

NIRMA UNIVERSITY

Institute:	Institute of Technology
Name of the Programme:	BTech (All Programmes)
Course Code:	2HS302CC23
Course Title:	Economics
Course Type:	Common
Year of introduction:	2023-24

L	T	Practical Component				C
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Course Learning Outcomes (CLOs):

At the end of the course the students will be able to:

1. interpret the various basic economic principles (BL2)
2. relate the economic fundamentals with engineering practices (BL2)
3. infer the macroeconomic aspects (BL3)
4. apply microeconomic and macroeconomic aspects in engineering projects (BL3)

Unit	Contents	Teaching Hours (Total 30)
Unit I	Introduction: Fundamental principles of economics, thinking like an Economist, Interdependence and the gains from Trade.	02
Unit II	Consumer Behavior: The theory of Cardinal Utility. The Law of Diminishing Marginal Utility and Consumer Equilibrium. The market forces of demand and supply, Law of Demand and Law of Supply. Elasticity and its application.	02
Unit III	Firm Behavior and Organization of Industry: Production Function, Cobb Douglas Production Function, Short Run Production Function – Law of Variable Proportion and Long Run Production Function – Laws of Returns to Scale – Cost Function – Types of Costs – Fixed Cost and Variable Cost. Average Cost and Marginal Cost, Typical Cost Curves, short run cost output relationship and long run cost output relationship	04
Unit IV	Market and Firm's Behavior: Type of Market - Revenue – Total Revenue, Average Revenue and Marginal Revenue, features of Competitive Market, Profit Maximization and price determination in Perfect Competitive market, Monopoly – meaning, features of monopoly market and price determination in monopoly market, Price Discrimination in Monopoly Market, Monopolistic Competition-meaning and features and price determination in monopolistic competitive market Oligopoly Market – features, strategies in oligopoly market, Case study of OPEC and global oil market	06
Unit V	Overview of Macroeconomics: Measuring National Income, Components of GDP, Methods of National Income Accounting – value added method, income method, expenditure method, Aggregate Demand and Aggregate Supply Curves, Effects of shifts in aggregate demand and aggregate supply curves Real vs. Nominal GDP	04
Unit VI	Saving and Investment: Overview of Classical and Keynesian Economics, Saving Function, Investment Function, Consumption	03

	Function, Keynesian Cross	
Unit VII	Financial System: Overview of Financial Market, Financial Intermediaries, Money – meaning, the functions of money, the forms of money Banks and Money Supply, Functions of Commercial Banks and Central Bank, Reserve Bank of India – Case Study of Central Bank Digital Currency [CBDC]	03
Unit VIII	Inflation: Measuring Cost of Living, The Cost Price Index – Inflation-Types of Inflation, Causes of Inflation - Demand Pull Inflation and Cost Push Inflation. Effect of Inflation	02
Unit IX	International Trade and Finance: The International Flows of Goods and Capital, Exports, Imports, Net Exports, Exchange Rate, Theory of Exchange Rate Determination-, The Bretton Woods System, Flexible Exchange Rate Purchasing Power Parity Theory and Balance of Payment Accounts-Current Account and Capital Account, The International Monetary Fund and The World Bank	04

Tutorials: Around 16 tutorials will be given to students in alignment with the theory classes. In the batch of 25-20 students, these tutorials will enhance practical application of microeconomics and macroeconomics.

SR NO	Session	Title	Hours
1	I	Numerical related to Price Elasticity	02
2	II	Numerical related to Production Function – calculation of Total Product, Average Product and Marginal Product	02
3	III	Numerical related to Cost Function – calculation of Total Cost, Average Cost and Marginal Cost	02
4	IV	Case Study of OPEC – Oligopoly Market Strategy	02
5	V	Computation of National Income under Value Added Method and Expenditure Method	02
6	VI	Computation of National Income under Income Method	02
7	VII	Computation of APC, MPC, APS, MPS and Multiplier Effect	02
8	VIII	Credit Creation by Commercial Banks and case Study of Central Bank Digital Currency in India	02

Self-Study: Self-study contents will be declared at the commencement of the semester. Around 10 % of the questions will be asked from the self-study contents.

Suggested Readings:

Granville, A., *The Indian Constitution: Cornerstone of A Nation*, OUP.
 Jayal. N. G., *Citizenship and Its Discontents: An Indian History*, Orient Blackswan, Delhi.
 Roy, A., *Citizenship in Modern India: A Very Short Introduction*, OUP.
 Granville, A., *Working in a Democratic Constitution: A History of the Indian Experience*, OUP.
 Jayal. N. G., *Democracy in India*, OUP, Delhi.
 Shah, G., *Social Movements and the State Sage*, Delhi.
 Thomas, P. *Indian Secularism and Its Critics: Some Reflections*, *The Review of Politics* Vol. 59, No. 3, Non-Western Political Thought, pp. 523-540.
 Jayal. N. G., Bhanu, M. P., (eds.), *The Oxford Companion to Politics in India*, OUP, Delhi,
 Kothari, R., 'The Congress System', in Z, Hasan (ed.) *Parties and Party Politics in India*,

New Delhi: Oxford University Press, pp 39-55.

Sridharan, E., *Introduction: Theorizing Democratic Consolidation, Parties and Coalitions, in Coalition Politics and Democratic Consolidation in Asia*, New Delhi: Oxford University Press.

Yadav, Y., and Palshikar, S., *Party System and Electoral Politics in the Indian States, 1952-2002: From Hegemony to Convergence*, in P, de Souza and E, Sridharan (eds.) *India's Political Parties*, New Delhi: Sage Publications, pp. 73-115.

Yadav, Y., *Understanding the Second Democratic Upsurge*, in F, Frankel, Z, Hasan, and R, Bhargava (eds.) *Transforming India: Social and Political Dynamics in Democracy*, New Delhi: Oxford University Press, pp. 120-145.

Deshpande, R., *How Gendered was Women's Participation in Elections 2004?*, *Economic and Political Weekly*, Vol. 39, No. 51, pp. 5431-5436.

Kumar, S., *Religious Practices Among Indian Hindus*, *Japanese Journal of Political Science*, Vol. 10, No. 3, pp. 313-332.

Neera, C., *Rethinking Pluralism, Secularism And Tolerance: Anxieties Of Coexistence*, Sage, Delhi

Ruchir, S., *Democracy on the Road: A 25 Year Journey through India*, Penguin Allen Lane, Delhi.

Ujjwal, S. K., and Roy, A., *Election Commission of India: Institutionalising Democratic Uncertainties*, OUP, Delhi.

Rajya Sabha TV Series *Samvidhaan*.

Systematic Voters Education and Electoral Participation (SVEEP) Programme of the Election Commission of India and Electoral Literacy Club (ELC). Visit <http://ecisveep.nic.in>.

Held, D., *Democracy and the Global Order: From the Modern State to Cosmopolitan Governance* (Stanford: Stanford University Press)

Kymlicka, W., *Citizenship in an Era of Globalization: A Response to Held*, in Ian Shapiro and Casiano Hacker-Cordon (eds.), *Democracy's Edges* (Cambridge, UK: Cambridge University Press).

Rajeev, B., (ed.) *Politics and Ethics of the Indian Constitution*, Delhi, Oxford University Press.

Zoya, H., (eds.) *India's Living Constitution: Ideas, Practices, Controversies*, Delhi, Permanent Black.

Sujit, C., (eds.) *The Oxford Handbook of the Indian Constitution*, Delhi, Oxford University Press.