

The Maharaja Sayajirao University of Baroda, Vadodara
Ph. D Entrance Test (PET Examination)

SYLLABUS

Note : Paper – II will cover 50 compulsory Multiple Choice Questions (MCQ) of 1 mark each covering Entire Syllabus including all electives.

Subject: Economics

PET Examination Code: 1

PAPER-II

1. **Micro-economic Analysis**
Demand analysis — Marshallian, Hicksian and Revealed preference approaches
Theory of Production and Costs
Pricing and output under different forms of market structure
Factor Pricing analysis
Elements of general equilibrium and new welfare economics
2. **Macro-economic Analysis**
Determination of output and employment — Classical approach, Keynesian approach, Consumption hypotheses
Demand for Money — Fisher and Cambridge versions, Approaches of Keynesian, Friedman, Patinkin, Baumol and Tobin
Supply of Money, Determinants of money supply, High-powered money, Money multiplier
Phillips Curve analysis
Business cycles — Models of Samuelson, Hicks and Kaldor.
Macro-economic Equilibrium — Relative roles of monetary and fiscal policies
3. **Development and Planning**
Economic Growth, Economic Development and sustainable Development —
Importance of institutions — Government and markets — Perpetuation of underdevelopment — Vicious circle of poverty, circular causation, structural view of underdevelopment — Measurement of development conventional, HDI and quality of life indices
Theories of Development — Classical, Marx and Schumpeter; Economic Growth — Harrod-Domar model, instability of equilibrium, Neoclassical growth — Solow's model, steady state growth. Approaches to development : Balanced growth, critical

minimum effort, big push, unlimited supply of labour, unbalanced growth, low income equilibrium trap

Indicators and measurement of poverty

Importance of agriculture and industry in economic development — choice of techniques and appropriate technology — Investment criteria — Elementary idea of cost-benefit analysis

Trade and Aid — International trade as 'engine of growth' — Globalization and LDC's

Objectives and role of monetary and fiscal policies in economic development

Techniques of planning; Plan Models in India; planning in a market-oriented economy

4. **Public Finance**

Role of the Government in Economic activity — Allocation, distribution and stabilization functions; Private, Public and Merit goods

The Public Budgets — Kinds of Budgets, Zero-base budgeting, different concepts of budget deficits; Budgets of the Union Government in India

Public Expenditure — Hypotheses; effects and evaluation

Public Revenue — Different approaches to the division of tax burden, incidence and effects of taxation; elasticity and buoyancy; taxable capacity

Public Debt — Sources, effects, burden and its management

Fiscal Federalism — Theory and problems; Problems of Centre-State Financial relations in India

Fiscal Policy — Neutral and compensatory and functional finance; balanced budget multiplier

5. **International Economics**

Theories of International Trade : Empirical verification and Relevance

International Trade under Imperfect competition

Terms of Trade and Economic Growth — Secular

Deterioration of Terms of Trade Hypothesis — a critical review

Equilibrium/disequilibrium in Balance of Payment — Traditional, Absorption and Monetary approaches for adjustment in the Balance of Payments, Foreign Trade multiplier

Impact of Tariffs, Partial and general equilibrium analysis; Political economy of Non-Tariff Barriers

Theory of regionalism at Global level — Collapse of Bretton-Wood System — Recent Monetary reforms

Trade Policy and Reforms in India

6. **Indian Economy**

Basic Economic indicators — National income, performance of different sectors

Trends in prices and money supply

Agriculture — Institutional and technological aspects, new agricultural policy

Industry — New industrial policy and liberalization

Money and banking — Concepts of money supply, inflation, monetary policy and financial sector reforms

Public finance — Trends in revenue and expenditures of the Central and State Governments, Public debt; analysis of the Union Budget

Foreign trade — Trends, Balance of payments and trade reforms

Poverty, unemployment, migration and environment

7. Statistical Methods

Measures of Central tendency, dispersion, skewness and kurtosis
Elementary theory of probability — Binomial, Poisson and Normal distributions
Simple correlation and regression analysis
Statistical inferences — Applications, sampling distributions (t, χ^2 and F tests),
sampling of attributes, testing of Hypothesis
Index numbers and time series analysis
Sampling and census methods, types of sampling and errors

Unit-I

Theory of Demand — Axiomatic approach, Demand functions, Consumer behaviour under conditions of uncertainty
Theory of production
Collusive and non-collusive oligopolies
Different models of objectives of the firm — Baumol, Morris and Williamson
Factor pricing
General equilibrium and Welfare Economics

Unit-II

Keynesian and post-Keynesian approaches to theory of output and employment; concept of investment multiplier; consumption hypotheses
Theories of investment and accelerator
Theories of demand for money — Keynesian and post-Keynesian
Different approaches to money supply; money supply; components and determinants; money multiplier
Output — price determination (aggregate supply and aggregate demand curve analysis)
Fleming-Mundell open economy model

Unit-III

Development and Growth — Role of institutions
Theories of growth and development — Models of growth of Joan Robinson and Kaldor; Technical Progress — Hicks, Harrod and learning by doing, production function approach to the determinants of growth : Endogenous growth : role of education, research and knowledge — explanation of cross country differentials in economic development and growth.
Theories of development — Classical, Marx, Schumpeter and structural analysis of development — Imperfect market paradigm, Lewis model of development, Ranis-Fei model, Dependency theory of development
Factors in economy development — natural resources, population, capital, Human Resource Development and infrastructure
Trade and development — trade as engine of growth, two-gap analysis, Prebisch, Singer and Myrdal views; gains from trade and LDCs

Unit-IV

Theories of taxation, types, incidence and effects

Theories of public expenditure — effects on savings, investment and growth

Burden of public debt

Union Finance — Trends in Revenue and Expenditure of the Government of India

State finance — Trends in Revenue and Expenditure of the State Governments

Public Debt — India's Public debt since 1951 — growth composition, ownership pattern and debt management

Union-State Financial Relations — Horizontal and vertical imbalances; the Finance Commissions

Fiscal Policy and Fiscal Reforms in India

Unit-V

'Monetary approach' and adjustment in the balance of payments

Regional blocs — multilateralism and world trading system

The Political Economy of imposition of non-tariff barriers

International trade under conditions of imperfect competition in goods market

Theory of International reserves

Optimum Currency Areas — Theory and impact in the developed and developing countries

WTO and its impact on the different sectors of the economy

Unit-VI

Components of money supply

Role, constituents and functions of money and capital markets

RBI — recent monetary and credit policies

Commercial banks and co-operative banks

Specialized financial and investment institutions

Non-Bank financial institutions and Regional Rural Banks

Unit-VII

Industrial structure and economic growth

Pattern of industrialization — Public and Private; large and small industries

Theories of Industrial location — Indian experience

Industrial productivity — measurement, partial and total trends

Industrial Finance in India

Industrial Labour — Problems, policies and reforms in India

Economic Reforms and industrial growth

Unit-VIII

Population and Economic development — interrelation between population, development and environment, sustainable development

Malthusian theory of population, Optimum theory of population, theory of demographic transition, population as 'Limits to Growth' and as 'Ultimate Source'

Concepts of Demography — Vital rates, Life tables, composition and uses, Measurement of fertility — Total fertility rate, gross and net reproduction rate — Age pyramids, population projection — stable, stationary and quasi-stationary population; characteristics of Indian population through recent census

Poverty in India — Absolute and relative; analysis of poverty in India

Environment as necessity — amenity and public goods; causes of environmental and ecosystem degeneration — policies for controlling pollution — economic and persuasive; their relative effectiveness in LDCs; Relation between population, poverty and environmental degradation — microplanning for environment and eco-preservation — water sheds, joint forest management and self-help groups

Role of State in environmental preservation — Review of environmental legislation in India

Unit-IX

Role of Agriculture in Indian Economy — Share of Agriculture, interrelationship between agriculture and industry

Institutional aspects — Land reforms, Green revolution

Technological aspects — Agricultural inputs and shifts in production function

Capital formation in the rural sector — Savings, assets and credits

Strategies for rural development

Regional disparities in Indian agriculture

Cooperative movement in India — Organization, structure and development of different types of cooperatives in India

Unit-X

Application of Differential and Integral Calculus in theories of consumer behaviour, Production and pricing under different market conditions

Input-output analysis and linear programming

Application of Correlation and Regression

Testing of Hypothesis in Regression Analysis

Elective-I

Single Equation Linear Model :

Assumption and properties of OLS

Multiple Regression Model — Estimation and Interpretation

Multi-collinearity — Auto-correlation and heteroscedasticity — Causes, detection, consequences and remedy

Dummy variables, distributed lags — Need, limitations and interpretation

Applications in Economics

Simultaneous Equation models :

Structural and reduced forms

Endogenous and exogenous variables

Identification problems and conditions

Single equation methods of estimations — TSLS, indirect least squares and least variance ratio

Techniques of Forecasting :

ARMA, ARIMA

Econometric properties of time series, Unit root, integrated series, random walk and white noise

Elective-II

Theory of Consumer Behaviour and Theory of Firms

Theory of Pricing — Monopoly, Monopolistic competition, Duopoly and Oligopoly

Theory of Games — Two-person, Zero-sum Game, Pure and Mixed strategy, Saddle point solution, Linear programming and input output analysis

Static and Dynamic Multiplier and Accelerator, Samuelson-Hicks trade cycle model.

Growth Models — Harrod and Domar, Neoclassical models — Solow, Meade, Kaldor's Model with technological progress, endogenous growth models

Employment and output determination with fixed and flexible prices (IS-LM, Aggregate demand and aggregate supply analysis)

Elective -III

- The Rise and Fall of Bretton-Wood and emerging International Monetary System
- World Trading System — Evolution and Distortions
- Globalization — Developments in Exchange Markets, Euro-Currency Markets, and International Bond Markets, International Debt crisis
- Theory of Foreign Exchange Markets — Exchange Trading, Arbitrage and Market Hedging

Elective — IV

- Growth and Productivity trends in Indian Agriculture
- Development of distributive institutions — Costs and price policies
- Agricultural marketing and credit
- Trends in migration and labour markets. Minimum Wages Act
- WTO and sustainable agricultural development
- Reforms in Indian agriculture

Elective — V

- Planning and Economic Development
- Costs, Prices, WTO and Indian Agriculture
- Globalization, Liberalization and the Indian Industrial Sector
- Infrastructure and Economic Development
- Social Sector, Poverty and Reforms in India
- Women, Environment and Economic Development
- Trade Reforms and Liberalization
- Financial sector reforms
- Fiscal policy and fiscal reforms