UNIVERSITY OF CALCUTTA

BA/BSc ECONOMICS (HONOURS AND GENERAL)SYLLABUS UNDER CHOICE BASED CREDIT SYSTEM

As on 24/05/2018

To be effective from the academic session 2018-19

BA/BSc ECONOMICS (HONOURS) SYLLABUS,
UNIVERSITY OF CALCUTTA, UNDER
CHOICE BASED CREDIT SYSTEM [AS ON 24-05-2018]
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Preamble and Definitions of Key Words:

- **Academic Year:** Two consecutive (one odd + one even) semesters constitute one academic year.
- **Choice Based Credit System (CBCS**): The CBCS provides choice for students to select from the prescribed courses (core, generic elective, skill enhancement and ability enhancement courses).
- **Course:** Usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weight. The courses should define learning objectives and learning outcomes. Different courses may have different marks.
- **Credit Based Semester System (CBSS):** Under the CBSS, the requirement for awarding a degree or diploma or certificate is prescribed in terms of number of credits to be completed by the students.
- **Credit Point:** It is the product of grade point and number of credits for a course.
- **Credit:** A unit by which the course work is measured. **It determines the number of hours of instructions required per week as per UGC-guideline. *One credit* is *equivalent to one hour* of *teaching* (theory or tutorial) *'per week'*.We have assumed there are 15 weeks of teaching per semester. For *five credits* of lecture hours (theory) per course there will be '*five hours of teaching per week'* so that for fifteen weeks all total there will be 75 hours of teaching (lecture hours) for theory classes per semester. For 1 credit tutorial classes (each of one hour) there will be 'one hour tutorial' (we call it tutorial contact hour) per week. Thus all total there are 15 tutorial contact hours for 15 weeks. *In other words, for a 5 credit (Theory)+1 credit(Tutorial)= 6 credit course the total 'lecture hours plus tutorial contact hours' (clubbed together can be referred to as 'teaching hours') for 15 weeks is 75+15=90. It implies there are 90 'teaching hours' per semester.*** Similarly for a 2 credit course (only theory) the teaching hours or lecture hours all total is 30. Within each course the total marks of 100 has been subdivided in the following manner. For 90 hours of teaching (Theory plus tutorial) we have 80 marks. The remaining 20 marks has been divided into two equal parts: 10 marks is reserved for ***continuous internal assessment (CIA)*** and the remaining 10 marks for attendance. Out of 80, for examination on the theory part 65 marks has been allotted and for examination on the tutorial part 15 marks has been allotted.
- ***Unlike theory or tutorial (where one credit is equal to one hour theory or tutorial), in case of practical we find 'one credit is equal to 2 hours of practical class'. Again each practical class is of 2 hours***. So 2 credits of practical per week means 4 hours of practical per week or 2 practical classes per week. **Only for two courses we have considered practical instead of tutorial and there the credit distribution is 4 (Th)+2 (P)=6.Thus for 4 credit theory for 15 weeks we have**

60 lecture hours for the whole semester and for 2 credit practical for 15 weeks (with 4 hours practical per week) we have total 60 practical hours implying 30 practical classes of two hours each for the whole semester.

- **Cumulative Grade Point Average (CGPA):** It is a measure of overall cumulative performance of a student over all semesters. (See CSR dated 07/05/2018 for details).
- **Grade Point:** It is a numerical weight allotted to each letter grade on a 10-point scale.
- **Letter Grade:** It is an index of the performance of students in a said course. Grades are denoted by letters A++, A+,A, B+, B, C+, C, and F. (Absent is Ab)The details will be as per University regulations (See CSR dated 07/05/2018).
- **Semester Grade Point Average (SGPA):** It is a measure of performance of work done in a semester. (See CSR dated 07/05/2018 for details).
- **Semester:** Each semester usually consist of on an average **15-18 weeks of academic work equivalent to 90 actual teaching days (as per UGC norms)**. ***We have assumed 15 weeks of teaching per semester*** and for each course of 6 credits there are 90 teaching hours (lecture hours plus tutorial contact hours) . It is to be noted that under each semester **odd semester** is to be scheduled from **July to December** and **even semester** from **January to June.**

Table 1: Marks and Paper distributions with credit

		Credits	
Course Type	**Total Papers**	**Credit**	**Marks**
Core Courses (CC)	14	14*6=84	14*100=1400
Discipline Specific Electives (DSE)	4	4*6 =24	4*100 = 400
Generic Electives (GE) [Covering Two Disciplines with two courses each. Any discipline in any semester]	4	4*6=24	4*100= 400
Ability Enhancement Compulsory Courses-AECC [Consisting of two Ability Enhancement Compulsory Courses – AECC-1 and AECC-2]	2 [AECC-1 is Communicating English/ Modern Indian Languages(MIL) and AECC-2 is Environmental Studies (ENVS)]	2*2=4	100*2= 200
Skill Enhancement Courses (SEC)	2	2*2=4	100*2=200
Totals	26	140	2600

- **Continuous Internal Assessment and Students' Attendance: For each paper 10% will be reserved for continuous internal assessment (CIA) and 10% will be reserved for attendance**

of the students. CIA should not be confused with Tutorial examinations. The guidelines regarding tutorial examinations will be notified later. The guidelines regarding attendance of the students to appear in the end semester examination and to convert attendance into marks for each paper will be as per University norms. ***CIA may take the form of written examination/s, take-home assignments, viva-voce; presentation etc depending on the course instructor. As per definition CIA will be assessed fully internally by the course instructor.***

Types of tutorials: Tutorial classes are introduced per course (except for AEC and SEC) to give the students an idea of detailed understanding of the course and also to build their confidence on the subject in terms of (i) solving problems, (ii) presenting a paper in terms of board work or power point,(iii) preparation of term paper etc. A tutorial class also helps a teacher to clarify any topic in detail to the students. A tutorial contact hour has been meant to promote teacher-student academic interaction. The norm of examination for this part of the course will be decided later. ***Unlike all other Science subjects Economics should not be treated as a laboratory–based subject.*** After all it is a subject under Social Science and so there is limited scope for introducing practical part for each course. **Only under Discipline Specific Elective-A, 5th Semester/6th Semester, for the Courses "Applied Econometrics" and "Issues in Indian Economy" (under DSE A) there will be a *practical part* of 30 marks (2 credits) instead of tutorial part of 15 marks (1 credit).** Practical classes in case of "Applied Econometrics" will be conducted on the basis of laboratory-based specified softwares (STATA or R). Practical classes for the course "Issues in Indian economy"

Method followed for coding the Courses

1. **Subject Code :** Code for Subject Economics is ECO
2. **Honours/ General :** For Honours Code is A and for General Code is G
3. **Course Code**
   a. Core Course : CC
   b. Language Core Course :LCC-1/LCC-2 [Applicable for BA General Candidates]
   c. Generic Elective : GE
   d. Discipline Specific Elective: DSE-A/DSE-B
   e. Ability Enhancement Compulsory Course : AECC-1/AECC-2
   f. Skill Enhancement Course : SEC-A/SEC-B
4. **Semester Code :** 1/2/3/4/5/6
5. **Paper No. Code (for Core Course) :** 1/2/3/...../14
6. **Paper Component Code :**
   Theory : TH, Practical : P, Tutorial : TU

Example: Economics Honours Core Course 1, 1st semester (Theory): ECO-A-CC-1-1-TH

Economics Honours Core Course 1, 1st semester (Tutorial): ECO-A-CC-1-1TU

Table 2 :Course structure semester-wise: Economics (Honours)

Table 2A :Semester –I (July to December)

Type of Course	Name of the Course	Credit	Marks
Economics Core Course –I (ECO-A-CC-1-1-TH-TU)	Introductory Microeconomics[Theory plus Tutorial]	5+1=6	100
Economics Core Course –II (ECO-A-CC-1-2-TH-TU)	Mathematical Methods for Economics-I [Theory plus Tutorial]	5+1=6	100
Ability Enhancement Compulsory Course-I (AECC-1) (CENG-AECC-1-1-TH /XXX-AECC-1-1-TH)	Communicative English/Modern Indian Languages(MIL) which include any one of the languages like Bengali, Hindi, Urdu etc	2	100
Generic Elective Course I (GE-1) (XXX-GE-1-1-TH-TU)	Other than Economics[Theory plus Tutorial/Practical/Project/Field Survey/Term Paper etc]	6	100
Total		**20**	**400**

Table 2B :Semester –II (January to June)

Type of Course	Name of the Course	Credit	Marks
Economics Core Course –III (ECO-A-CC-2-3-TH-TU)	Introductory Macroeconomics [Theory plus Tutorial]	5+1=6	100
Economics Core Course –IV (ECO-A-CC-2-4.TH-TU)	Mathematical Methods for Economics-II [Theory plus Tutorial]	5+1=6	100
Ability Enhancement Compulsory Course-II (AECC-2) (ENVS-AECC-2-2-TH)	Environmental Studies (ENVS) [Theory]	2	100
Generic Elective Course II (GE-2) (XXX-GE-2-2-TH-TU)	Other than Economics[Theory plus Tutorial /Practical/Project/Field Survey/Term Paper etc]	5+1=6	100
Total		**20**	**400**

Table 2C :Semester –III (July to December)

Type of Course	Name of the Course	Credit	Marks
Economics Core Course –V (ECO-A-CC-3-5-TH-TU)	Intermediate Microeconomics-I [Theory plus Tutorial]	5+1=6	100
Economics Core Course –VI (ECO-A-CC-3-6-TH-TU)	Intermediate Macroeconomics-I [Theory plus Tutorial]	5+1=6	100
Economics Core Course –VII (ECO-A-CC-3-7-TH-TU)	Statistics for Economics [Theory plus Tutorial]	5+1=6	100
Skill Enhancement Course-I (A Group) (ECO-A-SEC-3-1A-TH)	Data Analysis [Theory]/ Rural Development [Theory] [A-Group of SEC consists of two courses. Students will have to select *any one* of the two]	2	100
Generic Elective Course III (GE-3) (XXX-GE-3-3-TH-TU)	Other than Economics [Theory plus Tutorial/Practical/Project/Field Survey/Term Paper etc]	5+1=6	100
Total		**26**	**500**

Table 2D : Semester-IV (January to June)

Type of Course	Name of the Course	Credit	Marks
Economics Core Course –VIII (ECO-A-CC-4-8-TH-TU)	Intermediate Microeconomics-II[Theory plus Tutorial]	5+1=6	100
Economics Core Course –IX (ECO-A-CC-4-9-TH-TU)	Intermediate Macroeconomics-II [Theory plus Tutorial]	5+1=6	100
Economics Core Course –X (ECO-A-CC-4-10-TH-TU)	Introductory Econometrics[Theory plus Tutorial]	5+1=6	100
Skill Enhancement Course-II (B Group) (ECO-A-SEC-4-2B-TH)	Research Methodology [Theory]/ Managerial Economics [Theory] [B-Group of SEC consists of two courses. Students will have to select *any one* of the two]	2	100
Generic Elective Course IV (GE-4) (XXX-GE-4-4-TH-TU)	Other than Economics [Theory plus Tutorial Tutorial/Practical/Project/Field Survey/Term Paper etc]	5+1=6	100
Total		**26**	**500**

Table 2E: Semester –V (July to December)

Type of Course	Name of the Course	Credit	Marks
Economics Core Course –XI (ECO-A-CC-5-11-TH-TU)	International Economics [Theory plus Tutorial]	5+1=6	100
Economics Core Course –XII (ECO-A-CC-5-12-TH-TU)	Indian Economy [Theory plus Tutorial based Term Paper]	5+1=6	100
Two Discipline Specific Elective (DSE) Courses: DSE-A and DSE- B In Semester V these two courses are denoted as DSE-A(1) and DSE-B(1) One out of two courses from : DSE-A(1) One out of two courses from: DSE-B(1) (ECO-A-DSE-5-A(1)-TH-TU/P) and (ECO-A-DSE-5-B(1)-TH-TU)	DSE-A(1) consists of two courses out of which students will have to select *any one* and DSE-B(1) consists of two courses out of which students have to select *any one.* <u>The two courses under DSE-A(1) are</u> Applied Econometrics (AE) : 4(Th) +2 (P)= 6 Economic History of India (1857-1947) (EHI) : 5(Th) +1(Tu) = 6 [Students will have to select any one] <u>The two courses under DSE-B(1) are</u> Comparative Economic Development (1850-1950) (CED): 5(Th) +1(Tu) = 6 Financial Economics (FE) : 5 (Th) + 1 (Tu) =6 [Students will have to select any one]	(5+1)= 6 (5+1)= 6 [Or one (4+2)= 6 and one (5+1)= 6]	100+ 100
Total		**24**	**400**

Table 2F: Semester –VI (January to June)

Type of Course	Name of the Course	Credit	Marks
Economics Core Course –XIII (ECO-A-CC-6-13-TH-TU)	Public Economics [Theory plus Tutorial]	5+1=6	100
Economics Core Course –XIV (ECO-A-CC-6-14-TH-TU)	Development Economics [Theory plus Tutorial]	5+1=6	100
Two Discipline Specific Elective (DSE) Courses: DSE-A and DSE- B In Semester VI these two courses are denoted as DSE-A(2) and DSE-B(2) One out of two courses from : DSE-A(2) One out of two courses from: DSE-B(2) (ECO-A-DSE-6-A(2)-TH-TU/P) and (ECO-A-DSE-6-B(2)-TH-TU)	DSE-A(2) consists of two courses out of which students will have to select *any one* and DSE-B(2) consists of two courses out of which students have to select *any one.* <u>The two courses under DSE-A(2) are</u> Money and Financial Markets (MFM) : 5(Th) + 1(Tu) =6 Issues in Indian Economy (IIE) : 4(Th) +2 (P)= 6 [Students will have to select any one] <u>The two courses under DSE-B(2) are</u> Environmental Economics (EE) : 5 (Th) +1 (Tu) =6 Issues in Development Economics (IDE) : 5 (Th) +1 (Tu) =6 [Students will have to select any one]	(5+1)= 6 (5+1)=6 [Or one (4+2)=6 and one (5+1)= 6]	100 + 100
Total		**24**	**400**

- **In framing this syllabus the centralized structure of Calcutta University is followed.**
- **<u>Special Note</u>**

(i) *The four Generic Elective papers (courses) for Economics (Honours) students* ***will be from any two subjects other than Economics with the condition that Mathematics is to be one of the Generic Elective Subjects for Economics(Honours) students.*** *Thus students having Economics Honours will select two other disciplines of 200 marks each under Generic Elective and one of the two disciplines should be Mathematics .* ***Students will have to select two courses on Mathematics <u>in any two of the four semesters</u> 1,2, 3 and 4 (where we find Generic Elective Courses). <u>Thus two courses on Mathematics is compulsory for Economics (Honours).</u>*** *The other Discipline can be any other subject. For example, an Economics (Honours) student may opt for Mathematics as Generic Elective in 1st and 3rd semesters and Political Science (or Statistics) in 2nd and 4th Semesters.*

(ii) *Similarly Economics as Generic Elective will be offered to students having Honours in any subject other than Economics.* ***<u>The Generic Elective papers in Economics for Honours students (for students having Honours in any subject other than Economics) will be treated as Core Papers in Economics for General students (for BA/BSc General students having Economics as a Core paper under the General stream).</u> [This has been explained clearly in the context of the syllabus for BA/BSc Economics (General)].<u>Students having Honours in any subject other than Economics will select any two Disciplines or Subjects for the four Generic Elective papers offered.</u>***

Economics Core Course-I: ECO-A-CC-1-1-TH-TU

Introductory Microeconomics

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours (Theory): 75, No. of Tutorial contact hours:15

[For Semester-I]

ECO-A-CC-1-1-TH

Unit 1: Exploring the subject matter of Economics **10 lecture hours**

1.1 Scope and Method of Economics: Wants, Scarcity, Competing Ends and Choice - Defining Economics, Thinking like an economist: Basic Economics Questions, Microeconomics and Macroeconomics, Normative Economics and Positive Economics

1.2Principles of Microeconomics – principles of individual decision making and principles of economic interactions – Introduce trade off, opportunity cost, efficiency, marginal changes and cost-benefit, trade, market economy, property rights, market failure, externality and market power.

1.3 Interdependence and the Gains from Trade- production possibilities frontier and increasing costs, absolute and comparative advantage, comparative advantage and gains from trade.

1.4 Reading and working with graphs

Unit 2: Demand and Supply: How Markets Work **10 lecture hours**

2.1Elementary theory of Demand: Determinants of household demand and market demand, movement along and shift of the demand curve

2.2 Elementary theory of Supply: factors influencing supply, the supply curve, movement along and shift of the supply curve

2.3 The Elementary theory of market price: Determination of equilibrium price in a competitive market.

2.4 Market Adjustment without Government (with illustrations):the effect of shifts in demand and supply, the excess demand function, existence, uniqueness and stability of equilibrium

Unit 3: Market and Adjustments **10 lecture hours**

3.1 The Evolution of Market Economies, Price System and the Invisible Hand

3.2 The Decision-takers - households, firms and central authorities

3.3 The Concepts of Markets- individual market, separation of individual markets, interlinking of individual markets. Difference among markets- competitiveness, goods and factor markets, free and controlled markets. Market and non-market sectors, public and private sectors, economies- free market, command and mixed.

3.4 Different goods: Public goods, Private goods, Common resources and Natural Monopolies.

Unit 4: Market Sensitivity and Elasticity **12 lecture hours**

4.1 Importance of Elasticity in Choice-Decisions

4.2 Method of Calculation- Arc Elasticity, Point Elasticity-definition

4.3 Demand and supply Elasticities-types of elasticity and factors affecting elasticity, Demand Elasticity and Revenue, Long run and Short run elasticities of Demand and Supply

4.4 Income and Cross Price Elasticity

4.5 Applications: Case studies – OPEC and Oil Price, Illegal Drugs

Unit 5: Government Intervention **8 lecture hours**

5.1 The Economic Role of Government with respect to Market: (i) Price Ceiling, Price Floor and Market Adjustment (with short case studies of agricultural administered price, minimum wage and rent control); (ii) Black Market; (iii) Tax and market adjustment ; (iv) Elasticity and Tax incidence

5.2 Comparison of markets with and without government

Unit 6: Utilitarian Approach **25 lecture hours**

(Focus on intuitive explanation and diagrams. Learning to analyze without using calculus a must)

6.1 The History of Utility Theory – From Cardinal to Ordinal Approach.

6.2 Utility in Cardinal Approach- Utility and choice, Total Utility and Marginal Utility, Utility and choice-maximization, marginal utility, theory of demand

6.3 Ordinal utility: Assumptions on preference ordering, indifference curve, marginal rate of substitution and convexity of IC, budget constraint, consumers' equilibrium-interior and corner, Derivation of Demand Curves from ICs, composite good convention. Application: Cash subsidy versus subsidy in kind

6.4 Price consumption curve, Income consumption curveand Engel curve. Price effect - Income and Substitution effect (Hicks and Slutsky),inferior goods and Giffen goods, Marshallian and compensated demand curves

ECO-A-CC-1-1-TU

Tutorial Contact Hours: 15

Texts

1. G.Mankiw. 2007, Economics: Principles and Applications, India edition by South Western, Cengage Learning
2. R.G. Lipsey. An Introduction to Positive Economics, ELBS (6^{th} edition)
3. Lipsey, R. and Chrystal, A. 2007 Economics, OUP
4. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson
5. G.S.Maddala and E. Miller, 1989, Microeconomics, Prentice Hall, McGraw Hill International Editions

References

1. Karl e Case and Ray C Fair, Principles of Economics, Pearson Education, 8th Edition, 2007
2. P Samuelson and W.Nordhaus, Economics, McGraw hill International Edition (14th edition or later edition)
3. J.E.Stiglitz and C.E.Walsh, Principles of Economics, WW Norton and Company, NY, (3rd edition or later edition)
4. Hal. R Varian , Intermediate Microeconomics, A modern Approach, WW Norton and Company, 8th edition, 2010 (T)
5. Gravelle, H. and Rees,R. , Microeconomics, Prentice Hall
6. Ryan, W.J.L. and Pearce : Price Theory and Applications , Macmillan Education, UK
7. Ferguson, C.E. and Gould, J.P. : Microeconomic Theory, Aitbs Publishers and Distributors, New Delhi.
8. Satya Chakrabarty, Microeconomics, Allied Publishers

Economics Core Course II: ECO-A-CC-1-2-TH-TU

Mathematical Methods in Economics-I

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[For Semester-I]

ECO-A-CC-1-2-TH

1. Preliminaries **10 lectures hours**

- Sets and set operations; functions and their properties; number systems.
- Convex sets; geometric properties of functions: convex functions, their characterizations, properties and applications; further geometric properties of functions: quasi-convex functions, quasi-concave functions, their characterizations, properties and applications.
- Limit and continuity-Different Limit Theorems with proof-concept of first principle.
- Uses of the concept of continuity.

2. Functions of one real variable **10 lecture hours**

- Continuous functions of different types and their graphs- quadratic, polynomial, power, exponential, and logarithmic.
- Concept of derivatives. Limits and derivatives. L' Hospital's rule .Graphical meaning of derivatives. Derivatives of first and second order and their properties; convex, concave and linear function.
- Application in economics- concept of marginal. Concept of elasticity. Concept of average function

3. Single variable optimization **10 lecture hours**

- Local and global optima; Geometric characterizations; characterizations using calculus. Significance of first and second order conditions.
- Interpretation of necessary and sufficient conditions with examples.
- Applications in Economics- profit maximization and cost minimization.

4. Integration of functions **10 lecture hours**

- Integration of different types of functions;
- Methods of Substitution and integration by parts.
- Applications in economics- obtaining total from the marginal.

5. **Matrix Algebra** **20 lecture hours**

- Matrix: its elementary operations; different types of matrix.
- Rank of a matrix.
- Determinants and inverse of a square matrix.
- Solution of system of linear equations-Cramer's rule; Eigen values and Eigen vectors.
- System of nonlinear equations- Jacobian determinant and existence of solution.
- The concept of comparative statics
- Applications of Matrix Algebra in input-output analysis-the Leontief Static Open Model (LSOM) - the Hawkins-Simon conditions.

6. Game Theory **15 lecture hours**

- Concept of a game, strategies and payoffs
- Zero-sum games- maxmin and minmax solutions
- Dominant Strategy Equilibrium
- Nash equilibrium
- Nash equilibrium in the context of some common games – Prisoners' Dilemma, Battle of Sexes, Matching Pennies

ECO-A-CC-1-2-TU

Tutorial contact hours :15

Texts :

- Alpha C. Chiang and Kavin Wainwright : Fundamental Methods of Mathematical Economics, Mc Graw Hill, 2005.

References

1. K. Sydsaeter and P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia: Delhi, 2002.

2. Gibbons R. Game Theory for Applied Economists.
3. Mukherji and S. Guha: Mathematical Methods and Economic Theory, Oxford University Press, 2011.
4. Hands, D. W.: Introductory Mathematical Economics, Second Edition, 2004.
5. Silberberg ,E. and Suen, W.: The Structure of Economics : A Mathematical Analysis, Third edition, Mc-Graw Hill, 2001.
6. Apostol T.M. : Calculus, Volume 1, One-variable calculus, with an introduction to linear algebra, (1967) Wiley, ISBN 0-536-00005-0, ISBN 978-0-471-00005-1.
7. K. G. Binmore, Mathematical analysis, Cambridge University Press, 1991.
8. Archibald, G.C. and Lipsey, R.G. , An Introduction to Mathematical Treatment of Economics, 1967, Weidenfeld and Nicolson
9. Henderson, J.M. and Quandt, R.E., Microeconomic Theory : A Mathematical Approach, McGrawHill,1980
10. Dorfman, R., Samuelson, P.A. and Solow, R.M. , Linear Programming and Economic Analysis, McGraw-Hill, 1958.
11. Hadley, G. , Linear Algebra, Addison-Wesley Publishing Company, 1977

Economics Core Course III: ECO-A-CC-2-3-TH-TU

Introductory Macroeconomics

Total Marks: 100 [Theory (Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[For Semester-II]

ECO-A-CC-2-3-TH

1. National Income Accounting 20 lecture hours

Macroeconomic data- Basic concepts of National Income accounting. The circular flow. Concepts of GNP, GDP, NNP, and NDP at market price and at factor cost. The measurement of National Income-Value Added Method and Expenditure Method. The problem of double counting. The role of Government. Concepts of Corporate Income, Corporate Savings, Personal Income, Personal Disposable Income and Personal Savings. Saving-Investment gap and its relation with budget deficit and trade surplus. National Income accounting and cost of living. Basic idea of India's national income.

2. Income Determination in the Short Run (Part-I) :The Simple Keynesian Model in a Closed Economy 18 lecture hours

The Simple Keynesian Model (SKM) in a Closed Economy without Government- the Keynesian

Consumption Function; the Keynesian Saving Function; income determination in SKM; stability of equilibrium; the concept of effective demand- the concept of demand-determined output ; the Simple Keynesian Multiplier; the paradox of thrift; the SKM in a Closed Economy with Government; government expenditure and tax; the government expenditure multiplier and the tax rate multiplier; the balanced budget multiplier; the budget surplus; effects of tax changes and government purchases on budget surplus; the full employment budget surplus.

3. The Classical system 18 lecture hours

Basic ideas of Classical Macroeconomics; Say's Law and Quantity Theory of Money, Loanable fund theory; the Classical Theory of Income and Employment determination; full Employment and wage-price flexibility; Classical Dichotomy and Neutrality of Money.

4. Macroeconomic Foundations -I 19 lecture hours

- The bond market as the mirror image of the money market-the Walras' Law. Relationship between bond price and rate of interest- the concept of Keynesian liquidity preference schedule-speculative demand for money and liquidity trap.
- Investment function: Concepts of Marginal productivity of capital, marginal efficiency of capital (MEC) and marginal efficiency of investment (MEI)- Jorgenson's neo-classical theory- Acceleration principle- fixed and variable. Multiplier-accelerator interaction.

ECO-A-CC-2-3-TU

Tutorial Contact hours: 15

Textbooks:

1. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. Principles of Macroeconomics, Indian Imprint of South Western by Cengage India, 6th edition, 2015.
3. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 2010.
4. Ghosh Chandana and Ghosh Ambar, Macroeconomics, PHI Learning Pvt Ltd, 2014.

References

1. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005.
2. Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7th edition, 2011.
3. Venieris, Y.P. and Sebold F.D., Macroeconomics: Models and Policy, John Wiley and Sons, 1977.
4. Ackley Gardner (old), Macroeconomic Theory, Macmillan, 1961
5. Ackley Gardner(new), Macroeconomics : Theory and Policy : Macmillan,1978

6. Ghosh Chandana and Ghosh Ambar, Indian Economy : A Macro-theoretic Analysis, PHI Learning Pvt Ltd, 2016.
7. J.R.Hicks. The Social Framework: An Introduction to Economics, Clarendon Press, 3rd edition, 1960.
8. Sikdar Soumyen, Principles of Macroeconomics, Oxford University Press.
9. Economic Survey , Government of India, various issues.

Economics Core Course IV: ECO-A-CC-2-4-TH-TU

Mathematical Methods in Economics-II

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours:15

[For Semester-II]

ECO-A-CC-2-4-TH

1. Function of several variables **14 lecture hours**

- Continuous and differentiable functions: partial derivatives and Hessian matrix. Homogeneous and homothetic functions.
- Euler's theorem, implicit function theorem (without proof) and its application to comparative statics problems.
- Economic applications- the idea of level curves, theories of consumer behaviour and theory of production.

2. Multi-variable optimization **35 lecture hours**

- Optimization of nonlinear functions: Convex, concave, and quasi-concave functions; Unconstrained optimization.
- Constrained optimization with equality constraints- Lagrangian multiplier method; role of Hessian determinant.
- Inequality constraints and Kuhn-Tucker Conditions.
- Value function and Envelope theorem; Economic applications – consumer behaviour and theory of production.
- Optimization of linear function: Linear programming; concept of slack and surplus variables (graphical solution only). Concept of convex set. The Duality Theorem
- Economic Applications of Linear programming

3. Difference Equations **12 lecture hours**

- Finite difference; Equations of first and 2nd orders and their solutions
- Application in Economics- Cobweb model, Multiplier-Accelerator model.

4. Differential Equations **14 lecture hours**

- Solution of Differential equations of first order and second order of linear differential equations.
- Economic application-price dynamics in a single market- multimarket supply demand model with two independent markets.
- Qualitative graphic solution to 2x2 linear simultaneous non-linear differential equation system- phase diagram, fixed point and stability. Economic applications in microeconomics and macroeconomics

ECO-A-CC-2-4-TU

Tutorial Contact hours: 15

Text:

- Alpha C. Chiang and Kavin Wainwright: Fundamental Methods of Mathematical Economics, Mc Graw Hill, 2005.

References:

1. K. Sydsaeter and P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia: Delhi, 2002.
2. Carl Simon and Lawrence Blume. Mathematics for Economists, W. W. Norton and Company, 1994
3. A. Mukherji and S. Guha: Mathematical Methods and Economic Theory, Oxford University Press, 2011.
4. Hands, D. W.: Introductory Mathematical Economics, Second Edition,2004.
5. Silberberg, E. and Suen, W.: The Structure of Economics : A Mathematical Analysis, Third edition, Mc-Graw Hill, 2001.
6. K. G. Binmore, Mathematical analysis, Cambridge University Press, 1991.
7. Archibald, G.C. and Lipsey, R.G. , An Introduction to Mathematical Treatment of Economics, 1967, Weidenfeld and Nicolson
8. Henderson, J.M. and Quandt, R.E., Microeconomic Theory : A Mathematical Approach, McGrawHill,1980.
9. Intrilligator, M.D., Mathematical Optimization and Economic Theory, Society for Industrial and Applied Mathematics, Philadelphia, 1971.
10. Allen, R.G.D., Mathematical Analysis for Economists, McMillan, London, 1967

11. Dorfman, R., Samuelson, P.A. and Solow, R.M. , Linear Programming and Economic Analysis, McGraw-Hill, 1958.
12. Dixit, A.K., Optimization in Economic Theory, Oxford University Press, 1976.

Economics Core Course V: ECO-A-CC-3-5-TH-TU

Intermediate Microeconomics –I

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours:15

[For Semester- III]

ECO-A-CC-3-5-TH

Unit 1: Theories of Consumer Behaviour and Applications 17 lecture hours

1.1 Inter-temporal choice (saving and borrowing)

1.2Revealed preference

1.3. Choice under uncertainty – utility function and expected utility, risk aversion and risk preference

1.4 Applications of Consumer Behaviour in Construction of Price Indices – Laspeyers and Paasche's indices

2. Unit 2: Production and Costs 20 lecture hours

2.1 Technology – general concept of Production Function, production with one and two variable inputs,total average and marginal products, short run and long run, returns to factor and returns to scale, Isoquants, marginal rate of technical substitution, isocost line and firm's equilibrium, elasticity of substitution

2.2 Types of production functions- Cobb-Douglas, fixed-coefficient and CES functions

2.3 Cost structure- implicit cost, explicit cost, accounting cost, sunk cost, economic cost, fixed cost, variable cost, total, average and marginal cost. Determinants of short run cost, cost curves, cost minimization and expansion path, short versus long run cost curves, economies of scale.

3. Unit 3: The Firm and Perfect Market Structure 20 lecture hours

3.1 Organization, Firms and Profit Maximization

3.2 Marginal Revenue, Marginal Cost and Profit Maximization

3.3 Perfect competition- short run competitive equilibrium of the firm, short run supply curve of firm and industry, Output choice and competitive equilibrium in long run, Economic rent and profit, long-run industry supply- constant, increasing and decreasing cost.

3.4 Consumer and Producer surplus, welfare and efficiency of competitive equilibrium. Government intervention and dead weight loss, Application- Minimum prices and price supports (price ceiling and price floors)

4. Unit 4: Input Market in Perfect Competition 18 lecture hours

4.1 Basic concepts- derived demand, productivity of an input, marginal product of an input, marginal revenue product

4.2 Marginal productivity theory of distribution

4.3 Labor market-supply of labor, competitive labor markets

4.4 Land markets and rent

ECO-A-CC-3-5-TU

Tutorial Contact hours: 15

Text

1. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson

2. G.S.Maddala and E. Miller, 1989, Microeconomics, Prentice Hall, McGraw Hill International Editions

3. Goon, A.M., Gupta, M.K. and Dasgupta, B.: Fundamentals of Statistics Vol.2,The World Press Pvt. Ltd., Kolkata. (For index number only)

References

1. Hal. R Varian , Intermediate Microeconomics, A modern Approach, WW Norton and Company, 8th edition, 2010 (T)

2. Gravelle, H. and Rees ,R., Microeconomics, Prentice Hall

3. Anindya Sen, Microeconomics, OUP

4. Satya Chakrabarty, Microeconomics, Allied Publishers

5. Ferguson, C. E. and Gould, J.P., Microeconomic Theory, Aitbs Publishers and Distributors, New Delhi.

6. Lipsey, R. and Chrystal, A., 2007, Economics, OUP

Economics Core Course VI: ECO-A-CC-3-6-TH-TU

Intermediate Macroeconomics-I

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[For Semester- III]

ECO-A-CC-3-6-TH

1. Income Determination in the Short-run (Part-II) : The IS-LM Model

14 lecture hours

- IS-LM Model - equilibrium, stability and comparative statics. Crowding out .Effects of fiscal and monetary policies.

2. Aggregate Demand and Aggregate Supply- the Complete Keynesian Model

14 lecture hours

- Derivation of aggregate demand curve.
- Derivation of aggregate supply curves both in the presence and absence of wage rigidity.
- Equilibrium, stability, and comparative statics-effects of monetary and fiscal policies. Effects of wage cut.
- Unemployment equilibrium and its causes- possible solutions including real balance effect.

3. Keynes vs. Classics **10 lecture hours**

- Keynesian vs classical system.
- Hybrid models under Classical/Keynesian framework.
- Friedman's restatement of classical ideas

4. Money Supply, Monetary Policy and Government Budgetary Operations

17 lecture hours

- Measures of money supply with special reference to India (M_1,M_2, M_3 and M_4)
- Balance sheet view of money supplied by the banking sector as a whole
- High powered money –definition
- Balance sheet of Reserve Bank of India and High powered money
- Balance sheet of Commercial banks and basic ideas of money multiplier theory.
- Deposit multiplier, currency multiplier, reserve multiplier, credit multiplier and money multiplier in the context of the theory of money supply
- Interest sensitivity of money supply and the slope of the LM curve.

- Monetary policy – Open Market Operations, Statutory Liquidity Ratio, Bank rate, variable reserve ratio, repo rate.
- Government Budget Deficit and Deficit Financing-Indian illustration. Deficit financing and monetary policy.

5. Inflation, Unemployment and Expectations **20 lecture hours**

- The concept of Inflationary Gap.
- Demand pull vs. Cost push inflation
- Mark-up inflation
- The concept of stagflation
- Central Bank's role in controlling inflation: Monetary policy.
- Inflation and unemployment trade-off.
- Four models of aggregate supply: The Sticky-Wage Model, The Worker-Misperception Model, The Imperfect Information Model and The Sticky-Price Model.
- Deriving the Phillips Curve from Aggregate Supply Curve.
- Short run and long- run Phillips curve – role of adaptive expectations and rational expectations.
- Disinflation, Sacrifice Ratio and policy ineffectiveness.

ECO-A-CC-3-6-TU

Tutorial Contact hours: 15

Textbooks:

- Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
- N. Gregory Mankiw. Macroeconomics, Worth Publishers, 2010

References

- Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005.
- Ackley Gardner (old), Macroeconomic Theory, Macmillan, 1961
- Ackley Gardner(new), Macroeconomics : Theory and Policy : Macmillan,1978
- Ghosh Chandana and Ghosh Ambar, Macroeconomics, PHI Learning Pvt Ltd, 2014
- Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7th edition, 2011.
- Venieris, Y.P. and Sebold F.D. , Macroeconomics: Models and Policy, John Wiley and Sons, 1977
- Richard T. Froyen, Macroeconomics, Pearson Education Asia, 10th edition, 2016.
- William Branson. Macroeconomic Theory and Policy, Indian reprint, East West Press, 3rd edition, 2014.
- Levacic Rosalind and Rebmann Alexander, Macroeconomics: An Introduction to Keynesian and Neo-Keynesian Controversies, Palgrave Macmillan, 1982.

- Sikdar Soumyen, Principles of Macroeconomics, Oxford University Press
- Blaug Mark , Economic Theory in Retrospect, 5th Edition, Cambridge University Press, 1997
- Mueller, M. (edited), Readings in Macroeconomics, London: Holt, Rinehart and Winston, 1973.

Economics Core Course VII: ECO-A-CC-3-7-TH-TU

Statistical Methods for Economics

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[For Semester III]

ECO-A-CC-3-7-TH

1. Introduction and Overview **6 lecture hours**

- Subject-matter - the distinction between population and sample *[1 lecture hour]*
- Representation of data- graphical (line diagram, bar diagram, pie chart) and tabular method *[2 lecture hours]*
- Frequency Distribution *[3 lecture hours]*

2. Descriptive Statistics **13 lecture hours**

- Measures of central tendency(arithmetic mean, geometric mean, harmonic mean, median and mode, and their properties, Quartiles,Deciles and Percentiles) *[3 lecture hours]*
- Dispersion(range, quartile deviation, mean deviation, standard deviation, coefficient of variation, coefficient of mean deviation, coefficient of quartile deviation, Lorenz curve and Gini coefficient) *[4 lecture hours]*
- Moments, Skewness and Kurtosis (definition, computation) *[2 lecture hours]*
- Correlation and Regression (definition, computation, properties) *[4 lecture hours]*

3. Elementary Probability Theory **10 lecture hours**

- Sample spaces and events (concepts and definitions using set theory) *[2 lecture hours]*
- Axiomatic definition of probability and properties, theorem of total probability *[3 lecture hours]*
- Conditional probability, theorem of compound probability *[3 lecture hours]*
- Bayes' theorem and its applications. *[2 lecture hours]*

4. Probability Distributions **18 lecture hours**

- Random variable(discrete and continuous) *[1 lecture hour]*
- Probability distributions (pmf, pdf. Distribution functions) *[2 lecture hours]*

- Expected values of random variables (mean,variance, raw moment, central moment, moment generating functions) *[3 lecture hours]*
- Properties of commonly used discrete and continuous distributions:

  Binomial -(derivation of pmf, mean,variance, moments, moment generating functions, problems) *[3 lecture hours]*

  Poisson - (derivation of pmf, mean, variance, moments, moment generating functions, problems) *[3 lecture hours]*

  Normal - (derivation of pdf, mean, variance, moments, moment generating functions, problems) *[3 lecture hours]*
- Joint distribution functions of random variables (discrete and continuous) - joint pdf (pmf), marginal pdf (pmf)., conditional pdf (pmf) *[3 lecture hours]*

5. Sampling **14 lecture hours**

- Principal steps in a sample survey (concepts of population, sample, parameter, statistic) *[2 lecture hours]*
- Methods of sampling-

  SRSWR, SRSWOR(use of random sampling numbers) *[2 lecture hours]*

  Stratified sampling (basic concepts only) *[1 lecture hour]*

  Multi-staged sampling (basic concepts only) *[1 lecture hour]*
- Sampling distribution of sample mean and sample proportion

  Mean and standard error both inSRSWR and SRSWOR *[4 lecture hours]*

  Standard normal, chi-square, Student's t and F distributions – definitions, important properties (mean and variance) *[4 lecture hours]*

6. Statistical inference **14 lecture hours**

- Point estimation-Properties of a good estimator; *[4 lecture hours]*
- Basic principles of

  Ordinary Least Square, *[2 lecture hours]*

  Maximum Likelihood Method *[1 lecture hour]*

  Method of Moments; *[1 lecture hour]*
- Interval estimation.*[2 lecture hours]*
- Testing of hypothesis (basic conceptsof null hypothesis, alternative hypothesis, type I and Type II errors, power of a test, p-value) *[4 lecture hours]*

ECO-A-CC-3-7-TU

Tutorial contact hours: 15 [for revision, doubt clearing, solving problems]

Text books

- Goon, A. M, Gupta, M. K, and Dasgupta, B. Fundamentals of Statistics (Volume One, Volume two), The World Press Private Ltd
- William G. Cochran, Sampling Techniques, John Wiley, 2007

Reference books

- John E. Freund, Mathematical Statistics, Prentice Hall, 1992.
- Mood, A.M., F. A. Graybill and D.C. Boes, Introduction to the theory of statistics, McGraw Hill, 1974.

Skill Enhancement Course I: ECO-A-SEC-3-A(1)-TH

Data Analysis [DA]

Total Marks: 100 [Theory (Th) 80 + Internal Assessment 10+Attendance: 10]

Total Credits: 2,

No. of Lecture hours: 30

[For Semester III]

Unit 1: Collection and representation of data **12 lecture hours**

1.1 Collection of data (some methodological issues) *[4 lecture hours]*

1.1.1 Census

1.1.2 Sample survey

1.2 Representation of data *[2 lecture hours]*

1.3 The basics of data management in Stata / R / Eviews / SPSS / MS Excel *[6 lecture hours]*

Unit 2: Indian Official Statistics (Basic concepts) **18 lecture hours**

1. Central Statistical Office (CSO) – National Accounts Statistics (NAS), Industrial Statistics (ASI, IIP) *[6 lecture hours]*
2. National Sample Survey Office (NSSO) – Household Consumer Expenditure Survey Rounds, Employment and Unemployment Survey Rounds *[6 lecture hours]*
3. Census of India – Population Census 2011 *[4 lecture hours]*
4. Reserve Bank of India (RBI) – Handbook of Statistics on Indian Economy (Selected parts) *[2 lecture hours]*

Suggested Readings:

1. Goon, A. M, Gupta, M. K, and Dasgupta, B. *Fundamentals of Statistics (Volume One)*, The World Press Private Ltd
2. GOI, *Note on Sample Design and Estimation Procedure of NSS 68th Round*, National Sample Survey Office, Ministry of Statistics and Programme Implementation.
3. GOI, *SRS Statistical Report 2016*, Office of the Registrar General & Census Commissioner, India

Suggested Websites

www.mospi.nic.in

www.censusindia.gov.in

www.rbi.org.in

Skill Enhancement Course I: ECO-A-SEC-3-A(1)-TH

Rural Development [RD]

Total Marks: 100 [Theory(Th) 80 + Internal Assessment 10+Attendance: 10]

Total Credits: 2,

No. of Lecture hours: 30

[For Semester III]

1. **Aspects of Rural Development** **6 lecture hours**

- Concept of Rural Development
- Rural Development vs. Agricultural Development
- Role of NGOs in Rural Development
- Rural Non Farm Sector and Rural Development

2. **Panchayats and Rural Development** **5 lecture hours**

- Decentralized Planning and Participatory Development
- Role of Panchayats in Decentralized Rural Development
- Participatory Rural Appraisal
- Panchayats and Rural Development in West Bengal

3. **Rural Credit and Self Help Groups(SHGs)** **11 lecture hours**

- Role National Bank for Agriculture and Rural Development (NABARD) for promoting Rural Development
- Constraints of micro-enterprises in rural areas
- Credit needs for rural non farm sector.
- The concept of Micro credit
- Micro credit and the role of Grameen Bank
- Need for SHG for formation and features of SHG
- SHGs in India

4. **Critical Evaluation of Selected Government Programmes and Rural Development** **8 lecture hours**

- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and Rural Development
- Child labour and school drop-out in rural areas. Mid-day Meal and Rural Development
- National Rural Health Mission (NRHM) and Rural Development

- Pradhan Mantri Gram Sadak Yojana (PMGSY) and Rural Development

References

1. Katar Singh , Rural Development : Principles, Policies and Management, Sage Publications, New Delhi
2. K.G. Karmakar, Rural Credit and Self-Help Groups, Sage Publications, New Delhi
3. S.Sau, Rural Industrialization –Development Trajectory in India, Farma K.L.M., Kolkata
4. Misra D. and Puri K. Indian Economy, Himalaya Publishing House
5. Datt and Sundharam (Revised by G.Datt and A. Mahajan) , Indian Economy, 70th edition, S. Chand

13. N. Narayanasami, Participatory Rural Appraisal: Principle, Methods and Applications, Sage Publications, New Delhi, 2009.
14. Vasant Desai, A Study of Rural Economics, Himalaya Publishing House, New Delhi.
15. Mahi Pal, "Panchayati Raj and Rural governance", Economic and Political Weekly, Jan. 10-16, vol. XXXIX, 2004,No.2, p.13
16. Raghava, D. V. Rao, Panchayats and Rural Development, Ashish Publishing House, New Delhi, 1980.
17. Ram Reddy, Pattern of Panchayati Raj in India, Heritage Publishers, New Delhi, 2005.
18. Latest Reports on Panchayati Raj Development in West Bengal

Economics Core Course VIII: ECO-A-CC-4-8-TH-TU

Intermediate Microeconomics II

Total Marks: 100 [Theory (Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[For Semester IV]

ECO-A-CC-4-8-TH

Unit 1: Imperfect Market Structure **40 lecture hours**

1.1 Monopoly and barriers to entry- output determination and price rule, measure and sources of monopoly power, social costs of monopoly power-deadweight loss

1.2 Pricing with market power- first, second and third degree price discrimination, multiplant monopoly

1.3 Monopolistic competition- short run and long run equilibrium, excess capacity

1.4 Oligopoly- Oligopoly equilibrium as Nash equilibrium, Cournot, Bertrand and Stackelberg Model- use of isoprofit curves and simple game theoretic interpretation. Sweezy's kinked demand

curve model and non-collusive equilibrium. Competition versus collusion- the Prisoners' Dilemma. Collusive Oligopoly –Cartels and Price Leadership

Unit 2: Input market under Imperfect Competition 5 lecture hours

2.1 Monopsony, bilateral monopoly in labour market

Unit 3: General Equilibrium, Efficiency and Welfare 30 lecture hours

3.1 General Equilibrium and Economic Efficiency- Exchange, production and welfare, Pareto Optimality, Edgeworth box and contract curve, Pareto efficiency and perfect competition

3.2 Reasons for Market failure, Pareto efficiency and market failure (externalities and public goods), property right and Coase Theorem

3.3 Markets with asymmetric information-adverse selection, moral hazards, agency problems (concepts only)

ECO-A-CC-4-8-TU

Tutorial Contact Hours: 15

Text

- Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson

References

1. Hal. R Varian , Microeconomic Analysis, WW Norton and Company, 3rd edition, 2013
2. J Tirole, Theory of Industrial Organisation, MIT Press, 1988
3. K Binmore, Fun and Games: A text on Game Theory, OUP,1991
4. Anindya Sen, Microeconomics, OUP
5. C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning, 2010
6. Satya Chakrabarty, Microeconomics, Allied Publishers
7. Ferguson, C. E. and Gould, J.P., Microeconomic Theory, Aitbs Publishers and Distributors, New Delhi.
8. Cohen, K.J. and Cyert, R.M. , "Theory of the Firms: Resource Allocation in a Market Economy" , Prentice Hall India,1981
9. Chauhan, S.P.S. , " Microeconomics- An Advanced Treatise", Prentice Hall India, 2009.

Economics Core Course IX: ECO-A-CC-4-9-TH-TU

Intermediate Macroeconomics II

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[For Semester IV]

ECO-A-CC-4-9-TH

1. Basic Tenets of New Classical and New Keynesian Theories 20 lecture hours

- New Classical Theory-The concept of rational expectations and the theory of real business cycle-introductory ideas
- New Keynesian Theory- nominal rigidities and real rigidities, rigidities in interest rates and credit rationing-introductory ideas

2. Macroeconomic Foundations -II 20 lecture hours

- Consumption: Keynesian consumption function; Fisher's theory of optimal intertemporal choice; life-cycle and permanent income hypotheses; Dusenberry's relative income hypothesis; rational expectations and random-walk of consumption expenditure.
- Demand for money: Regressive Expectations and Tobin's portfolio choice models; Baumol's inventory theoretic money demand.

3. Economic Growth 35 lecture hours

- Harrod and Domar models of economic growth.
- Solow one sector growth model-golden rule- -dynamic efficiency.
- Technological progress ,
- Elements of endogenous growth theory-basic ideas-the AK model

ECO-A-CC-4-9-TU

Tutorial Contact hours: 15

Textbooks:

- N. Gregory Mankiw. Macroeconomics, Worth Publishers, 2010
- Ghosh Chandana and Ghosh Ambar, Macroeconomics, PHI Learning Pvt Ltd, 2014

References

- Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005.
- Romer David , Advanced Macroeconomics, McGraw Hill Education, 4th edition, 2011.
- Ghosh Chandana and Ghosh Ambar, Economics of the Public Sector, PHI Learning Pvt Ltd, 2008

- Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7th edition, 2011.
- Richard T. Froyen, Macroeconomics, Pearson Education Asia, 10th edition, 2016.
- Steven M. Sheffrin, Rational Expectations, Cambridge University Press, 2nd edition, 1996.
- William Branson. Macroeconomics , Harper and Row, 3rd edition, 1989
- Snowdon and Vane (ed), A Macroeconomics Reader, Routledge, Taylor and Francis Group.
- R. Barro. Macroeconomics, 5th edition, The MIT Press, 1989
- A.K.Sen (ed). Growth Economics, Penguin, 1970
- Barro, R.J. and Xavier Sala-i-Martin , Economic Growth,
- Errol D'Souza. Macroeconomics, Pearson Education (New Delhi), 2009.
- Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
- Laidler, E.W. ,The Demand for Money : Theories and Evidence, Dun-Donnelley Publishing Corporation, New York, 1978.

Economics Core Course X: ECO-A-CC-4-10-TH-TU

Introductory Econometrics

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[For Semester IV]

ECO-A-CC-4-10-TH

1. Nature and Scope of Econometrics 4 lecture hours

1.1 Distinction between Economic Model and Econometric model *[1 lecture hour]*

1.2 Concept of stochastic relation, Role of random disturbance in econometric model *[1 lecture hour]*

1.3 Types of data *[1 lecture hour]*

1.4 Application of Econometrics in different branches of social science *[1 lecture hour]*

2. Classical Linear Regression Model (Simple linear regression and multiple linear regression): part 1 15 lecture hours

2.1 The classical assumptions (basic interpretation) *[1 lecture hour]*

2.2 Concepts of population regression function and sample regression function *[3 lecture hours]*

2.3 Estimation of model by method of ordinary least squares (Derivation in simple linear model (SLRM) and multiple linear model (MLRM) with two regressors only) *[6 lecture hours]*

2.4. Simple correlation, partial correlation and multiple correlation (Definition, and interpretation in the context of SLRM and MLRM) *[2 lecture hours]*

2.5 Limitations of SLRM and additional complications in MLRM *[2 lecture hours]*

2.6 Economic interpretations of the estimated model *[1 lecture hour]*

3. Classical Linear Regression Model (Simple linear regression and multiple linear regression): part 2 10 lecture hours

3.1 Properties of the Least Squares Estimators (BLUE) in SLRM- Gauss-Markov theorem *[4 lecture hours]*

3.2 Qualitative (dummy) independent variables – intercept dummy and slope dummy (only interpretation of the model) *[3 lecture hours]*

3.3 Forecasting - Ex-post forecast and Ex-ante forecast, forecast error (only for two variable model) *[3 lecture hours]*

4. Statistical inference in linear regression model 26 lecture hours

4.1 Use of standard normal, chi2, t, and F statistics in linear regression model *[9 lecture hours]*

4.2 Testing hypothesis *[12 lecture hours]*

Single test (t test and chi2 test)

Joint test (F test)

4.3 Goodness of fit (in terms of R^2, adjusted R^2 and F statistic), Analysis of Variance (ANOVA) *[3 lecture hours]*

4.4 Statistical significance and economic importance *[2 lecture hours]*

5. Violations of Classical Assumptions 12 lecture hours

5.1 Multicollinearity - Consequences, Detection (Variance Inflationary Factor (VIF)) and Remedies *[4 lecture hours]*

5.2 Heteroscedasticity - Consequences, Detection (Lagrange Multiplier test) and Remedies *[4 lecture hours]*

5.3 Autocorrelation - Consequences, Detection (Durbin-Watsontest) and Remedies *[4 lecture hours]*

6. Specification Analysis 8 lecture hours

6.1 Omission of a relevant variable *[2 lecture hours]*

6.2 Inclusion of irrelevant variable *[2 lecture hours]*

6.3 Tests of specification errors *[2 lecture hours]*

6.4 Testing for linearity and normality assumptions *[2 lecture hours]*

ECO-A-CC-4-10-TU

Tutorial Contact hours: 15

Text Books

1. Gujarati, Damodar (2004), *Basic Econometrics*, McGraw-Hill

2. Wooldridge, Jeffrey M. (2013), *Introductory Econometrics* – A Modern Approach, CENGAGE learning

Reference Books

1. Maddala, G. S. (2002), *Introduction to Econometrics*, Macmillan Publishing Company
2. Goon, A. M, Gupta, M. K, and Dasgupta, B., *Fundamentals of Statistics* (Volume One), The World Press Private Ltd

Skill Enhancement Course II: ECO-A-SEC-4-B(2)-TH

Research Methodology

Total Marks: 100 [Theory (Th) 80 + Internal Assessment 10+Attendance: 10]

Total Credits: =2,

No. of Lecture hours: 30,

[For Semester IV]

Unit 1 : Methodological Issues 1 **10 lecture hours**

- Locating the basic issues- theme based literature survey and motivation behind any study-objectives of the study-development of writing skills
- Designing the sampling frame in case of field survey- the role of pilot survey
- The role of random numbers in drawing random sample
- Methods behind preparation of questionnaire in case of field survey
- Data entry after field survey
- Tabular representation of data and graphs for data interpretation

Unit 2: Methodological Issues 2 **20 lecture hours**

- Theoretical and Empirical Research in Economics.
- Common sections of an ideal research paper in Economics.
- Illustrations of empirical research work. Reporting the regression results and interpretation of the results: the role of statistical inference.[The course instructor should focus on framing the testable hypothesis and the role of statistical inference in empirical research]
- Illustrations of theoretical research: specification of the model, closing the model, checking stability of the model for meaningful comparative static results. [The course instructor should focus on the role of stability analysis in theoretical models by showing the method of linearizing non-linear differential equations. Illustrations can be made from IS-LM model by using trace and determinant conditions of the Jacobian matrix-the role of phase diagrams]
- Role of footnotes or end notes in a research paper
- Bibliography, reference and citation

- Writing the abstract of a research paper
- Key words and JEL Classification
- Presentation of a research paper through power point. Basic rules to be followed for a good presentation. Role of diagrams, graphs, pictures and charts.

Suggested Readings

1. Goon, A. M, Gupta, M. K, and Dasgupta, B. Fundamentals of Statistics (Volumes One and Two),The World Press Private Ltd
2. C.R. Kothari : Research Methodology : Methods and Techniques (second revised edition), New Age India (P) Ltd Publishers.
3. Alpha C. Chiang and Kavin WainWright : Fundamental Methods of Mathematical Economics, McGraw Hill, 2005.[For stability analysis]

Skill Enhancement Course II: ECO-A-SEC-4-B(2)-TH

Managerial Economics

Total Marks: 100 [Theory (Th) 80 + Internal Assessment 10+Attendance: 10]

Total Credits: =2,

No. of Lecture hours: 30,

[For Semester IV]

1. Demand, Cost and Profit Analysis 6 lecture hours

- Demand for durable and non durable products, demand forecasting techniques
- Cost estimation
- Cost-volume-profit analysis (break even analysis)- objectives and assumptions; determination of breakeven point, limitations of c-v-p analysis

2. Pricing Policies and practices 3 lecture hours

- Factors governing prices, price discounts and differentials, price forecasting

3. Capital Budgeting 8 lecture hours

- What is capital budgeting, need for capital budgeting, different steps in capital budgeting, Capital budgeting appraisal methods – payback method, accounting rate of return method, net present value method, interest rate of return method, benefit cost ratio method. Capital rationing, alternative methods of financing investments

4. Cost of capital 5 lecture hours

- Cost of debt capital, cost of share capital, cost of equity capital, cost of retained earnings

5. Inventory Management **8 lecture hours**

- Inventory costs, concepts of average inventory, various inventory models- economic order quantity, optimum number of orders per year, optimum number of days supply per order.

References

- Varshney R.L., and Maheshwari K.L. – Managerial Economics, Sulatn Chand, N Delhi
- Keat P. G. and Young P.K.Y – Manegerial Economics, Pearson Education, N Delhi]
- Mehta P.L - – Managerial Economics, Sulatn Chand, N Delhi
- Samuelson W.F and Marks S,G - – Managerial Economics, Wiley Student Education
- Clarke T. International Corporate Governance, Routledge.

Economics Core Course XI: ECO-A-CC-5-11-TH-TU

International Economics

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours:15

[Semester V]

ECO-A-CC-5-11-TH

1. Absolute and Comparative Advantages of Trade **9 lecture hours**

- Adam Smith's theory of absolute advantage.
- David Ricardo's theory of comparative advantage.
- Arbitrage as the basis and direction of trade; fundamental sources of cross-country price differences and arbitrage-concept of comparative advantage; externalities, regulation and perverse comparative advantage
- One factor economy, production possibility frontier, relative demand and relative supply, terms of trade, trade in the Ricardian world, determination of intermediate TOT, complete vs incomplete specialization, complete specialization and gains from trade.

2. The Building Blocks of Trade Theory **14 lecture hours**

- The concept of community indifference curve-Justification and properties.
- The need for trade indifference curves, derivation of trade indifference curves, properties of trade indifference map, Offer curves and its properties. Three important elasticities- the elasticity of offer curves, the elasticity of demand for imports, the elasticity of supply of exports. International equilibrium and offer curves, terms of trade (TOT) and stability, the Marshall-Lerner condition,
- Gains from Trade (GFT) theorem, illustration of GFT, decomposition of GFT, substitution possibilities and magnitude of GFT.

- Production structure for neo-classical trade models, role of constant returns to scale, the concept of unit isoquants, duality in the production structure, significance of the envelope condition in trade models

3. Factor Endowment and Trade (Heckscher-Ohlin-Samuelson Model) 15 lecture hours

- Heckscher-Ohlin (HO)theorem and price vs physical definitions of relative factor abundance.
- Role of homotheticity of tastes in the context of physical definition
- Factor Intensity Reversal in the context of price and physical definitions and invalidity of HO Theorem.
- Factor intensity ranking, one-to-one correspondence between commodity price ratio & factor price ratio (Stolper-Samuelson theorem), One to one correspondence between endowment ratio and production proportion (Rybczyski theorem) .
- The Factor Price Equalization Theorem. Factor price equalization and complete specialization.
- Incomplete Specialization, Factor price equalization and Factor Intensity Reversal
- Empirical studies- Leontief Paradox.

4. Applications of Neo-classical Trade Models for developing countries 10 lecture hours

- Jones (1965) Heckscher-Ohlin type 2x2(two factors-two commodities) full employment model for small open developing economies. Basic structure –significance of the assumption of constant returns to scale- the decomposability property-the capital intensity condition in physical and value terms- Implications of Stolper-Samuelson and Rybczynski theorems-the price and output magnification effects.
- Jones (1971) 3x2(three factors-two commodities) specific-factor model. Basic structure-significance of the assumption of constant returns to scale-the indecomposability property. Implications of price magnification effects in specific factor model.

5. Trade Policy 12 lecture hours

- Partial Equilibrium Analysis of Tariff - cost–benefit, Quota, Quota- Tariff equivalence & non-equivalence, monopoly effects of quota, subsidy and voluntary export restraint.
- General Equilibrium Analysis- distinction between large and small economy, welfare effects of a tariff on small country and large country. Tariff ridden offer curve, Tariff war, Optimum tariff for large economy, Metzler's Paradox.

6. Open Economy Macroeconomics and Balance of Payments 15 lecture hours

- Determination of equilibrium income in open economy. Foreign Trade Multiplier with & without repercussion effects.

- Balance of Payment accounts in an open economy. Autonomous and accommodating transactions.
- Fixed &Flexible Exchange Rates: adjustment of demand and supply of Foreign Exchange, Effect of devaluation, The Mundel-Fleming Model (IS LM BP model)

ECO-A-CC-5-11-TU

Tutorial Contact hours: 15

Texts

1. P. Krugman and M. Obstfeld- International Economics (8th Edition) ; Pearson Education
2. R. Caves, J. Frankel and R.W. Jones – World Trades & Payments (9th Ed); Pearson Education.
3. Rajat Acharyya- International Economics; Oxford University Press

References

- J.R. Markusen, J.R. Melvin, W.H. Kaempfer, K.E. Maskus – International Trade – Theory and Evidence, McGraw Hill
- B. Sodersten, and G. Reed (1994) : International Economics , Macmillan, London, 3rd edition.
- M. Chacoliades (1978) : International Trade: Theory and Policy, New York, McGraw- Hill
- R. Dornbusch : Open Economy Macroeconomics, Basic Books, Inc. Publishers, New York**.**
- Jones, R.W. : " The Structure of Simple General Equilibrium Models", Journal of Political Economy, Vol 73, 1965, pp 551-572
- Jones, R.W. : " A Three Factor Model in Theory, Trade and History", in Bhagwati. J. et al (eds) Trade, Balance of Payments and Growth, 1971, North Holland, Amsterdam.
- Chaudhuri, S. and Mukhopadhyay, U.: Foreign Direct Investment in Developing Countries: A Theoretical Evaluation, Springer, Chapter 2 only, 2014.

Economics Core Course XII: ECO-A-CC-5-12-TH-TU

Indian Economy

Total Marks: 100

[Theory (Th) 65 + Tutorial Based Term Paper (Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial Based Term Paper contact hours: 15

[Semester V]

ECO-A-CC-5-12-TH

1. Economic Development since Independence 20 lecture hours

- Growth and development under different policy regimes (from planning to market based development)
  - Objectives, achievements and failures of Planning *[4 lecture hours]*
  - Economic crisis during the late 1980s *[3 lecture hours]*

- Economic Reforms –Critical Analysis *[3 lecture hours]*

- Structural changes in the post-reforms period *[5 lecture hours]*
- Regional variation of growth and development *[5 lecture hours]*

2. Population and Human Development **15 lecture hours**

- Demographic trends and issues *[6 lecture hours]*
- Education and health:Basic problems and Government measures, Right to Education (RTE) Act 2009 *[9 lecture hours]*

3. Growth and Distribution **20 lecture hours**

- Trends in GDP and per capita GDP *[5 lecture hours]*
- Growth, poverty and inequality *[5 lecture hours]*
- Youth unemployment (School Transition to Work) *[5 lecture hours]*
- Policy perspectives in growth and distribution *[5 lecture hours]*

4. **Economic Reforms in India** **20 lecture hours**

- Banking sector reforms *[5 lecture hours]*
- Reforms in tax policy *[5 lecture hours]*
- Reforms in the external sector *[5 lecture hours]*
- Reforms in Labour market *[5 lecture hours]*

ECO-A-CC-5-12-TU

Tutorial Based Term Paper Contact Hours: 15 (for review classes, presentation by the students)

A term paper is to be prepared by the student under Tutorial Based Term Paper on any topic under the four broad themes covering the syllabus for the tutorial. Term paper should cover a literature survey of the topic along with a critical evaluation of the policy measures undertaken in the Indian context to tackle the specified problem. It should be prepared under a full time teacher of the subject belonging to the institution. All total 15 hours are allotted for a term paper. It is to be evaluated (all total 15 marks) jointly by an internal and an external examiner(if it is permitted under University rules) on the basis of the content of the term paper along with viva-voce on the term paper.

References

- Jean Dreze and AmartyaSen, 2013. An Uncertain Glory: India and its Contradictions, Princeton University Press.
- Jean Dreze and Amartya Sen: Economic Development and social opportunity, OUP

- Mihir Rakshit, 2011, Macroeconomics of Post-Reform India, OUP
- Sukhomoy Chakraborty: Development Planning: The Indian Experience, OUP
- Uma Kapila: Indian Economy since independence, Academic Foundation
- Ahluwalia and Little (ed): India's Economic Reforms and Development, OUP
- Joshi and Little: India's Economic Reforms, OUP
- Pulapre Balakrishnan, 2007, the Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November.
- Panchanan Das. (2012), Wage Inequality in India - Decomposition by Sector, Gender and Activity Status, Economic and Political Weekly, 47(50), pp. 58-64
- Rakesh Mohan, 2008, ―Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, Economic and Political Weekly, May.
- S.L. Shetty, 2007, ―India's Savings Performance since the Advent of Planning, in K.L. Krishna and A. Vaidyanathan, editors, Institutions and Markets in India's Development.
- Himanshu, 2010, Towards New Poverty Lines for India, Economic and Political Weekly, January.
- Jean Dreze and Angus Deaton, 2009, Food and Nutrition in India: Facts and Intepretations, Economic and Political Weekly, February.
- Himanshu. 2011, ―Employment Trends in India: A Re-examination, Economic and Political Weekly, September.
- Rama Baru et al, 2010, ―Inequities in Access to Health Services in India: Caste, Class and Region, Economic and Political Weekly, September.
- Geeta G. Kingdon, 2007, ―The Progress of School Education in India, Oxford Review of Economic Policy
- J.B.G. Tilak, 2007, ―Post Elementary Education, Poverty and Development in India, International Journal of Educational Development.
- T. Dyson, 2008, ―India's Demographic Transition and its Consequences for Development‖ in Uma Kapila, editor, Indian Economy Since Independence, 19th edition, Academic Foundation.
- Kaushik Basu, 2009, ―China and India: Idiosyncratic Paths to High Growth, Economic and Political Weekly, September.
- K. James, 2008, ―Glorifying Malthus: Current Debate on Demographic Dividend in India Economic and Political Weekly, June.
- Reetika Khera, 2011, ―India's Public Distribution System: Utilisation and Impact Journal of Development Studies.
- Aniruddha Krishna and DevendraBajpai, 2011, ―Lineal Spread and Radial Dissipation: Experiencing Growth in Rural India, 1992-2005, Economic and Political Weekly, September.
- Kaushik Basu and A. Maertens, Eds, 2013, The New Oxford Companion to Economics, Oxford University Press.

Discipline Specific Elective – A(1):

ECO-A-DSE-5-A(1)-TH-P

Applied Econometrics [AE]

Total Marks: 100

[Theory (Th) 50+ Practical (P) 30 + Internal Assessment 10 + Attendance: 10]

Total Credits: [4(Th)+2(P)]=6 ,

No. of Lecture hours: 60, No. of Practical hours: 60/No. Of Practical classes: 30

[Semester –V]

ECO-A-DSE-5- A(1) –TH

1. Steps in empirical research **10 lecture hours**

1.1 Use of econometric models in empirical research – some basic concepts *[5 lecture hours]*

1.2 The basic commands in Stata / R *[5 lecture hours]*

2. Regression Diagnostics and Specification **20 lecture hours**

2.1 Misspecification *[4 lecture hours]*

2.2 Functional forms *[4 lecture hours]*

2.3 Model selection *[4 lecture hours]*

2.4 Application with Stata / R *[8 lecture hours]*

3. Application of Regression Analysis **30 lecture hours**

3.1 Cross section analysis – Linear regression model with two regressors (by using survey data like NSSO with Stata / R) *[6 lecture hours]*

3.2 Time series analysis (very preliminary level) – Basic concepts of time series, Estimating linear trend (by using NAS with Stata / R) *[12 lecture hours]*

3.3 Panel data analysis – basic concepts of fixed effects model; random effects model – (Application with Indian Official Statistics using Stata / R) *[12 lecture hours]*

ECO-A-DSE-5-A(1)-P

Total Practical Hours: 60, No of Practical Classes: 30

Applications of use of softwares STATA or R will be demonstrated in the computer laboratory in practical classes and the practical examination will be conducted in the usual manner as mentioned in CSR.

Text Books

1. Christopher F. Baum, (2006), An Introduction to Modern Econometrics Using Stata, Stata Press

2. Maddala, G. S. (2002), Introduction to Econometrics, Macmillan Publishing Company

3. Wooldridge, Jeffrey M. (2013), Introductory Econometrics – A Modern Approach, CENGAGE learning

4. Hamilton L. Statistics with Stata

References

STATA USER'S GUIDE RELEASE 13, https://www.stata.com/manuals13/u.pdf

Discipline Specific Elective – A(1):

ECO-A-DSE-5-A(1)-TH-TU

Economic History of India (1857-1947) [EHI]

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[Semester- V]

ECO-A-DSE-5-A(1) –TH

1. Impact of British rule on India **30 lecture hours**

- Deindustrialization
- Commercialization of agriculture
- Economic Drain

2. Aspects of Economic Policies in British India **45 lecture hours**

- Land policy
- Policy of Discriminating Protection
- Early Industrial Development and Managing Agency System
- Currency and monetary policy
- Development of Infrastructure – Railways

ECO-A-DSE-5-A(1)-TU

Tutorial contact hours: 15

References

1. Lakshmi Subramanian, "History of India 1707-1857", Orient Blackswan, 2010, Chapter 4.
2. SumitGuha, 1991, Mortality decline in early 20th century India', Indian Economic and Social History Review (IESHR), pp 371-74 and 385-87.
3. Tirthankar Roy, The Economic History of India 1857-1947, Oxford University Press, 3rd edition, 2011.
4. B. Chandra B. (2010): Rise and Growth of Economic Nationalism in India, HarAnand Publications,
5. J. Krishnamurty, Occupational Structure, Dharma Kumar (editor), The Cambridge Economic History of India, Vol. II, (henceforth referred to as CEHI), 2005, Chapter 6.
6. IrfanHabib, Indian Economy 1858-1914, A People's History of India, Vol.28, Tulika, 2006.

7. Ira Klein, 1984, ―When Rains Fail: Famine relief and mortality in British India‖, IESHR 21.
8. Jean Dreze, Famine Prevention in India in Dreze and Sen (eds.) Political Economy of Hunger, WIDER Studies in Development Economics, 1990, pp.13- 35.
9. John Hurd, Railways, CEHI, Chapter 8, pp.737-761.
10. Rajat Ray (ed.), Entrepreneurship and Industry in India, 1994.
11. AK Bagchi, ―Deindustrialization in India in the nineteenth century: Some theoretical implications Journal of Development Studies, 1976.
12. MD Morris, Emergence of an Industrial Labour Force in India, OUP 1965, Chapter 11, Summary and Conclusions.
13. K.N. Chaudhuri, Foreign Trade and Balance of Payments, CEHI, Chapter 10.
14. B.R. Tomlison, 1975, India and the British Empire 1880-1935, IESHR, Vol.XII.
15. Dharma Kumar, The Fiscal System, CEHI, Chapter 12.
16. Basudev Chatterjee, Trade, Tariffs and Empire, OUP 1992, Epilogue.
17. Daniel Thorner, Agrarian Prospect in India, 1977.
18. Visaria and P. Visaria, Population. CEHI, Chapter

Discipline Specific Elective-B(1):
ECO-A-DSE-5-B(1)-TH-TU
Comparative Economic Development (1850-1950) [CED]

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[Semester-V]

ECO-A-DSE-5-B(1)-TH

1. Strategies and Policies for Economic Development 30 lecture hours

- Laissez-faire and free trade
- Strategy of industrialization in Soviet Union.

- Ha-Joon Chang. 2002. *Kicking Away the Ladder—Development Strategy in Historical Perspective*. London: Anthem Press. Chapter 2 (excluding NICs).
- Alec Nove. 1992. *An Economic History of the USSR 1917-1991*, London: Penguin 1992, chapter 8.

2. Regions of contemporary development 45 lecture hours

- Success stories of Asia : Japan, South East Asia and China
- Crisis and failures of Latin America and Africa

- Ha-Joon Chang. 2002. *Kicking Away the Ladder—Development Strategy in Historical Perspective*. London: Anthem Press. Chapter 2, 46-51.

- Ha-Joon Chang. 2004. "The East Asian Development Experience", in *Rethinking Development Economics,* edited by Ha-Joon Chang, pp. 107-124. London: Anthem Press.
- PranabBardhan, "What Makes a Miracle: Some Myths About the Rise of China and India", *Boston Review*, January/February 2008; and "Introduction: The Myths Floating Around the Giants", in *Awakening Giants, Feet of Clay: Assessing the Economic Rise of China and India* (Princeton: Princeton University Press, 2010.
- Gabriel Palma. 2004. "Latin America During the Second Half of the Twentieth Century – From the 'Age of Extremes' to the Age of 'End-of-History' Uniformity", in *Rethinking Development Economics,* edited by Ha-Joon Chang, pp. 125-151. London: Anthem Press.
- Kwan Kim. 2005. "Development Crisis in Sub-Saharan Africa: Globalization, Adjustment and the Roles of International Institutions", in *Global Development and Poverty Reduction*, edited by John-ren Chen and David Sapsford, pp. 294-320. Cheltenham and Northampton: Edward Elgar, 2005.

ECO-A-DSE-5-B(1)-TU

Tutorial Contact hours: 15

General References

- Ha-Joon Chang. 2003. "Kicking Away the Ladder: The "Real" History of Free Trade", *Foreign Policy*, 30 December
- Alice Amsden. Ch. 6 of *Escape from Empire: The Developing Worlds Journey through Heaven and Hell*, MIT Press.
- World Bank, "Overview", in *World Development Report 2001: Attacking Poverty*, pp. 1-12.
- World Bank, "Overview", in *World Development Report 2002: Building Institutions for Markets*, pp. 1-12.
- Barry Naughton. 2006. *The Chinese Economy: Transitions and Growth*. MIT Press.
- Kay, Cristobal. 2002. Why East Asia overtook Latin America: Agrarian Reform, Industrialisation and Development, *Third World Quarterly*, Vol 23.
- Mark Weisbrot, *Latin America: The End of an Era*, Center for Economic and Policy Research, December 2006
- Keith Griffin. 1999. *Alternative Strategies for Economic Development*, chapter 2, Palgrave Macmillan.
- T. Nakamura, Economic Growth in Pre-War Japan, Tr. by Robert A Feldman, Yale University Press, 1983.
- Okochi, Karsh and Levine, Workers and Employees in Japan, The Japanese Employment Relations System, University of Tokyo, 1965.
- Y. Hayami, A Century of Agricultural Growth in Pre-War Japan: Its Relevance to Asian Development, University of Minnesota Press, 1975.

- Chalmers Johnson, MITI and the Japanese Miracle: The Growth of Industrial Policy 1925-1975, Stanford University Press, 1982.
- W.W. Lockwood, Economic Development of Japan, Expanded edition, Princeton University Press, 1966.
- Dobb M., Soviet Economic Development since 1917, Universal Book Stall, New Delhi, 1995.
- Paul R. Gregory and Robert C. Stuart, Soviet Economic Structure and Performance, Harper & Row, 3rd edition, 1986.
- Rodrik D. 2007. Industrial Policy for the 21st Century, in *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*, Princeton University Press.

Discipline Specific Elective-B(1):

ECO-A-DSE-5-B(1)-TH-TU

Financial Economics [FE]

Total Marks: 100 [Theory(Th) 65+ Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[Semester-V]

ECO-A-DSE-5-B(1)-TH

1. Investment Theory and Portfolio Analysis 35 lecture hours

- Deterministic cash-flow streams: Basic theory of interest; discounting and present value; internal rate of return; evaluation criteria; fixed-income securities; bond prices and yields; interest rate sensitivity and duration; immunisation; the term structure of interest rates; yield curves; spot rates and forward rates.
- Single-period random cash flows: Random asset returns; portfolios of assets; portfolio mean and variance; feasible combinations of mean and variance; mean-variance portfolio analysis: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.
- CAPM: The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the CAPM model in investment analysis and as a pricing formula.

2. Options and Derivatives 20 lecture hours

- Introduction to derivatives and options; forward and futures contracts; options; other derivatives; forward and future prices; stock index futures; interest rate futures; the use of futures for hedging; duration-based hedging strategies; option markets; call and put options; factors affecting option

prices; put-call parity; option trading strategies: spreads; straddles; strips and straps; strangles; the principle of arbitrage; discrete processes and the binomial tree model; risk-neutral valuation.

3. Corporate Finance **20 lecture hours**

- Patterns of corporate financing: common stock; debt; preferences; convertibles; Capital structure and the cost of capital; corporate debt and dividend policy; the Modigliani- Miller theorem.

ECO-A-DSE-5-B(1)-TU

Tutorial Contact hours: 15

Text

Hull, John C., Options, Futures and Other Derivatives, Pearson Education, 6th edition, 2005.

References

- David G. Luenberger, Investment Science, Oxford University Press, USA, 1997.
- Thomas E. Copeland, J. Fred Weston and KuldeepShastri, Financial Theory and Corporate Policy, Prentice Hall, 4th edition, 2003.
- Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance, McGraw-Hill, 7th edition, 2002.
- Stephen A. Ross, Randolph W. Westerfield and Bradford D. Jordan, Fundamentals of Corporate Finance. McGraw-Hill, 7th edition, 2005.
- Burton G. Malkiel, A Random Walk Down Wall Street, W.W. Norton & Company, 2003.
- William Sharpe, Gordon Alexander and Jeffery Bailey, Investments, Prentice Hall of India, 6th edition, 2003.

Economics Core Course XIII: ECO-A-CC-6-13-TH-TU

Public Economics

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[Semester VI]

ECO-A-CC-6-13-TH

Unit 1. Government in a Market Economy **15 lecture hours**

- Market failure and externalities; public and merit goods;
- Government intervention;
- Public Expenditure for financing development

Unit 2. Choice and Public Economics **20 lecture hours**

- Characteristics of Pure Public Good; Distinction between Pure Public Good and Private Good;

- Market Failure in case of Pure Public Good Optimal provision of Public Goods - Private Provision and Public Provision of Public Goods,
- Lindahl Equilibrium,
- Voting Equilibrium.

Unit 3. The Revenue and Expenditure of the Government **20 lecture hours**

- Classification of Taxes; Canons of Taxation;
- Principles of Taxation - Benefit Principle, Equal Sacrifice Principle, Ability to Pay Principle;
- Incidence and Burden of Taxes;
- Effects of taxation on income distribution, work efforts, and on savings,
- The Laffer curve;
- Comparison between direct and indirect taxes – income and substitution effects;
- Optimal Taxation

Unit 4. Public Finance **20 lecture hours**

- Meaning and Classification of Public Expenditure - government budget and its types, government expenditure and tax multipliers, balanced budget multiplier;
- Meaning of Public Debt; Sources of Public Borrowings: internal and external borrowing; Effects of Public Debt.
- Indian Public Finance – Fiscal Federalism in India

ECO-A-CC-6-13-TU

Tutorial contact hours: 15

References:

- J. F. Due and A. F. Friedlander. Government Finance-Economics of Public Sector, AITBS Publishers and Distributors, 1994
- J. Hindriks and G. D. Myles. Intermediate Public Economics, The MIT Press; Annotated Edition, 2006.
- R.A. Musgrave and P.B. Musgrave, Public Finance in Theory & Practice, McGraw Hill Publications, 5th edition, 1989.
- Amaresh Bagchi (ed), Readings in Public Finance, OUP
- 5. J. E. Stiglitz. Economics of Public Sector,W. W Norton and Company, 3rd Edition, 2000.
- A Ghosh and C. Ghosh, Economics of the Public Sector, Prentice Hall India Learning Private Limited; 2nd Revised edition (2014)

Economics Core Course XIV: ECO-A-CC-6-14-TH-TU

Development Economics

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[Semester VI]

ECO-A-CC-6-14-TH

1. Meaning of Economic Development **10 lecture hours**

- Income Approach and Capability Approach,
- Construction and interpretation of HDI; international variations in development measures; comparing development trajectories across nations and within them.
- Dependency school of development.

2. Poverty and Inequality **15 lecture hours**

- Inequality axioms; a comparison of commonly used inequality measures.
- Gender Inequality, connections between inequality and development.
- Poverty measurement, HPI; poverty traps and path dependence of growth processes.
- Vicious Circle of Poverty Hypothesis

3. Dual Economy Models **20 lecture hours**

- The concept of surplus labour and disguised unemployment
- Peasants and Dualism with and without surplus labour
- Interdependence of agriculture and Industry (Lewis model, Ranis-Fei model)
- Rural-Urban Migration (Harris- Todaro model)

4. Population Growth and Economic Development **10 lecture hours**

- Basic concepts (Birth and Death Rates, mortality, fertility)
- Demographic transition theory
- Cost of children, externalities
- Low Level Equilibrium Trap models and their criticism-critical minimum effort theory (Nelson and Leibenstein).

5. Development Strategies **10 lecture hours**

- Balanced vs. Unbalanced Growth Theories
- Choice of Techniques

6. Political Institutions and the State **10 lecture hours**

- Definition of institutions, Evolution of Political and Economic Institutions.
- The determinants of democracy.
- Alternative institutional trajectories and their relationship with economic performance.
- Within-country differences in the functioning of state institutions. State ownership and regulation. Government failures and corruption.

ECO-A-CC-6-14-TU

Tutorial Contact hours: 15

Texts

1. Todaro and Smith: Economic Development, Pearson Education, 2009
2. Debraj Ray, Development Economics, Oxford University Press, 2009.
3. Kaushik Basu, Analytical Development Economics, OUP

References

- ParthaDasgupta, Economics, a Very Short Introduction, Oxford University Press, 2007.
- Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, Understanding Poverty, Oxford University Press, 2006.
- KaushikBasu, The Oxford Companion to Economics in India, OUP, 2007.
- AmartyaSen, Development as Freedom, OUP, 2000.
- Daron Acemoglu and James Robinson, Economic Origins of Dictatorship and Democracy, Cambridge University Press, 2006.
- Robert Putnam, Making Democracy Work: Civic Traditions in Modern Italy, Princeton University Press, 1994
- Meier and Rauch (ed)- Leading Issues in Development Economics, OUP
- Hayami and Godo, Development Economics, OUP
- Thirlwall; Growth and Development. 5th Edition

Discipline Specific Elective –A(2):

ECO-A-DSE-6-A(2)-TH-TU

Money and Financial Markets [MFM]

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[Semester-VI]

ECO-A-DSE-6-A(2)-TH

1. Introduction to money and Money and Banking **5 lecture hours**

- Concept, functions, measurement; theories of money supply determination**.**

2. Financial Institutions, Markets, Instruments and Financial Innovations 17 lecture hours

- Role of financial markets and institutions; problem of asymmetric information – adverse selection and moral hazard; financial crises.
- Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations.
- Why banks are special Institutions? How banks act as a leveraging mechanism?

3. Financial Markets and Interest Rates Behaviour 18 lecture hours

- Determination; sources of interest rate differentials;
- Theories of term structure of interest rates; interest rates in India.

4. Banking System 20 lecture hours

- Balance sheet and portfolio management;
- Multiple Deposit Creation,
- Determinants of the Money Supply.
- Indian banking system- Changing role and structure- banking sector reforms

5. Central Banking and Monetary Policy 15 lecture hours

- Functions, balance sheet; goals, targets, indicators and instruments of monetary control;
- Monetary management in an open economy; current monetary policy of India**.**

ECO-A-DSE-6-A(2)- TU

Tutorial Contact hours: 15

Text

- F. S. Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson Education, 6th edition, 2009.

References

- F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, Foundations of Financial Markets and Institutions, Pearson Education, 3rd edition, 2009.
- M. R. Baye and D. W. Jansen, Money, Banking and Financial Markets, AITBS, 1996.
- Rakesh Mohan, Growth with Financial Stability- Central Banking in an Emerging Market, Oxford University Press, 2011.
- L. M. Bhole and J. Mahukud, Financial Institutions and Markets, Tata McGraw Hill, 5th edition, 2011.
- M. Y. Khan, Indian Financial System, Tata McGraw Hill, 7th edition, 2011.
- N. Jadhav, Monetary Policy, Financial Stability and Central Banking in India, Macmillan, 2006.

- R.B.I. – Report of the Working Group: Money Supply Analytics and Methodology of Compilation, 1998.
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Discipline Specific Elective-A(2):

ECO-A-DSE-6-A(2)-TH-P

Issues in Indian Economy [IIE]

Total Marks: 100

[Theory (Th) 50 + Practical (P) 30 + Internal Assessment 10+Attendance: 10]

Total Credits: [4(Th)+2(P)]=6 ,

No. of Lecture hours: 60, No. of Practical hours: 30/No. of Practical classes: 30

[Semester-VI]

ECO-A-DSE-6-A(2)-TH

1. Growth and structural changes **4 lecture hours**

- Trends in national income and per capita income- Analysis with official statistics *[2 lecture hours]*
- Structural Composition of national income and employment with NAS and NSSO data *[2 lecture hours]*

2. Macroeconomic Policies and Their Impact **15 lecture hours**

- Fiscal Policy *[3 lecture hours]*
- Trade and investment policy *[3 lecture hours]*
- Financial and monetary policies *[3 lecture hours]*
- Inflation and measures to control inflation *[3 lecture hours]*
- Labour laws and regulation *[3 lecture hours]*

3. Policies and Performance in Agriculture **15 lecture hours**

- Growth; productivity; agrarian structure and technology, capital formation *[3 lecture hours]*
- Agricultural marketing *[3 lecture hours]*
- Food security and food policy *[3 lecture hours]*
- Pricing and procurement *[3 lecture hours]*
- WTO and Indian agriculture *[3 lecture hours]*

4. Policies and Performance in Industry **12 lecture hours**

- Output, employment and productivity growth *[2 lecture hours]*
- Regional variation of industrial growth *[2 lecture hours]*
- Small scale industries- problems and prospects *[2 lecture hours]*

- Public sector; competition policy *[2 lecture hours]*
- Foreign direct investment in industry *[2 lecture hours]*
- Economic reforms and industry *[2 lecture hours]*

5. Trends and Performance in Services **14 lecture hours**

- Formal and informal sectors *[5 lecture hours]*
- Banking and insurance *[5 lecture hours]*
- Trade in services *[4 lecture hours]*

ECO-A-DSE-6-A(2)-P

Total Practical Hours: 60, Number of Practical classes: 30

Students will have to take help of primary or secondary data and will have to make statistical/econometric analysis of any problem on Indian economy as mentioned in this course (i.e. the topic will not be outside the course) on the basis of the use of statistical softwares like SPSS/STATA/R/E-VIEWS .A project report is to be prepared by the candidate analysing the results obtained from the use of any one of the above-mentioned statistical softwares. Though there is a project report, basically it is a computer laboratory based practical on the basis of which the project report will be constructed. Use of computer laboratory is essential for running the above-mentioned statistical softwares and also for handling the data. In this sense the project work is to be interpreted as a Practical (it is not a separate project paper).The project should be supervised by a full time teacher of the subject belonging to the institution. All total 60 hours (30 Practical classes) have been allotted for the practical part of the course. The norm of the examination will be similar to that of a practical examination. To be more specific, the practical examination of the project is to be conducted jointly by the supervisor and an external examiner on the basis of the content of the project report, use of the above-mentioned statistical softwares in the computer laboratory (in the form of running the regressions used in the project or by determining the various measures of descriptive statistics used in the project in front of the examiners just like that of a practical examination) and also on the basis of a viva-voce based on the candidate's knowledge about the data set (especially data sources in case of secondary data) along with economic interpretation of the regression results. In case the student uses primary data it should be related to one of the topics covered in the course and *why primary data is used instead of secondary data* is to be justified by the student. In case of use of primary data students should have good knowledge about the sampling procedure used in collecting data. *On the day of the practical examination students should carry with them soft copy of the data set used in the project.*

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- A. Raychaudhury and P De, International Trade in Services in India: Implications for Growth and Inequality in a Globalizing World, OUP, 2012.
- India Development Reports, IGIDR

Discipline Specific Elective- B(2) :

ECO-A-DSE-6-B(2)-TH-TU

Environmental Economics [EE]

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[Semester- VI]

ECO-A-DSE-6-B(2)-TH

Unit 1. Introduction **7 lecture hours**

1.1 What is environmental economics;

1.2 Review of microeconomics and welfare economics.

1.3 Interlinkages between the economy and environment

Reference for unit 1:

Hanley N, Shogren J.F. & White B. *Environmental Economics in Theory and Practice*, Macmillan

Unit 2. Efficiency and Market Failure **18 lecture hours**

2.1 Pareto optimality and market failure in the presence of externalities

2.2 Property rights and the Coase theorem

2.3 Public goods/ bads and market failure

Reference for unit 2:

Kolstad C, *Environmental Economics,* OUP

Unit 3. The Design and Implementation of Environmental Policy **20 lecture hours**

3.1 Pigouvian Fees – Single Polluter, Multiple Polluters, Fees vs Subsidies

3.2 Regulating Pollution : Command and Control, Economic Incentives

3.3 The Basic Theory of Tradeable Pollution Permits

Reference for unit 3:

Kolstad C, *Environmental Economics,* OUP

Hanley N, Shogren J.F. & White B. *Environmental Economics in Theory and Practice*, Macmillan

Unit 4. International Environmental Problems **13 lecture hours**

4.1 Transboundary Pollution – Transboundary Pollution as a problem of international externalities

4.2 International Trade and Environment – Pollution Havens

4.3 International Environmental Agreements – Basic idea about Montereal and Kyoto Protocol and Talks on Climate Change

Reference for unit 4:

Hanley N, Shogren J.F. & White B. *Environmental Economics in Theory and Practice*, Macmillan

Kolstad C, *Environmental Economics*, OUP

Internet on Recent Environmental Agreements

Unit 5. Measuring the values of Environmental Costs and Benefits 17 lecture hours

5.1 Concepts of Willingness to pay (WTP) and Willingness to accept compensation (WTAC), Difference between the two concepts

5.2 Direct and Indirect Methods of Valuation – Contingent valuation, Travel Cost, hedonic Pricing – basic concepts only (no econometric techniques) – when they should be used, what are the advantages and disadvantages of these methods.

Reference for unit 5:

Hanley N, Shogren J.F. & White B. *Environmental Economics in Theory and Practice*, Macmillan

ECO-A-DSE-6-B(2)-TU

Tutorial Contact hours: 15

Discipline Specific Elective –B(2):

ECO-A-DSE-6-B(2)-TH-TU

Issues in Development Economics [IDE]

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours: 75, No. of Tutorial contact hours: 15

[Semester- VI]

ECO-A-DSE-6-B(2)-TH

1. Demography and Development 10 lecture hours

- Demographic concepts; birth and death rates, age structure, fertility and mortality
- Demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households
- Connections between income, mortality, fertility choices and human capital accumulation
- Migration.

2. Land, Labor and Credit Markets 20 lecture hours

- The distribution of land ownership; land reform and its effects on productivity
- Contractual relationships between tenants and landlords
- Land acquisition; nutrition and labor productivity
- Iinformational problems and credit contracts

- Microfinance
- Inter- linkages between rural factor markets.

3. Individuals, Communities and Collective Outcomes **15 lecture hours**

- Individual behavior in social environments
- Multiple social equilibria;
- Governance in organizations and in communities;
- Individual responses to organizational inefficiency.

4. Environment and Sustainable Development **15 lecture hours**

- Defining sustainability for renewable resources
- A brief history of environmental change;
- Common-pool resources;
- Environmental externalities and state regulation of the environment;
- Market based instruments, economic activity and climate change.

5. Globalization **15 lecture hours**

- Globalization in historical perspective
- the economics and politics of multilateral agreements;
- Trade, production patterns and world inequality
- Financial instability in a globalized world.
- India in the context of global economy

ECO-A-DSE-6-B(2)-TU

Tutorial contact hours: 15

Text

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- DaniRodrik, The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist, Oxford University Press, 2011.
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BA/BSc ECONOMICS (GENERAL) SYLLABUS,

UNIVERSITY OF CALCUTTA, UNDER CHOICE BASED CREDIT SYSTEM

[AS ON 24-05-2018]

To be effective from the academic session 2018-19

Preamble

- As the subject Economics falls under both BA and BSc two types of structures are proposed for BA/BSc Economics (General). One for BA Economics (General) and the other for BSc Economics (General).
- For any student with Honours in a subject other than Economics (say Sociology (Honours) or Political Science (Honours) or Statistics (Honours)) may opt for Economics as a Generic Elective subject. So provisions are to be kept for Economics Generic Elective for four courses (papers).
- For any BA (General) student with Core subjects other than Economics [say Political Science as Core paper (under General) and History as Core paper (under General)] may opt for Economics as a Generic Elective Course [two Generic Elective courses are to be chosen from any discipline other than the Core. Thus provision should be kept for two courses of any subject other than the Core, say Economics]. This should be treated as Generic Elective Course for BA (General) student.
- Regarding skill-enhancement course there are two groups. Group A for odd semesters like semester III and semester V and Group B for even semesters like semester IV and semester VI. As part of skill-enhancement Course under BA/BSc Economics (General) provision should be kept for two skill-enhancement courses under each of the two groups (so all total provision is to be kept for 4 courses).
- The conversion of credit to lecture hours is same as that of the Honours course. **For *five credits* of lecture hours (theory) per course there will be *five hours of teaching per week* so that for fifteen weeks all total there will be 75 lecture hours for theory classes per semester. For 1 credit tutorial classes (each of one hour) there will be all total 15 hours of tutorial classes for 15 weeks (one can refer to it a 15 tutorial contact hours). We can club 'lecture hours' and 'tutorial contact hours' and can refer to it as 'teaching hours'.Thus for a 5 credit (Theory)+1 credit(Tutorial)= 6 credit course for 15 weeks we have 75+15=90 teaching hours.** Similarly for a 2 credit course (only theory) the teaching hours or lecture hours all total is 30. Within each course the total marks of 100 has been subdivided in the following manner. For 90 hours of teaching (Theory plus tutorial) we have 80 marks. The remaining part (20 marks) has been divided into two equal parts: 10 marks is reserved for ***continuous internal assessment (CIA)*** and the remaining 10 marks for

attendance. Out of 80 for written examination 65 marks has been allotted and the remaining 15 marks has been allotted for tutorial examination.

- We first focus on BSc Economics (General). To illustrate the structure we start from a hypothetical example. Suppose the three general subjects opted by a student for BSc (General) are Economics, Mathematics and Statistics. Then the syllabus for Economics should be treated as the syllabus for BSc Economics (General) and it would be based on the following structure.

Table 3: Structure for BSc (General) Course covering three subjects

Type of Course	Total Number of Courses	Number of Courses for Economics out of total number of Courses	Credit for each course	Total Credit	Total Marks
Core Course (CC)	12	4	5(Th) +1 (Tu)=6 for each course or 4(Th) +2(P) =6 for each course	Total credit for12 courses = 72	12. 12x100 =1200
Discipline Specific Elective (DSE)	6	2	5(Th) +1 (Tu)=6 for each course or 4(Th) +2(P) =6 for each course	Total credit for 6 courses =36	6x100 =600
Ability Enhancement Compulsory course (AECC)	2	Nil	2 (Th) for each course	Total credit for 2 courses =4	2x100 =200
Skill Enhancement Elective Course (SEC)	4	2	2 (Th) for each course	Total credit for 4 courses =8	4x100 =400
Total	**24**	**8**		**120**	**2400**

- In case of BSc (General) for each CC we have 100 marks, for each DSE we have 100 marks, for each AECC we have 100 marks, for each SEC we have 100 marks so that all total we have 2400 marks for BSc (General) stream (as shown in Table 3). For each semester we have 400 marks as shown in table 3.In the above table Th stands for Theory, Tu stands for tutorial and P stands for Practical.
- We next focus on BA Economics (General). To illustrate the structure we start from a hypothetical example. Suppose the two general subjects opted by a student for BA (General) are Political Science and Economics. Then the syllabus for Economics should be treated as the syllabus for BA Economics (General) and it would be based on the structure shown in table 4
- In Language Core Course (LCC) as per decision of the University there will 2 English Courses and 2 MIL Courses.
- Ability Enhancement Courses can be conducted along with the Honours students in 1st and 2nd semesters.

Table 4: Structure for BA (General) Course covering two subjects (with two different subjects under Generic Elective)

. Type of Course	Total Number of Courses	Number of Courses for Economics out of total number of Courses	Credit for each course	Total Credit	Total Marks
Core Course (CC)	8	4	5(Th) +1 (Tu)=6 for each course	. Total credit for 8 courses = 48	8x100 =800
9. Language Core Course (LCC)	4	Nil	5(Th) +1 (Tu)=6 for each course	. Total credit for 4 courses = 24	4x100 =400
. Generic Elective (GE) [From any other subject other than Core]	2	. 2 GE Economics (provided none of the two Core general subjects is Economics)	5(Th) +1 (Tu)=6 for each course	. Total credit for 2 courses = 12	2x100 =200
Discipline Specific Elective (DSE)	4	. 2 can be offered from Economics from each of the two groups A and B. Candidate will have to select one from each of the two groups	5(Th) +1 (Tu)=6 for each course	. Total credit for 4 courses =24	4x100 =400
Ability Enhancement Compulsory course (AECC)	2	Nil	2 (Th) for each course	. Total credit for 2 courses =4	2x100 =200
Skill Enhancement Elective Course (SEC)	4	. 2 can be offered from Economics from each of the two groups A and B	2 (Th) for each course	. Total credit for 4 courses =8	4x100 =400
Total	**24**	**8 (without considering GE courses) + 2 GE Courses (if the general Core subjects are other than Economics)**		**120**	**2400**

- We now consider semester-wise break-up of BSc (General) and BA (General) Courses:

Table 5 : Semester-wise Break-up of BSc (General) Course covering three subjects

Semester	Types of Courses [Course codes are in bold within brackets]	Economics Course	Total Credit for all Courses for each semester	Total Marks
I	3 CC**(CC-1)**, 1AECC**(AECC-1)**	1 CC	20	400
II	3CC**(CC-2)**, 1AECC**(AECC-2)**	1CC	20	400
III	3CC**(CC-3)**, 1 SEC**(SEC-A(1))**	1CC plus 1 SEC (if any candidate considers SEC-A(1) as Economics)	20	400
IV	3CC**(CC-4)**, 1 SEC**(SEC-B(1))**	1CC plus 1 SEC (if any candidate considers SEC-B(1) as Economics)	20	400
V	3DSE**[DSE-A (1A+2A+3A)]** , 1SEC **(SEC-A(2))**	1DSE plus 1SEC(if any candidate considers SEC-A(2) as Economics)	20	400
VI	3DSE**[DSE-B (1B+2B+3B)]**, 1 SEC **(SEC-B(2))**	1DSE plus 1SEC (if any candidate considers SEC-B(2) as Economics)	20	400
Total	**24Courses**	**4 CC +2 DSE under DSE A (candidate will select one) + 2 DSE under DSE B (candidate will select one) + 2 SEC under SEC A (candidate will select one) + 2 SEC under SEC B (candidate will select one)**	**120**	**2400**

Table 6 : Semester-wise Break-up of BA (General) Course covering two subjects

Semester	Types of Courses . [Course codes are in bold within brackets]	Economics Course	Total Credit for all Courses for each semester	5. Total Marks
I	2 CC **(CC-1)** , 1 GE **(GE-1)** and 1AECC **(AECC-1)**	1 CC plus 1GE(if the core is other than Economics)	20	400
II	2CC **(CC-2)** ,1 GE **(GE-2)**, 1AECC **(AECC-2)**	1CC plus 1GE(if the core is other than Economics)	20	400
III	2CC **(CC-3)**, 1 LCC **(L1(1))** ,1 SEC **(SEC-A(1))**	1CC plus 1 SEC (if any candidate considers SEC-A(1) as Economics)	20	400
IV	2CC **(CC-4)** , 1LCC **(L2(1))**, 1 SEC **(SEC-B(1))**	1CC plus 1 SEC (if any candidate considers SEC-B(1) as Economics	20	400
V	1 LCC **(L1(2))**, 2DSE **[DSE-A (1A+2A)],** 1SEC **(SEC-A(2))**	1DSE plus 1SEC (if any candidate considers SEC-A(2) as Economics)	20	400
VI	1 LCC**(L1(2))** , 2DSE**[DSE-B (1B+2B)]** , 1 SEC **(SEC-B(2))**	1DSE plus 1SEC (if any candidate considers SEC-B(2) as Economics)	20	400
Total	**24Courses**	**4 CC +2 DSE under DSE A (candidate will select one) + 2 DSE under DSE B (candidate will select one) + 2 SEC under SEC A (candidate will select one) + 2 SEC under SEC B (candidate will select one) + 2 GE (in case if the Core Course is other than Economics– the candidate will select one)**	**120**	**2400**

- AECC-1 refers to Communicative English/MIL. AECC-2 refers to Environmental Studies
- LCC: L1 –English Courses; L2- MIL courses. Two courses each
- SEC - Two courses from two subjects
- DSE- Two courses from two subjects in case of BA (General) .Two Courses from three subjects in case of BSc (General).[One course from each subject under each semester].
- In case of BA (General) for each CC we have 100 marks, for each LCC we have 100 marks, for each GE we have 100 marks, for each DSE we have 100 marks, for each AECC we have 100 marks and for each SEC we have 100 marks (as shown in table 4) so that all total we

have 2400 marks for BA (General) stream. For each semester we have 400 marks as shown in table 6.

- If a candidate selects one Economics paper under group-A in case of SEC then the candidate can opt for 3rd or 5th semester. If a candidate selects one Economics paper under group-B in case of SEC then the candidate can opt for 4th or 6th semester. These are shown in terms of tables 5 and 6. [See the explanations regarding DSE and SEC after table 10]
- Economics as Generic Elective can be offered for students having Honours in any subject other than Economics. The semester break-up of the course is as follows

Table 7: Semester-wise break-up of Generic Elective for students having Honours in subject other than Economics

Semester	Course
I	Generic Elective Course I (GE-I)
II	Generic Elective Course II(GE-II)
III	Generic Elective Course III(GE-III)
IV	Generic Elective Course IV (GE-IV)

- The four GE courses for students having Honours in any subject other than Economics can be treated as Core courses (CC) in first four semesters for students under BA/BSc General Courses.
- We have thus the following classification of GE and CC:

Table 8 : Semester-wise distribution of CC and GE

Semester	Name of the Course	Core Course (CC) for BA/BSc General students	GE Course for students who have Honours in sny subject other than Economics	GE (Economics) Course for BA (General) students who have Core papers other than Economics
I	Introductory Microeconomics	Core Course 1(Econ)-CC-1 (ECO-G-CC-1-1-TH-TU)	Generic Elective Course I (ECO-GE- 1-1-TH-TU)	Generic Elective Course I (ECO-G-GE-1-1-TH-TU)
II	Introductory Macroeconomics	Core Course 2(Econ)-CC-2 (ECO-G-CC-2-2-TH-TU)	Generic Elective Course II (ECO-GE-2-2-TH-TU)	Generic Elective Course II (ECO-G-GE-2-2-TH-TU)
III	Issues in Economic Development and India	Core Course 3(Econ)-CC-3 (ECO-G-CC-3-3-TH-TU)	Generic Elective Course III (ECO-GE-3-3-TH-TU)	Not Applicable
IV	. Indian Economic Policies	Core Course 4(Econ)-CC-4 (ECO-G-CC-4-4-TH-TU)	Generic Elective Course IV (ECO-GE-4-4-TH-TU)	Not Applicable

- In table 8 the last column implies the two Generic Elective Courses for BA (General) students that will be offered to students who have Core Courses other than Economics. In such case the student may opt for the two Courses in Economics in the First Semester and in the Second Semester (it matches with the two Core Courses in Economics for the first two semesters). The student may take two such courses from Economics in the first and second semesters

provided his/her Core papers in BA (General) are other than Economics. No separate option has been provided for the students in choosing the courses. They will have to select from the Core papers of Economics (General) Courses provided in the First and Second Semesters.

- For the two Discipline Specific Elective (DSE) courses we suggest the following :

Table 9 : Options for two DSE (Economics) Courses –Group A and Group-B BA (General) and BSc (General)

Name of Courses under DSE-A [Candidate will have to select only one] [Relevant for 5th Semester]	**Name of the Courses under DSE-B [Candidate will have to select only one] [Relevant for 6th Semester]**
Money and Banking (MB) ECO-G-DSE-5-1A/2A-TH-TU	Public Finance (PF) ECO-G-DSE-6-1B/2B-TH-TU
Sustainable Development (SD) ECO-G-DSE-5-1A/2A-TH-TU	Economic History of India (1857-1947) (EHI) ECO-G-DSE-6-1B/2B-TH-TU

Table 10 : Options for two SEC (Economics) Courses –Group A and Group-B: BA (General) and BSc (General)

Name of the Course under SEC-A [Candidate will have to select only one] [Relevant for 3rd or 5th Semesters]	**Name of the Course for SEC-B [Candidate will have to select only one] [Relevant for 4th or 6th Semesters]**
Introductory Methods of Field Survey (IMFS) ECO-G-SEC-3-1A-TH/ECO-G-SEC-5-2A-TH	. Economic Data Analysis and Report Writing (EDARW) ECO-G-SEC-4-1B-TH/ECO-G-SEC-6-2B-TH
Elementary Rural Development (ERD) ECO-G-SEC-3-1A-TH/ECO-G-SEC-5-2A-TH	Entrepreneurship and Development (ED) ECO-G-SEC-4-1B-TH/ECO-G-SEC-6-2B-TH

- In case of semester 5 for DSE A at least two options from each discipline are to be given. Similarly in case of semester 6 for DSE-B at least two options from each discipline are to be given. In case of Economics we have given exactly two options for each group A and B. In case of BSc (General) a candidate will have to select one option from three different disciplines from each group (i.e. DSE-A ad DSE-B). These are referred to as courses DSE-A: 1A, 2A and 3A and DSE-B: 1B, 2B and 3B. [Here 1 ,2 and 3 are disciplines like Economics, Mathematics, Statistics whereas A and B are the groups]

- The structure is similar in case of BA (General) except that here a candidate will have to select one option from two different disciplines (instead of three different disciplines). These are referred to as courses DSE-A: 1A and 2A (for semester 5) and DSE-B : 1B and 2B (for semester 6) . [Here again 1 and 2 are disciplines like Economics and History whereas A and B are the groups]

- In Table 10 we have specified the options under Group A and Group B. As an example we can say that in case of BA (General) suppose the disciplines as Core Courses are History and Economics. In this case two options are given for Economics under Skill Enhancement

Course (SEC) in the form of SEC-A and SEC-B. In case of SEC-A, suppose two options from Economics and two from History are offered. Similarly, two options from Economics and two options from History are also offered under SEC-B. If a candidate opts for History from SEC-A in semester 3 then he /she must opt for Economics (any one of the two Economics options) from SEC-A in case of semester-5. Similarly if a candidate opts for Economics from SEC-B (any one of the two Economics options) in semester 4 then he/she must opt for History from SEC-B in semester 6.

- ***The SEC-A courses will be offered twice .The same courses will be taught twice: once in the 3rd Semester and again in the 5th Semester. Similarly SEC-B courses will be offered twice. The same courses will be taught twice: once in the 4th Semester and again in the 6th Semester. Examinations will be conducted both for 3rd and 5th semester students for the same Economics courses under SEC-A. Similarly, examinations will be conducted both for 4th and 6th semester students for the same Economics courses under SEC-B.***

- Based on the above-mentioned structure we have framed the syllabus in the following manner.

Core Course 1 (CC 1) BA/BSc (General) / Generic Elective Course I (GE -1) for BA/BSc Honours students [other than students having Economics (Honours)]/BA (General) Generic Elective Course I (GE-I) for students not having Economics as Core Course

Name of the Course: Introductory Microeconomics

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours (Theory): 75, No. of Tutorial contact hours: 15

[For Semester-I]

ECO-G-CC-1-1-TH-TU/ ECO--GE-1-1-TH-TU/ECO-G-GE-1-1-TH-TU

ECO-G-CC-1-1-TH/ ECO--GE-1-1-TH /ECO-G-GE-1-1-TH

1. **Exploring the subject matter of Economics** **5 lecture hours**

Why study economics? Scope and method of economics; the economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output; science of economics; the basic competitive model; prices, property rights and profits; incentives and information; rationing; opportunity sets; economic systems; reading and working with graphs.

2. **Supply and Demand: How Markets Work, Markets and Welfare**

16 lecture hours

Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; law of demand and law of supply; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity of demand - own price, cross price and income elasticity of demand- total revenue, average revenue, marginal revenue and price elasticity of demand; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.

3. **The Households** **18 lecture hours**

- Utility maximization-the cardinal approach. Total utility and marginal utility-law of diminishing marginal utility-relation between law of demand and law of diminishing marginal utility
- Utility maximization-the ordinal approach. Consumption decision and the budget constraint, consumption and income/price changes, description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer‘s optimum choice; the price consumption curve and the income consumption curve; derivation of the demand curve from price consumption curve; income and substitution effects.

4. **The Firm and Perfect Market Structure** **18 lecture hours**

- Production function of a firm; total product, average product and marginal product; concept of isoquant ; returns to scale; behaviour of profit maximizing firms and the

production process; the cost function, short run costs and output decisions; costs and output in the long run.

- Features of a perfectly competitive market. Short run equilibrium under perfect competition. Supply curve of a firm. Long run equilibrium under perfect competition.

5. Imperfect Market Structure 8 lecture hours

Monopoly equilibrium- differences with perfect competition. Basic ideas of price-discriminating monopolist .

6. Input Markets 10 lecture hours

The labour market - basic concepts - derived demand, productivity of an input; marginal productivity of labour, marginal revenue product); the land market- concepts of rent and quasi rent.

ECO-G-CC-1-1-TU/ ECO--GE-1-1-TU /ECO-G-GE-1-1-TU

Tutorial Contact Hours: 15

Text

- R.G. Lipsey. An Introduction to Positive Economics, ELBS (6^{th} edition)

Reference Books

- Mankiw, N.G. : Economics: Principles and Applications, India edition by South Western, Cengage Learning India Private Limited, 4th edition, 2007.
- Samuelson, P.A. and Nordhaus, W.D. :Economics, 19^{th} edition, McGraw Hill
- Stonier, A.W. and Hague, D.C. : A Textbook of Economic Theory, Longman Group, London.

Core Course 2 (CC 2) BA/BSc (General) / Generic Elective Course II (GE -II) for BA/BSc Honours students [other than students having Economics (Honours)]/ BA (General) Generic Elective Course II (GE-II) for students not having Economics as Core Course

Name of the Course: Introductory Macroeconomics

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours (Theory): 75, No. of Tutorial contact hours: 15

[For Semester-II]

ECO-G-CC-2-2-TH-TU/ ECO--GE-2-2-TH-TU/ECO-G-GE-2-2-TH-TU

ECO-G-CC-2-2-TH / ECO--GE-2-2-TH /ECO-G-GE-2-2-TH

1. Introduction to Macroeconomics and National Income Accounting 14 lecture hours

Basic issues of macroeconomics; measurement of gross domestic product; distinction of gross domestic product with gross national product; net domestic product and net national product; net domestic product at market price and at factor cost-the concept of national income. Measurement of national income- income method and the expenditure method- circular flow of income; the

concept of value added and the value added method of measuring national income; real versus nominal GDP.

2. The Simple Keynesian Model in a Closed Economy 14 lecture hours

The Keynesian consumption function and the Keynesian saving function. The Simple Keynesian Model of Income determination- the concept of effective demand-the Simple Keynesian Multiplier-the role of the government in Simple Keynesian Model

3. The Classical System 11 lecture hours

Basic ideas of classical system-Say's Law and Quantity Theory of Money- classical theory of income and employment determination.

4. Money Supply and Money Demand 11 lecture hours

- Supply of money; measures of money supply; high powered money, credit creation by commercial banks, tools of monetary policy.
- Demand for money-demand for money in the classical system and in the Keynesian system-the liquidity preference schedule.

5. Inflation 13 lecture hours

Demand pull and cost push inflation; inflation and its social costs; hyperinflation; trade off between inflation and unemployment –basic ideas of the Phillips Curve; anti-inflationary monetary and fiscal policies.

6. The External Sector 12 lecture hours

- Basis of trade: concepts of absolute advantage and comparative advantage; arguments for free trade; arguments for protection
- Balance of Payments-accounting and equilibrium; disequilibrium in balance of payments and devaluation-the role of the Marshall-Lerner condition

ECO-G-CC-2-2-TU / ECO--GE-2-2-TU /ECO-G-GE-2-2-TU

Tutorial Contact Hours: 15

Text

Sikdar Soumyen, Principles of Macroeconomics, Oxford University Press

Reference Books

- Stonier, A.W. and Hague, D.C. : A Textbook of Economic Theory, Longman Group, London
- Mankiw, N.G.: Elementary Macroeconomics, Worth Publishers, 7th edition, 2010.

- Errol D'Souza, Macroeconomics, Pearson Education, 2009.

Core Course 3 (CC 3) BA/BSc (General) / Generic Elective Course III (GE-III) for BA/BSc Honours students [other than students having Economics (Honours)]:

Name of the Course: Issues in Economic Development and India

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours (Theory): 75, No. of Tutorial contact hours: 15

[For Semester-III]

ECO-G-CC-3-3-TH-TU/ ECO--GE-3-3-TH-TU

ECO-G-CC-3-3-TH / ECO--GE-3-3-TH

1. **Meaning of Economic Development** **25 lecture hours**

Meaning of economic development; growth vs. development; concept of human development and its measurement, population and human development; education and health sectors in India; features and causes of underdevelopment of the Indian economy; growth and development of Indian economy under different policy regimes.

2. **Poverty , Inequality and Development** **20 lecture hours**

Basic issues of poverty and inequality; basic ideas about measurement of poverty and inequality- the poverty line; trends and policies to eradicate poverty and income inequality in India

3. **Development of the Dual Economy and Development Strategies** **15 lecture hours**

- Surplus labour and disguised unemployment-basic concepts; the Lewis model of economic development with unlimited supply of labour.
- Balanced and unbalanced growth as development strategies

4. **International Organizations and Economic Development** **15 lecture hours**

- Functions of IMF and World Bank and their roles in economic development
- The World Trade Organization (WTO) and its functions. India and the WTO

ECO-G-CC-3-3-TU / ECO--GE-3-3-TU

Tutorial Contact Hours: 15

Text

- Todaro and Smith: Economic Development, Pearson Education, 2009
- Misra D. and Puri K. Indian Economy, Himalaya Publishing House

References

- Thirlwall, Growth and Development, 5th Edition
- Rakesh Mohan, 2008, ―Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, Economic and Political Weekly, May.
- Datt and Sundharam (Revised by G. Datt and A. Mahajan) , Indian Economy, 70th edition, S. Chand
- T. Dyson, 2008, ―India‘s Demographic Transition and its Consequences for Development in Uma Kapila, editor, Indian Economy Since Independence, 19th edition, Academic Foundation.
- Agarwala, A.N. and Singh, S.P. : Economics of Underdevelopment (eds), Oxford University Press, London.
- Mukherjee, Debes : Development Policies, Problems and Institutions, New Central Book Agency, Kolkata.

Core Course 4 (CC 4) BA/BSc (General) / Generic Elective Course IV (GE-IV) for BA/BSc Honours students [other than students having Economics (Honours)]:

Name of the Course: Indian Economic Policies

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours (Theory): 75, No. of Tutorial contact hours: 15

[For Semester-IV]

ECO-G-CC-4-4-TH-TU/ ECO--GE-4-4-TH-TU

ECO-G-CC-4-4-TH / ECO--GE-4-4-TH

1. **Macroeconomic Policies and their Impact** **15 lecture hours**

   Fiscal Policy; trade and investment policy; financial and monetary policies; labour regulation.

2. **Policies and Performance in Agriculture** **21 lecture hours**

   Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurement.

3. **Policies and Performance in Industry** **21 lecture hours**

   Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment

4. **Policies and Performance of Indian Foreign Trade** **18 lecture hours**

India's foreign trade: change in volume and direction of India's foreign trade in the post-liberalization period; Balance of Payments position of India in recent years; India's export and import policies.

ECO-G-CC-4-4-TU / ECO--GE-4-4-TU

Tutorial Contact Hours: 15

Text

- Misra D. and Puri K. Indian Economy, Himalaya Publishing House
- Datt and Sundharam (Revised by G.Datt and A. Mahajan) , Indian Economy, 70th edition, S. Chand

References

- Shankar Acharya, 2010, ―Macroeconomic Performance and Policies 2000-8,‖ in Shankar Acharya and Rakesh Mohan, editors, India's Economy: Performances and Challenges: Development and Participation, Oxford University Press.
- Rakesh Mohan, 2010, ―India's Financial Sector and Monetary Policy Reforms, ‖ in Shankar Acharya and Rakesh Mohan, editors, India's Economy: Performances and Challenges: Development and Participation, Oxford University Press.

Discipline Specific Elective Course [Economics] (DSE -A) BA/BSc (General)

Name of the Course: Money and Banking (MB)

Total Marks: 100 [Theory(Th) 65+ Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours (Theory): 75, No. of Tutorial contact hours: 15

[For Semester-V]

ECO-G-DSE-5-1A/2A-TH-TU

ECO-G-DSE-5-1A/2A-TH

1. **Money Supply and Banking System with reference to India**

25 lecture hours

Definition of money supply in the Indian context (M_1, M_2, M_3 and M_4) , Balance sheet of the banking sector and accounting of money supply; balance sheet of the Reserve Bank of India and the accounting interpretation of High powered money; definition of high powered money; the money multiplier theory and balance sheet of commercial banks, sterilization by Central Banks. Indian banking system-changing role and structure; Indian banking sector reforms.

2. Financial Institutions and Financial Markets 22 lecture hours

- Role of financial markets and institutions in economic development- Indian examples
- Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations.

3. Interest Rates 12 lecture hours

Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

4. Central Banking and Monetary Policy 16 lecture hours

Instruments of monetary control with special reference to India; concepts of statutory liquidity ratio(SLR), cash reserve ratio(CRR) and repo rate as instruments of monetary control; monetary management in an open economy; current monetary policy of India, demonetization and its impact on the Indian economy.

ECO-G-DSE-5-1A/2A-TU

Tutorial Contact Hours: 15

Texts

- F. S. Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson Education, 6th edition, 2009.
- F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, Foundations of Financial Markets and Institutions, Pearson Education, 3rd edition, 2009.
- M. R. Baye and D. W. Jansen, Money, Banking and Financial Markets, AITBS, 1996.
- Gupta, S.B.: Monetary Planning in India, Oxford University Press, Delhi.

References

- Rakesh Mohan, Growth with Financial Stability- Central Banking in an Emerging Market, Oxford University Press, 2011.
- L. M. Bhole and J. Mahukud, Financial Institutions and Markets, Tata McGraw Hill, 5th edition, 2011.
- M. Y. Khan, Indian Financial System, Tata McGraw Hill, 7th edition, 2011.
- N. Jadhav, Monetary Policy, Financial Stability and Central Banking in India, Macmillan, 2006.
- R.B.I. – Report of the Working Group: Money Supply Analytics and Methodology of Compilation, 1998.
- R.B.I. Bulletin, Annual Report and Report on Currency and Finance (latest).
- Economic Survey 2016-17, Government of India.

Discipline Specific Elective Course [Economics] (DSE -A) BA/BSc (General)

Name of the Course: Sustainable Development (SD)

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours (Theory): 75, No. of Tutorial contact hours: 15

[For Semester-V]

ECO-G-DSE-5-1A/2A-TH-TU

ECO-G-DSE-5-1A/2A-TH

1. The Approach Towards Sustainability-Introductory ideas 15 lecture hours

Key environmental issues and problems, economic way of thinking about these problems, circular flow of environmental pollutants and waste recycling-laws of thermodynamics, renewable and non-renewable resources-the issue of sustainability

2. The meaning of Sustainable Development 25 lecture hours

Different definitions of sustainable development, rules of sustainable development, measures of sustainable development, sustainable management of resources-the role of property rights, stakeholders associated with sustainble management of different types of renewable resources-fishery, forestry and water, the concept of sustainable livelihood in the context of sustainable resource management.

3. Trans-boundary pollution, climate change and sustainable development

15 lecture hours

Implementation of environmental policies in developing countries and international experience; transboundary environmental problems-international meetings, protocols and treaties; economics of climate change-basic ideas of the carbon credit market-clean development mechanism and international emission trading.

4. Sustainable Resource Management Policies in India 20 lecture hours

Water policy, forestry policy and fishery policy of India. Basic objectives of the policies along with goals and visions.

ECO-G-DSE-5-1A/2A-TU

Tutorial Contact Hours: 15

Texts

Rabindranath Bhattacharya : "Environmental Economics : An Indian Perspective", Oxford University Press.

Pearce and Turner : 'Environmental and Natural Resource Economics', John Hopkins University Press,1991

References

- Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray, "Natural Resource and Environmental Economics", Pearson Education/Addison Wesley, 4th edition, 2011.
- Charles Kolstad, "Intermediate Environmental Economics", Oxford University Press, 2nd edition, 2010.
- IPCC (Intergovernmental Panel on Climate Change), Fifth Assessment Report , 2014.
- National Water Policy 2012, Ministry of Water Resources, Government of India.
- National Forest Policy 2016 : Ministry of Environment and Forests, Government of India
- National Policy on Marine Fisheries, 2017: Ministry of Animal Husbandry, Dairying and Fisheries, Government of India.

Discipline Specific Elective Course [Economics] (DSE-B) BA/BSc (General)

Name of the Course: Public Finance (PF)

Total Marks: 100 [Theory(Th) 65 + Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours (Theory): 75, No. of Tutorial contact hours: 15

[For Semester-VI]

ECO-G-DSE-6-1B/2B-TH-TU

ECO-G-DSE-6-1B/2B-TH

1. Theory of Public Finance **40 lecture hours**

- Overview of Fiscal Functions, Tools of Normative Analysis, Pareto Efficiency, Equity and the Social Welfare.
- Market Failure, Public Good and Externalities.
- Elementary Theories of Product and Factor Taxation (Excess Burden and Incidence).

2. Issues from Indian Public Finance **35 lecture hours**

- Current Issues of India's Tax System.
- Working of Monetary and Fiscal Policies.
- Analysis of Budget and Deficits

- Fiscal Federalism in India
- State and Local Finances

ECO-G-DSE-6-1B/2B-TU

Tutorial Contact Hours: 15

Text

- Ganguly Subrata , Public Finance : A Normative Approach, Nababharat Publishers

References

- Musgrave, R.A. and P.B. Musgrave, Public Finance in Theory and Practice, Mc- Graw Hill, 1989.
- M.M Sury, Government Budgeting in India, Commonwealth Publishers, 1990.
- Shankar Acharya, "Thirty years of tax reform" in India, Economic and Political Weekly, May 2005.
- Government of India, Report of the 13th Finance Commission.
- Economic Survey, Government of India (latest).
- State Finances: A Study of Budgets, Reserve Bank of India (latest).

Discipline Specific Elective Course [Economics] (DSE-B) BA/BSc (General)

Name of the Course: Economic History of India (1857-1947) (EHI)

Total Marks: 100 [Theory(Th) 65+ Tutorial(Tu) 15 + Internal Assessment 10+Attendance: 10]

Total Credits: [5(Th)+1(Tu)]=6 ,

No. of Lecture hours (Theory): 75, No. of Tutorial contact hours: 15

[For Semester-VI]

ECO-G-DSE-6-1B/2B-TH-TU

ECO-G-DSE-6-1B/2B-TH

- **Colonial India: Background and Introduction** **10 lecture hours**

Overview of the colonial economy

- **Macro Trends** **13 lecture hours**

National Income; population; occupational structure.

- **Agriculture** **17 lecture hours**

Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.

- **Railways and Industry** **20 lecture hours**

Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial

structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labor relations.

- **Economy and State in the Imperial Context** **15 lecture hours**

The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

ECO-G-DSE-6-1B/2B-TU

Tutorial Contact Hours: 15

Text

- Bhattacharya, Dhiresh, A Concise History of Indian Economy, Progressive Publishers, 1972

References

- Irfan Habib, Indian Economy 1858-1914, A People's History of India, Vol.28, Tulika, 2006.
- B.R. Tomlison, 1975, India and the British Empire 1880-1935, IESHR, Vol.XII.
- Dharma Kumar, the Fiscal System, CEHI, Chapter 12.
- Basudev Chatterjee, Trade, Tariffs and Empire, OUP 1992, Epilogue.
- Daniel Thorner, Agrarian Prospect in India, 1977
- Amiya Kumar Bagchi , Private Investment in India 1900-1939, Taylor and Francis, 2000.

Skill Enhancement Course [Economics] -A Group (SEC-A) BA/BSc (General)

Name of the Course: Introductory Methods of Field Survey (IMFS)

Total Marks: 100 [Theory(Th) 80 + Internal Assessment 10+Attendance: 10]

Total Credits: 2,

No. of Lecture hours: 30

ECO-G-SEC-3-1A-TH/ECO-G-SEC-5-2A-TH

[For Semester III or Semester V]

1. **Basic ideas of economic data** **8 lecture hours**
    - Types of data-cross section, time series , pooled data, panel data etc.
    - Nature of field survey data – types of cross section data
    - Advantages and disadvantages of field survey data
    - Importance of field survey data for economic analysis
    - Role of pilot survey

2. **Methodologies of collection of data** **15 lecture hours**
    - Complete enumeration vs. sample survey

- Sampling techniques : basic ideas of simple random sampling (with and without replacement), stratified random sampling, circular sampling, sampling proportional to size (mathematical proof/mathematical demonstration not required for any type of sampling)
- Practical methods of drawing random sample using random number tables.
- Prerequisites for field survey –preparation of blank tables
- Preparation of questionnaire depending on nature of survey- illustrations on the basis of preparation of hypothetical questionnaire

3. Recording of data **7 lecture hours**

- How to record data after completion of survey : use of manual methods and recording through the use of computers
- Tabular representation of data collected
- Cross checking of data after tabular representation
- Role of units of measurement

References

- Goon, A. M, Gupta, M. K, and Dasgupta, B. Fundamentals of Statistics (Volumes One and Two),The World Press Private Ltd
- Kapur J.N. and Saxena H.C. , Mathematical Statistics, Sultan Chand Publishing

Skill Enhancement Course [Economics] -A Group (SEC-A) BA/BSc (General)

Name of the Course: Elementary Rural Development (ERD)

Total Marks: 100 [Theory(Th) 80 + Internal Assessment 10+Attendance: 10]

Total Credits: 2,

No. of Lecture hours: 30

ECO-G-SEC-3-1A-TH/ECO-G-SEC-5-2A-TH

[For Semester III or Semester V]

1. Basic Issues in Rural Development **12 lecture hours**

- Rural Development vs. Agricultural Development
- Decentralized Planning and Participatory Development-the role of Panchayats
- Panchayat and Rural Development in West Bengal
- Role of NGOs in Rural Development

2. Rural Credit and Self Help Groups(SHGs) **12 lecture hours**

- Constraints of micro-enterprises in rural areas
- The rural non farm sector –credit needs for rural non farm sector.

- Concept of micro credit and the role of Grameen Bank
- Need for SHG for formation-features of SHG
- SHGs in India

3. Selected Government Programmes and Rural Development 6 lecture hours

- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
- Mid-day Meal
- Pradhan Mantri Gram Sadak Yojana (PMGSY)

References

1. Katar Singh , Rural Development : Principles, Policies and Management, Sage Publications, New Delhi.
2. K.G. Karmakar, Rural Credit and Self-Help Groups, Sage Publications, New Delhi
3. S.Sau, Rural Industrialization –Development Trajectory in India, Farma K.L.M., Kolkata
4. Misra D. and Puri K. Indian Economy, Himalaya Publishing House
5. Datt and Sundharam (Revised by G.Datt and A. Mahajan) , Indian Economy, 70th edition, S. Chand

Skill Enhancement Course [Economics] -B -Group (SEC-B) BA/BSc (General)

Name of the Course: Economic Data Analysis and Report Writing (EDARW)

Total Marks: 100 [Theory(Th) 80 + Internal Assessment 10+Attendance: 10]

Total Credits: 2,

No. of Lecture hours: 30

ECO-G-SEC-4-1B-TH/ECO-G-SEC-6-2B-TH

[For Semester IV or Semester VI]

1. Tabular and Graphical representation of Statistical Data 6 lecture hours

- Tabular representation of data for analysis
- Graphical representation of data-use of line diagram, bar chart, divided bar chart, pie chart etc.
- Frequency distribution table: uses and implications
- Pictorial descriptions of frequency table: frequency polygon, histogram, ogive etc.

2. Basic Descriptive Statistics and its role in Data Analysis 16 lecture hours

- Measures of Central Tendency-Concept of arithmetic mean, geometric mean and harmonic mean-their uses (explicit mathematical proof of the properties of different types mean are not

required).The concept of median and mode-their uses in analyzing economic data. Comparison of mean, median and mode as measures of central tendency

- Measures of dispersion: range, mean deviation, standard deviation and quartile deviation. Properties of various measures and their implications (explicit proof of properties is not required). Comparison of various measures of dispersion. Significance of the concept of coefficient of variation. Use of range, standard deviation and coefficient of variation in measuring income inequality. Basic concept of Gini coefficient and Lorenz curve.
- Introductory ideas of correlation and regression analysis.

3. Elements of Report writing 8 lecture hours

- Locating the basic issues- theme based literature survey and motivation behind any study- objectives of the study-development of writing skills
- Methodological issues: Use of tables and graphs. Use of various measures of central tendency and dispersion in analyzing the results.
- Insertion of footnotes or end notes.
- Preparation of Bibliography

References

- Goon, A. M, Gupta, M. K, and Dasgupta, B. Fundamentals of Statistics (Volume One), The World Press Private Ltd.
- A.L. Nagar and R.K. Das : Basic Statistics, 2nd edition, Oxford University Press.
- C.R. Kothari: Research Methodology: Methods and Techniques (second revised edition), New Age India (P) Ltd Publishers.

Skill Enhancement Course [Economics] -B -Group (SEC-B) BA/BSc (General)

Name of the Course: Entrepreneurship and Development (ED)

Total Marks: 100 [Theory(Th) 80 + Internal Assessment 10+Attendance: 10]

Total Credits: 2,

No. of Lecture hours: 30

ECO-G-SEC-4-1B-TH/ECO-G-SEC-6-2B-TH

[For Semester IV or Semester VI]

1. Basic issues of Entrepreneurship and Economic Development 10 lecture hours

- Basic features of Entrepreneurship
- Entrepreneurship and its linkages with economic development
- Growth of entrepreneurship in India—Role of Entrepreneurship in Economic Development.

- Planning Commission's guidelines for formulating a project report by an entrepreneur
- Problem of Rural entrepreneurship in India

2. Financial resources for new ventures of an entrepreneur 7 lecture hours

- Sources of finance---capital structure.
- Institutional support to enterprises—national small industries board – state small industries development corporation--- district industries center--- industrial estates-Indian experience

3. Growth strategies in small business 7 lecture hours

- Stages of growth,
- Types of growth strategies-Expansion, Diversification, Joint Venture, Merger and Subcontracting

4. Sickness in Small Business 6 lecture hours

- Concept of industrial sickness
- Symptoms of sickness in small business
- Causes and consequences of sickness in small business

References

- S.S Khanka--- Entrepreneurial Development, S.Chand & Company Ltd
- Bill Bolton and John Thompson ---- Entrepreneurs: Talent, Temperament and Technique, Butterworth and Heinemann.
- .David .H Holt---Entrepreneurship New Venture Creation
- Poornima M. Charantimath: Entrepreneurship Development and Small Business Enterprises (2nd Edition) Pearson.
- Misra D. and Puri K. Indian Economy, Himalaya Publishing House
- Datt and Sundharam (Revised by G.Datt and A. Mahajan) , Indian Economy, 70th edition, S. Chand