of growth models.

#### SECTION SECOND

10. Concepts and Methods - Formulation of Macro Models. Stocks and Flows. Capital-output ratios. Production Function.
11. Existence and Stability of Steady State growth [In the Context of Harrod Models].
12. Expectations and equilibrium growth, Capital-output ratios [In the Context of Harrod Models].
13. Neo Classical one Sector Model - assumption, equation, stability [ Compared with Harrod - Domar Problems]
14. Two Sector Model economic growth - Problems of Stability - Fieldman Model.
15. Economic distribution and economic growth - Cambridge models, Kaldor and Robinsons - a Comparative Study of issues involved in different models.

16. Some important issues in growth theory - Capital controversy, technical progress and economic growth, measuring relative contributions to growth, time scale of economic models.

**BOOKS :**

- |    |                 |   |                                    |
|----|-----------------|---|------------------------------------|
| 1. | Adelman Irma    | - | Theories of Economic & Development |
| 2. | W.I. Baumol     | - | Economic Dynamics                  |
| 3. | M. Blang        | - | Economic Theory in Retrospect      |
| 4. | Joan Robinson   | - | An Essay on Marxian Economics      |
| 5. | J.A. Schumpeter | - | Theory of Economic Development     |
| 6. | B. Hoeselits    | - | Theories of Economic Growth        |

**EC-4 Economic Systems and Thinkers**

**SECTION FIRST**

1. Economic Systems :- Meaning and classification. Incentives in Systems. Basic economic problems before any economy. Alternative arrangement for solving these problems. Criteria for economic systems [Performance Criteria].
2. Capitalism :- Main Features of Competitive Capitalism. Features and institution of modern capitalist economy. Achievement and Failures of advanced capitalism. Control and planning of a capitalistic economy. Planning and control of U.S.A. Welfare State Capitalism.
3. Socialism :- Essential features of a socialist economy. Liberal, authoritarian and market socialism. Difference between socialism and communism. Democratic socialism. Economic Reforms in socialist economy since 1960. Main features of Chinese system. Main features of the economy of South ASEAN countries.
4. Mixed Economy :- Definition and features. Institutional arrangement. Problems of mixed economic systems. Mixed economy of India. Multinational corporations in mixed economy of India
5. Plan Economic Systems :- Concepts and definition of planning. Role of planning in developing countries. Types of planning [on the basis of economic systems] Broad features of India's socialist pattern.
6. Convergence of different economic systems. Globalization of economic systems.

**SECTION SECOND**

7. Adam Smith :- Naturalism and optimism. Smith's liberalism [Laissez-fair]. Nature and scope of economics. Views on wealth, Division of labour. Smith's theory of value, Views on distribution with dual approach on rent, Wages, Profits, Views regarding Capital canon of taxation in public finance.
8. J.S. Mill. - Background of his thinking. Mill's Statement on - Subject matter of Economics, Self-interest, Free competition, Theory of Value, population, Consumption, production, distribution. Four propositions and renewal of capital goods. Theory of International Trade. Theory of economic development. Stationary state. Mill as a socialist.

9. Karl Marx :- Marx's scientific socialism and philosophy. Dialectical materialism. Marxism theory of value. Concept of Surplus Value. Growth and Decay of Capitalism. Appraisal.
10. Alfred Marshall :- Views on Consumption, production. Marshall's Theory of value. Concept of Representative firm. Marshall on distribution. Marshall as Synthesist. Appraisal.
11. Indian Thinkers - Dadabhai Naorojee - Economic philosophy. Mahatma Gandhi - Economic equality, Economic self reliance and self-sufficiency, Decentralized economy, Dignity of labour, Delimitation of wants, Dangers of industrialization, Swadeshi and Village industries. The principle of co-operation and collective effort in Indian Rural Economy. The concept of Trusteeship.

**BOOKS :**

**FOR SECTION FIRST**

1. Gregory Grossman - Economic system (2nd Ed.)
2. Louks and Whiteney - comparative Economic Systems (9t Ed.)
3. Geogre N. Halm - Economic Systems (A Comparative analysis) (3rd Ed.).
4. S.S.M. Desai - Economic Systems (3rd Ed.)
5. R. Dutta and K.P.M. Sundharan - Indian Economy.
6. प्रा. प्र. गो. ठोंबरे - अर्थव्यवस्था अभ्यास

**FOR SECTION SECOND**

1. Dr. S.S.M. Desai - History of Economic Thought.
2. Isaac Ilyich Rubin - A History of Economic Thought.
3. Lewis H. Heney - History of Economic Thought.
4. Gide and Rist - History of Economic Thought.
5. प्रा. स. श्री. मु. देसाई आणि प्रा. पिं. त्र्यं. येवलेकर - अर्थशास्त्र-विचार-विकास
6. प्रा. रा. म. गोखले - आर्थिक इतिहास आणि अर्थशास्त्रीय विचारांचा इतिहास
7. N.K. Bose - Selection from Gandhi (1957)
8. K.G. Mashruwala - Gandhi and Marx
9. संपादक अनुवादक दा. न. शिखरे - गांधी विचार दर्शन खंड १३ वा अर्थकारण.
10. आचार्य धर्माधिकारी - सर्वोदय दर्शन.

SECTION FIRST

1. Agriculture in different economics. Peculiarities of agriculture as a sector of the economy. Nature of Risk and uncertainty in agriculture, their impact on organization of agricultural production.
2. Management - Farm management and agricultural production. State of production, Elasticity of production. How much to produce. Cost function relation between different cost curves. Principle of equimarginal returns.
3. Water management and Technology - water resource, potential source of irrigation, utilisation of irrigation, potential irrigation and agricultural technology. The economics of irrigation development and use of water. Technology - Technological basis of agricultural production, innovation. Farms inputs and outputs. Green Revolution - meaning, causes, effects.
4. Supply - Demand and marketing of agricultural products - Factors affecting supply. Supply during short and long period. Cobweb phenomenon - affecting demand pattern. Trends of demand for major agricultural products. Marketing of Agricultural products - structure of markets, marketing cost, marketing margins, problems of marketing of agricultural product. Measures to solve.
5. Labour in Agriculture - Demand for labour in agriculture. Supply of labour in agriculture. Nature of employment and unemployment. Productivity of labour in agriculture, wages in agriculture. Poverty and low level of living of agricultural labour.

SECTION SECOND

6. Agricultural finance Vs Business and Industrial finance  
Kinds of agricultural finance on the basis of purpose - e.g. Infrastructure, production, consumption, marketing, Transport, storage, processing, Long Term, Medium Term, Short Term Finance. Agricultural Finance in developed and developing economics.
7. Agricultural Finance - The various agencies, which supply agricultural Finance - money Lenders, Nationalized Banks, Reserve Bank, Lead Bank, NABARD, Regional Rural Bank, Co-operative Banks. Special Schemes - like, IRDP, MEAL, SFDA, Non Banking financial Intermediaries.
8. Breakup of capital Needs of a farmer during one calender year. Percentage share of each source of credit. Risk element in agricultural finances. Reasons, Remedies. Report of all India Rural Credit Survey Committee; their findings, proposals. Evaluation of Government of India implementation since 1956.
9. Rural Indebtedness in India - Problem, background, causes, consequences - Economic, Social, Political - Policy measures to remove the agricultural indebtedness.



10. Agricultural prices - Price Fluctuation :- It's effects, minimum prices. Recent price policy in India. Policies for internationally traded agricultural products. Price policy and economic growth. Terms of trade for Indian Agriculture.

BOOKS:

1. T.P. Singh - Agricultural Finance Theory and Practice
2. Subrato Ghatale - Rural Money Market
3. S.M. Desai - Rural Banking in India.
4. Vasant Desai - A Study of Rural Economics.
5. Kahlon and Singh - managing Agricultural Finance.
6. J.W. Mellor - Economics of Agricultural Development.
7. Shukla Tara - Economics of Underdeveloped Agriculture.
8. B.V. Jha - Agricultural Price Stabilization in India.
9. Bhardwaj Krishna - Production condition in Indian Agriculture.
10. R.L. Cohen - Economics of Agriculture.
11. B.M Bhatia - Poverty, Agriculture and Economic Growth
12. Bishop - Agricultural Economic Analysis.
13. Sharaj Jain - Agricultural policy in India.
14. C.B. Mamoria - Agricultural Problems of India.
15. T.W. Schultz - Economic Organization of agriculture.
16. A.N. Agarwal - Indian Economy (problems and planning)

EC-6 : ECONOMICS OF LABOUR

SECTION FIRST

1. The growth of modern industry and the rise of labour problems. Labour market. The Indian experience. Imperfection in Indian labour market. Historical evaluation of emergency of free labour market. Characteristics of the Indian labour market.
2. Labour supply - Work - Leisure choice, supply of household labour and of married women workers, supply of educated and skilled workers, Labour supply in the organised sector in India. Rural - Urban migration - Absentism and turnover. Labour supply in unorganised sector. Role of employment exchange - unemployment concept - the Indian experience.
3. Demand for Labour - Demand for labour in competitive and non-competitive markets. Demand for overtime hours.
4. Trade Unions- Their role and impact on wages and unemployment. Trade Union as a monopolist in the labour market. Collective bargaining. Growth and characteristics of the trade union movement in India.
5. Industrial Relations - Industrial disputes - causes and methods of prevention and settlement. Works committee, Industrial democracy, state intervention.

SECTION SECOND

6. Theories of wage determination, their inadequacy methods of wage payments. Exploitation of Labour. Minimum wage, Fair wage, Profit sharing problem of wage differentials.
7. Wage determination - wage regulation in India, payment of wages-Act, Wage Boards, Dearness allowances, Bonus.

8. Wage policy in India - wages, employment, inflation, Philips curve, share of wages in national income. National wage policy. Protection of women and child Labour. The ILO.
9. Social security and Labour welfare - social security and Labour welfare measures. Labour participation in management.
10. Standard of Living - family budget inquiries. Health and efficiency of Labour.

#### BOOKS

1. Lester - Economics of Labour.
2. Tunlop J.T. - The Theory of Wage determination.
3. Kellogg Roy B. - Labour Economics.
4. V.B. Singh - Industrial Labour in India.
5. Labour Bureau Government of India - Problems of Indian Labour.
6. F. C. Saxena - Labour problems and Social welfare.
7. Shister, Joseph - Readings in Labour Economics and Industrial Relation.
8. T.N. Bhogaliwall - Economics of Labour and Social Welfare.
9. Lutt and K.P.M. Sundharam - Indian Economy.

#### EC-7 ECONOMICS OF POPULATION AND DEMOGRAPHY

##### SECTION FIRST

1. Population as an interdisciplinary field. It's relations to - Economics, Ecology, Geography and Sociology. Historical perspective on Indian and world demography.
2. Theories of population - Malthus and Marx on population. Concepts of optimum population, demographic transition. Threshold hypothesis population, development and social change. Ecological concerns.
3. Sources of population Data - population censuses, vital Registration, sample registration system and demographic surveys, contents and quality of demographic data.
4. Basic demographic methods, distribution, mean and dispersion, vital events, rates and ratios. Simple, compound and experimental growth, weighted average and direct standardization, interpolation and extra-polution, Life table methods. Stationary and stable populations.
5. Population size and Growth, overview of the size, growth and distribution of the world population by major regions. Study of India's population, size and growth in relation to development of natural resources.
6. Population composition by sex, age and other socio-economic and cultural characteristics relevant to India, such as, religion, caste, education and gainful employment.

##### SECTION SECOND

7. Population distribution - settlement patterns and special classification of population centres, their heterogeneity and functional integration, the urban hierarchy, external determinants and consequences of urbanization in India..pa

8. Concept and measurement cohorts and period, fertility, bio-social, psychological, economic and cultural factors affecting family formation and. Fertility as an element of population dynamics, fertility levels and differentials in India. Family planning [Recent trends in India, China and Japan].
9. Concepts and measurement of mortality, infant and perennial mortality, Levels and trends of mortality in modern times, determinants and recent trends of death rates in India. Life tables and mortality differentials in India by sex rural-urban and states.
10. Concepts and measurement of migration, internal and international migration, migration differentials by socio-economic characteristics, determinants and consequences of migration. Migration trends since 1960.
11. Population and planning - Elements of population policy and their relationship to economic and social policies. The population policy of India since 1960.

#### BOOKS:

1. Cambridge University press Cambridge 5th Ed. - Demography PROX.
2. Bendre A.A. and T. Kanitkar - Principle of Population Studies.
3. G.W. Barelay, John Wiley - Technique of Population analysis.
4. S.N. Agarwala - India's population problems.
5. Government of India Press, New Delhi - Five Year Plans of India.
6. A. Desai - Population and India's development.
7. United Nations - New York - The determinants and consequences of population Trends.

#### EC-8 ENVIRONMENTAL ECONOMICS

##### SECTION FIRST

1. Ecology - Environment - Ecosystem and Economics, Resource Base of Economics, Control of resources, concept of Quality of Life, Sustainable development.
2. Resources - Nature and classification of resources. Renewable resources [Air, Water, Solary, Energy]. Non-renewable resources [Soil, industrial affluent], Land resource, oceanic resources, Water resoruces, Technological resources, Drain of resources, Environmental Costs of resource utilisation.
3. Market System and Environment- Environment as a factor pricing in different markets - Free market, Imperfect market Market failure.
4. Economic Growth Vs Ecology Debate - Quality of environment, Environmental problems in developed countries - [(Industrialization, Technological changes, Natural resources)]. Environmental problems in developing countries - population, poverty, technology transfer.

5. Environmental Balance - Pollution - Types, causes, effects. Measures to combat pollution. Environmental planning, significance of environmental planning and developmental planning. Environmental management-Poverty Vs Environmental Equity - Social aspects, Legal aspects, Financial aspects, political aspects. Rural Environmental planning and urban Environmental planning.

#### SECTION SECTION

6. Cost - Benefit Analysis - Financial, Economic and Social cost - Benefit analysis.
7. Welfare and Environment Welfare as an important component in Welfare. Environment and Social efficiency, Pareto Optimality.
8. Environmental Impact Analysis - Impact of economic growth on environment - Primary sector, secondary sector and Tertiary sector.
9. Environmental Degradation - Effects of Environmental deterioration on poverty groups and weaker sections, common property resources, Green House Effect. Measures to protect environment - Awareness, Ecology movement, Environmental Education, Laws and Courts, Environment Audit, Role of Government and NGOs in world Economy.
10. Environmental pollution in India - Policies to protect environmental Quality and pollution - Bio-Technology for better environment. Role of Government, NGOs and Women in environmental balance in India. Socio-economic and Future oriented Ecological Approach for India.
11. General overview of Ecology movement in world and India.

#### BOOKS:

1. The Quality of Life - Economics, Environmental Polity.
2. B.P. Odum - Fundamentals of Ecology 3rd Ed.
3. H.R. Odum - System Ecology
4. J.W. Baumol. E.W. Dares - The Theory of Environmental policy Externalities, public outlay on the Quality of life.
5. Joseph J. Seneca and M.K. Trussig - Environmental Economics
6. Kneese - Environmental Economics
7. Barry Field - Environmental Economics
8. Juan Martinez Alier - Ecological Economics
9. Pramod Singh - Environmental Pollution and Management.
10. C.A. Vakil - Economic Aspects of Environmental pollution in India.
11. World Commission on Environment and Development, Common future oxford - Pune.
12. J Bandopadhyay - India's Environment crisis ad Response.
13. Citizen's Report on Environment - Centre for Science and Environment.
14. T.N. Khoshoo - Environmental concerns and strategies.
15. Attachund - Environmental challenges - A Global Survey.

=X=X=X=