



**DEPARTMENT OF ECONOMICS  
FAROOK COLLEGE (Autonomous)**

**UNDERGRADUATE PROGRAMME IN ECONOMICS  
(B.A ECONOMICS)  
SYLLABUS  
As per UG Regulation 2019**

**CHOICE BASED CREDIT SEMESTER SYSTEM  
(CBCSS)**

# CERTIFICATE

I hereby certify that the documents attached are the bona fide copies of the syllabus of B.A. Economics Programme to be effective from the academic year 2019-20 onwards.

Date:

Place:

PRINCIPAL

## PROGRAMMESTRUCTURE

**1. Duration** of B.A Economics Programme shall be 6 semesters distributed over a period of 3 academic years. The odd semesters (1, 3, and 5) shall be from June to October and the even semesters (2,4, and 6) shall be from November to March.

**2. Courses:** The Programme shall include five types of courses, viz; Common Courses, Core courses, Complementary courses, Open Course and Audit courses.

**3. Common Courses:** In general, every UG student shall undergo 10 common courses (total 38 credits), including 6 Common English Courses and 4 Additional Language Courses for completing the Programme. Common English courses shall be taught by the English teachers and additional language courses by the teachers of additional languages respectively.

**4. Core courses:** Core courses are the courses in Economics and they are offered by the parent department.

**5. Complementary courses:** Complementary courses cover one or two disciplines that are related to the core subject and are distributed in the first four semesters. There shall be two complementary courses in a semester for B.A Programme.

**6. Open courses:** There shall be one open course in core subjects in the fifth semester. The open course shall be open to all the students in the institution except the students in the parent department. The students can opt that course from any other department in the institution. Total credit allotted for open course is 3 and the hours allotted is 3.

**7. Ability Enhancement courses/Audit courses:** These are courses which are mandatory for a programme but not counted for the calculation of SGPA or CGPA. There shall be one Audit course each in the first four semesters. These courses are not meant for class room study. The students can attain only pass (Grade P) for these courses. At the end of each semester there shall be examination conducted by the college from a pool of questions (Question Bank) set by the College. The students can also attain these credits through online courses like SWAYAM, MOOC etc. (optional). The list of passed students must be finalized at least before the fifth semester examination. The list of courses in each semester with credits is given below.

Course with credit	Semester
Environment Studies – 4	1
Disaster Management – 4	2
*Human Rights/Intellectual Property Rights/ Consumer Protection – 4	3
*Gender Studies/Gerontology- 4	4

\* Can opt any one of the courses.

**8. Extra credit Activities:** Extra credits are mandatory for the programme. Extra credits will be awarded to students who participate in activities like NCC, NSS and Swatch Bharath. Those students who could not join in any of the above activities have to undergo Farook College Social Service Programme. Extra credits are not counted for SGPA or CGPA.

**9. Credits:** A student is required to acquire a minimum of 140 credits for the completion of the UG programme, of which 120 credits are to be acquired from class room study and shall only be counted for SGPA and CGPA. Out of the 120 credits, 38 (22 for common (English) courses + 16 for common languages other than English) credits shall be from common courses, 2 credits for project/corresponding paper and 3 credits for the open course. The maximum credits for a course shall not exceed 5. Audit courses shall have 4 credits per course and a total of 16 credits in the entire programme. The maximum credit acquired under extra credit shall be 4. If more Extra credit activities are done by a student that may be mentioned in the Grade card. The credits of audited courses or extra credits are not counted for SGPA or CGPA.

**10. Attendance:** A student shall be permitted to appear for the semester examination, only if he/she secures not less than 75% attendance in each semester. Attendance shall be maintained by the Department concerned. Condonation of shortage of attendance to a maximum of 10% in the case of single condonation and 20% in the case of double condonation in a semester shall be granted by the College remitting the required fee. Benefits of attendance may be granted to students who attend the approved activities of the college/university with the prior concurrence of the Head of the institution. Participation in such activities may be treated as presence in lieu of their absence on production of participation/attendance certificate (within two weeks) in curricular/extracurricular activities (maximum 9 days in a semester). Students can avail of condonation of shortage of attendance in a maximum of four semesters during the entire programme (Either four single condonations or one double condonation and two single condonations during the entire programme). If a student fails to get 65% attendance, he/she can move to the next semester only if he/she acquires 50% attendance. In that case, a **provisional registration** is needed. Such students can appear for supplementary examination for such semesters after the completion of the programme. Less than 50% attendance requires Readmission. Readmission is permitted only once during the entire programme.

**11. Grace Marks:** Grace Marks may be awarded to a student for meritorious achievements in co-curricular activities (in Sports/Arts/NSS/NCC/Student Entrepreneurship) carried out besides the regular hours. Such a benefit is applicable and limited to a maximum of 8 courses in an academic year spreading over two semesters. In addition, maximum of 6 marks per

semester can be awarded to the students of UG Programmes, for participating in the College Fitness Education Programme(COFE).

**12. Project:** Every student of a UG degree programme shall have to work on a project of 2 credits under the supervision of a faculty member.

## SCHEME OF B.A ECONOMICS PROGRAMME

<b>SEMESTER I</b>							
<b>Course</b>	<b>Code</b>	<b>Name of the paper</b>	<b>credit</b>	<b>Hours</b>	<b>IN</b>	<b>EX</b>	<b>Total</b>
Common 1	A01	Common Course: English	3	5	15	60	75
Common 2	A02	Common Course: English	3	4	15	60	75
Common 3	A07	Common Course: Additional Language	4	4	20	80	100
Core 1	BEC1B01	Microeconomics I	5	6	20	80	100
Complementary 1	BEC1C04	Mathematical Methods for Economics-I	2	3	10	40	50
Complementary 2		History	2	3	10	40	50
Audit course		Environment Studies	4	-	-	-	-
Total			23	25			500

<b>SEMESTER II</b>							
<b>Course</b>	<b>Code</b>	<b>Name of the paper</b>	<b>credit</b>	<b>Hours</b>	<b>IN</b>	<b>EX</b>	<b>Total</b>
Common 4	A03	Common Course: English	4	5	20	80	100
Common 5	A04	Common Course: English	4	4	20	80	100
Common 6	A08	Common Course: Additional Language	4	4	20	80	100
Core 2	BEC2B02	Microeconomics II	5	6	20	80	100
Complementary 1	BEC2C04	Mathematical Methods for Economics-II	2	3	10	40	50
Complementary 2		History	2	3	10	40	50
Audit course		Disaster Management	4	-	-	-	-
Total			25	25			500

<b>SEMESTER III</b>							
<b>Course</b>	<b>Code</b>	<b>Name of the paper</b>	<b>credit</b>	<b>Hours</b>	<b>IN</b>	<b>EX</b>	<b>Total</b>
Common 7	A05	Common Course: English	4	5	20	80	100
Common 8	A09	Common Course: Additional Language	4	5	20	80	100
Core 3	BEC3B03	Quantitative Methods for Economic Analysis-I	4	5	20	80	100
Core 4	BEC3B04	Macroeconomics I	4	4	20	80	100
Complementary 1	BEC3C04	Mathematical Methods for Economics-III	2	3	10	40	50
Complementary 2		History	2	3	10	40	50
Audit course		*Human Rights/Intellectual Property Rights/ Consumer Protection	4	-	-	-	-
Total			24	25			500

SEMESTER IV							
Course	Code	Name of the paper	credit	Hours	IN	EX	Total
Common 9	A06	Common Course: English	4	5	20	80	100
Common 10	A10	Common Course: Additional Language	4	5	20	80	100
Core 5	BEC4B05	Quantitative Methods for Economic Analysis-II	4	5	20	80	100
Core 6	BEC4B06	Macroeconomics II	4	4	20	80	100
Complementary 1	BEC4C04	Mathematical Methods for Economics-IV	2	3	10	40	50
Complementary 2		History	2	3	10	40	50
Audit course		*Gender Studies/Gerontology	4	-	-	-	-
Total			24	25			500

SEMESTER V							
Course	Code	Name of the paper	credit	Hours	IN	EX	Total
Core 7	BEC5B07	Indian Economic Development: National and Regional-I	4	6	20	80	100
Core 8	BEC5B08	History of Economic Thought	4	5	20	80	100
Core 9	BEC5B09	Monetary Economics	4	5	20	80	100
Core 10	BEC5B10	Financial Markets	4	5	20	80	100
Open	BEC5D01	Economics in Everyday Life	3	3	15	60	75
	BEC5D02	International Trade and Finance					
	BEC5D03	Banking					
Project		To be continued in VI <sup>th</sup> Sem	-	1			
Total			19	25			475

SEMESTER VI							
Course	Code	Name of the paper	credit	Hours	IN	EX	Total
Core 11	BEC6B11	International Economics	4	5	20	80	100
Core 12	BEC6B12	Development Economics	4	5	20	80	100
Core 13	BEC6B13	Indian Economic Development: National and Regional-II	4	5	20	80	100
Core 14	BEC6B14	Public Finance	4	5	20	80	100
Elective	BEC6E01	Environmental Economics	3	3	15	60	75
	BEC6E02	Basic Econometrics					
	BEC6E03	Economics of Business and Finance					
Project	BEC6B15	Individual/Group activity	2	2	10	40	50
Total			21	25			525

<b>CORE, COMPLIMENTARY, OPEN AND ELECTIVE PAPERS</b>							
<b>SEMESTER I</b>							
<b>Course</b>	<b>Code</b>	<b>Name of the paper</b>	<b>Credit</b>	<b>Hours</b>	<b>IN</b>	<b>EX</b>	<b>Total</b>
Core 1	BEC1B01	Microeconomics I	5	6	20	80	100
Complementary 1	BEC1C04	Mathematical Methods for Economics-I	2	3	10	40	50
<b>SEMESTER II</b>							
<b>Course</b>	<b>Code</b>	<b>Name of the paper</b>	<b>Credit</b>	<b>Hours</b>	<b>IN</b>	<b>EX</b>	<b>Total</b>
Core 2	BEC2B02	Microeconomics II	5	6	20	80	100
Complementary 1	BEC2C04	Mathematical Methods for Economics-II	2	3	10	40	50
<b>SEMESTER III</b>							
<b>Course</b>	<b>Code</b>	<b>Name of the paper</b>	<b>Credit</b>	<b>Hours</b>	<b>IN</b>	<b>EX</b>	<b>Total</b>
Core 3	BEC3B03	Quantitative Methods for Economic Analysis-I	4	5	20	80	100
Core 4	BEC3B04	Macroeconomics I	4	4	20	80	100
Complementary 1	BEC3C04	Mathematical Methods for Economics-III	2	3	10	40	50
<b>SEMESTER IV</b>							
<b>Course</b>	<b>Code</b>	<b>Name of the paper</b>	<b>Credit</b>	<b>Hours</b>	<b>IN</b>	<b>EX</b>	<b>Total</b>
Core 5	BEC4B05	Quantitative Methods for Economic Analysis-II	4	5	20	80	100
Core 6	BEC4B06	Macroeconomics II	4	4	20	80	100
Complementary 1	BEC4C04	Mathematical Methods for Economics-IV	2	3	10	40	50
<b>SEMESTER V</b>							
<b>Course</b>	<b>Code</b>	<b>Name of the paper</b>	<b>Credit</b>	<b>Hours</b>	<b>IN</b>	<b>EX</b>	<b>Total</b>
Core 7	BEC5B07	Indian Economic Development: National and Regional-I	4	6	20	80	100
Core 8	BEC5B08	History of Economic Thought	4	6	20	80	100
Core 9	BEC5B09	Monetary Economics	4	5	20	80	100
Core 10	BEC5B10	Financial Markets	4	5	20	80	100
Open	BEC5D01	Economics in Everyday Life	3	3	15	60	75
	BEC5D02	International Trade and Finance					
	BEC5D03	Open Course (To choose 1 out of 3)					
Project		To be continued in VI <sup>th</sup> Sem	-	1			
<b>SEMESTER VI</b>							
<b>Course</b>	<b>Code</b>	<b>Name of the paper</b>	<b>Credit</b>	<b>Hours</b>	<b>IN</b>	<b>EX</b>	<b>Total</b>
Core 11	BEC6B11	International Economics	4	5	20	80	100
Core 12	BEC6B12	Development Economics	4	5	20	80	100
Core 13	BEC6B13	Indian Economic Development: National and Regional-II	4	5	20	80	100
Core 14	BEC6B14	Public Finance	4	5	20	80	100
Elective	BEC6E01	Environmental Economics	3	3	15	60	75
	BEC6E02	Basic Econometrics					
	BEC6E03	Economics of Business and Finance					
Project	BEC6B15	Individual/Group activity	2	2	10	40	50



## EVALUATION AND GRADING

Mark system is followed instead of direct grading for each question. For each course in the semester letter grade and grade point are introduced in 10-point indirect grading system as per guidelines given below.

### Ten Point Indirect Grading System

Percentage of Marks (Both Internal & External put together)	Grade	Interpretation	Grade point Average (G)	Range of grade points	Class
95 and above	O	Outstanding	10	9.5 -10	First Class with Distinction
85 to below 95	A+	Excellent	9	8.5 -9.49	
75 to below 85	A	Very good	8	7.5 -8.49	
65 to below 75	B+	Good	7	6.5 -7.49	First Class
55 to below 65	B	Satisfactory	6	5.5 -6.49	
45 to below 55	C	Average	5	4.5 -5.49	Second Class
35 to below 45	P	Pass	4	3.5 -4.49	Third Class
Below 35	F	Failure	0	0	Fail
Incomplete	I	Incomplete	0	0	Fail
Absent	Ab	Absent	0	0	Fail

### Course Evaluation

The evaluation scheme for each course shall contain two parts

- 1) Internal assessment
- 2) External Evaluation

20% weight shall be given to the internal assessment. The remaining 80% weight shall be for the external evaluation.

#### Internal Assessment

20% of the total marks in each course are for internal examinations. The internal assessment shall be based on a predetermined transparent system involving written tests, Class room participation based on attendance in respect of theory courses and lab involvement/records attendance in respect of Practical Courses.

Internal assessment of the project will be based on its content, method of presentation, final conclusion and orientation to research aptitude.

Components with percentage of marks of Internal Evaluation of Theory Courses are- Test paper 40%, Assignment 20%, Seminar 20% and Class room participation based

on attendance 20%. Split up of marks for Test paper and Class Room Participation (CRP) for internal evaluation are as follows.

**Split up of of marks for Test paper**

<b>Range of Marks in test paper</b>	<b>Out of 8 (Maximum internal marks is 20)</b>	<b>Out of 6 (Maximum internal marks is 15)</b>
Less than 35%	1	1
35% - 45%	2	2
45% - 55%	3	3
55% - 65%	4	4
65% -85%	6	5
85% -100%	8	6

**Split up of of marks for Class Room Participation**

<b>Range of CRP</b>	<b>Out of 4 (Maximum internal marks is 20)</b>	<b>Out of 3 (Maximum internal marks is 15)</b>
$50\% \leq \text{CRP} < 75\%$	1	1
$75\% \leq \text{CRP} < 85\%$	2	2
85 % and above	4	3

**External Evaluation**

External evaluation carries 80% of marks. All question papers shall be set by the College. The external question papers may be of uniform pattern with 80/60 marks. The courses with 2/3 credits will have an external examination of 2 hours duration with 60 marks and courses with 4/5 credits will have an external examination of 2.5 hours duration with 80marks.

## QUESTION PAPERS PATTERN

### Question paper type 1 with 80 marks

The external QP with 80 marks and internal examination is of 20 marks. Duration of each external examination is 2.5 Hrs. The pattern of External Examination is as given below. The students can answer all the questions in Sections A&B. But there shall be Ceiling in each section.

#### **Section A**

Short answer type carries 2 marks each -15questions Ceiling -25

#### **Section B**

Paragraph/ Problem type carries 5 marks each -8questions Ceiling - 35

#### **Section C**

Essay type carries 10 marks (2 outof4) 2X10=20

### Question paper type 2 with 60 marks (Open Course & Elective Course).

The external QP with 60 marks and internal examination is of 15 marks. Duration of each external examination is 2 Hrs. The pattern of External Examination is as given below. The students can answer all the questions in Sections A& B. But there shall be Ceiling in each section.

#### **Section A**

Short answer type carries 2 marks each -12questions Ceiling -20

#### **Section B**

Paragraph/ Problem type carries 5 marks each -7questions Ceiling - 30

#### **Section C**

Essay type carries 10 marks (1 outof2) 1X10=10

### Question paper type 3 with 40 marks (Complementary Course)

The external QP with 40 marks and internal examination is of 10 marks. Duration of each external examination is 1.5 Hrs. The pattern of External Examination is as given below. The students can answer all the questions in Sections A& B. But there shall be Ceiling in each section.

#### **Section A**

Short answer type carries 2 marks each - 6 questions Ceiling -10

#### **Section B**

Paragraph/ Problem type carries 5 marks each -5 questions Ceiling - 20

#### **Section C**

Essay type carries 10 marks (1 out of 2) 1X10=10

### **STUDY TOUR**

A compulsory study tour is recommended as part of the paper entitled "India's Economic Development- National and Regional" in the Fifth or Sixth Semester and the tour report should be submitted to the Head of the Department soon after the tour.

### **PROJECT GUIDELINES**

As part of the requirements for BA Programme every student must do a project either individually or as a group, under the supervision of a teacher. Project work is meant for providing an opportunity to approach and study a problem in a systematic and scientific manner. It provides them an opportunity to apply the tools they have studied and learn the art of conducting a study and presenting the report in a structured way. The report of the project, completed in every respect, is to be submitted to the department for valuation by the examiners appointed by the College. Guidelines for doing Project are as follows.

1. Project work may be done either individually or as a group of students not exceeding 5 in number.
2. The topic of the project should be on economic issues either theoretical or case study type.
3. Students should be properly oriented on the methodology of conducting a study during the Vth Semester, making use of the hours allotted for the purpose.
4. The Project work should be completed by the end of the VI semester and the report should be submitted to the Department before 31st March of the year concerned.
5. The project report should be either printed or typed in English.
6. A copy of the project report in English (printed or typed) should be submitted by the student/team on or before 31 March of the year concerned.
8. Length of the project report - 20 to 35 typed pages (Paper A4, Times New Roman, Font size 12, line spacing 1.5). The report may be organized in 3 chapters(minimum).The use of simple statistical tools in data analysis may be encouraged.
9. Project evaluation and the Viva voce should be conducted immediately after the completion of the regular classes /written examination.

#### **Basic Ingredients of a Project Design**

The project work can be designed by considering the following elements.

1. Selection of a Topic, Pilot Survey – a trial run of questionnaire / interviews
2. Significance / relevance of the Study, Review of Related Literature
3. Formulation of Research Questions
4. Research Objectives (Minimum 2)
5. Coverage (Universe / Sample & period of study)
6. Data source (Primary/Secondary)

7. Methods of Analysis i.e., Tools and Techniques
8. Limitations of the study
9. Chapter outline
10. Data Analysis/Result Chapter(s)
11. Conclusion

### **Structure of the Report**

The report should be organized in the following sequence:

1. Title page
2. Name of the candidate, Name and designation of the supervising teacher
3. Declaration of the student and certificate of the supervising teacher
4. Acknowledgements
5. List of tables, List of figures, table of contents
6. Introduction
7. Significance of the study
8. Related works, if any
9. Objectives, methodology and data sources
10. Chapter scheme
11. Main text, summary conclusions and recommendations
12. Bibliography

## PROJECT EVALUATION

Evaluation of the Project Report shall be done under Mark System.

1. The evaluation of the project will be done at two stages:
  - a) Internal Assessment (supervising teachers will assess the project and award internal Marks)
  - b) External evaluation (external examiner appointed by the College.)
  - c) Grade for the project will be awarded to candidates, combining the internal and external marks.
2. The internal and external components is to be taken in the ratio 1:4. Assessment of different components may be taken as below.

Internal (20% of total)			External (80% of total)		
Component	% of Marks	Marks	Component	% of Marks	Marks
Punctuality & Originality	20	2	Relevance of the Topic, Statement of Research Problem, Statement of Objectives, Methodology	20	8
Use of Data	20	2	Structure of Review, Quality of Analysis/Use of Statistical Tools, Presentation of Findings and Reference/Bibliography.	30	12
Scheme/ Organization of Report	30	3	Viva-voce	50	20
Viva-voce	30	3			
Total		10	Total		40

3. External Examiners will be appointed by the College from the list of VI Semester Board of Examiners in consultation with the Chairperson of the Board.
4. The Chairman of the VI semester examination should form and coordinate the evaluation teams and their work.
5. Internal Assessment should be completed 2 weeks before the last working day of VI Semester.
6. Internal Assessment marks should be published in the Department.
7. The Chairman Board of Examinations, may at his discretion, on urgent requirements, make certain exception in the guidelines for the smooth conduct of the evaluation of project.

### Pass Conditions

- Submission of the Project Report and presence of the student for viva are compulsory for internal evaluation. No marks shall be awarded to a candidate if she/ he fails to submit the Project Report for external evaluation.

- The student should get a minimum P Grade in aggregate of External and Internal.
- There shall be no improvement chance for the Marks obtained in the Project Report.
- In the extent of student failing to obtain a minimum of Pass Grade, the project work may be re-done and a new internal mark may be submitted by the Parent Department. External examination may be conducted along with the subsequent batch.

## DETAILED SYLLABUS – CORE COURSES

### SEMESTER I

Course Category:	Core Course 1
Course Title and Code:	Micro Economics I, BEC1B01
No. of Credits:	5
No. of Contact Hours:	108

### Microeconomics I

#### Syllabus

#### **Module I: Introduction to Microeconomics**

Nature and scope of micro economics – Microeconomic models and methodology – Positive and normative analysis - induction and deduction, Value judgements.

#### **Module II: Price Determination in a Competitive Market**

Demand, supply and equilibrium - Market demand curve –market supply curve – Change in Market Equilibrium – Functions of prices - changes in demand and supply – Extension and contraction in demand - Increase and Decrease in demand - Elasticity of demand and supply- Price Elasticity of demand – Point and Arc method – Price elasticity and total expenditure- Factors determining price elasticity - TR, MR and price Elasticity – Income elasticity and its interpretation- Cross elasticity - substitutes and complementary goods

#### **Module III: Theory of consumer behaviour**

Utility - Cardinal Versus Ordinal utility- Consumer Equilibrium under cardinal utility – Consumer behavior under ordinal utility- assumptions – Indifference curve - properties - MRS – Equilibrium of the consumer under ordinal utility – Budget constraints - Budget line - Income effect - Engel curve - Normal good; inferior good – Consumer's response to price changes - Price effect and utility maximization- Derivation of individual demand curve for normal good – Decomposition of Price effect into income effect and substitution effect – Hicksian and Slutsky's methods – Normal, inferior and Giffen goods – Application of Indifference Curves - Theory of Revealed Preference – Revealed Preference axiom - Consumer surplus - Marshall and Hicks.

#### **Module IV: Theory of Production**

Production Function-short run versus long run production function – TP, AP, MP and their interrelationships - Production with one variable input - Law of variable proportions - Production with two variable input - Returns to scale - Iso-quants - properties - MRTS – Elasticity of substitution - Iso-cost line – Least cost input combination - Producer's equilibrium - Expansion path - Cobb-Douglas production function (concept only)

#### **References**

1. Dominic Salvatore. (2008), Microeconomics, Theory and Applications, Fifth Edition, Oxford University Press, New Delhi.
2. Koutsoyiannis A. (1979), Microeconomic Theory, 2nd edition, Macmillan, London.
3. Robert S. Pindyck, Daniel L Rubinfeld and Mehtha (2006), Microeconomics, Seventh Edition, Prentice Hall of India Ltd, New Delhi.
4. Varian H. (2000), Intermediate Microeconomics: A Modern Approach, Fifth Edition, Affiliated East West Press Private Limited
5. Walter Nicholson and Christopher Snyder (2010 ), Theory and applications of intermediate microeconomics' 11th edition, South Western, Cengage learning
6. N. Gregory Mankiw (2012), Principles of Microeconomics, Seventh Edition, Cengage Learning.



## SEMESTER II

Course Category:	Core Course 2
Course Title and Code:	Micro Economics II, BEC2B02
No. of Credits:	5
No. of Contact Hours:	108

### **Microeconomics II** **Syllabus**

#### **Module I: Theory of Costs**

Explicit and implicit costs, opportunity cost, private cost, social cost, economic cost, accounting cost, sunk cost, fixed and variable cost, marginal and average cost -Short run and Long run cost curves - Modern theory of costs - Short- run costs - AFC, AVC, ATC – Long run L shaped cost curves and its Implications.

#### **Module II: Market structure: Perfect Competition**

Perfect competition –characteristics –Short run Equilibrium of firm and Industry – shut down point - Long run equilibrium of a firm and industry – Constant, increasing and decreasing cost industries - Welfare effects of government intervention – Impact of a tax or subsidy.

#### **Module III: Monopoly and Monopolistic Competition**

Sources of monopoly – AR and MR curve of a monopolist - Short run and Long run equilibrium – Supply curve of a monopolist – The multiplant firm – Measuring monopoly power – Lerner Index - social cost of monopoly – Degrees of Price discrimination - Dumping - Peak load pricing - Monopsony – Bilateral monopoly (concepts only) - Monopolistic competition – Features - Short run and long run equilibrium - Product differentiation and selling costs

#### **Module IV: Oligopoly**

Oligopoly – Features, Collusive versus non-collusive oligopoly – Cournot model – Kinked demand curve model - Cartel and price leadership

#### **Module V: Pricing and Employment of Inputs**

Marginal Productivity theory of input demand – Competitive factor markets - Demand curve of the firm for one variable input –Demand curve of the firm for several variable inputs - Market demand curve for an input - Supply of inputs to a firm – The market supply of inputs – Equilibrium in a competitive factor market.

#### **References**

1. Dominic Salvatore. (2008), Microeconomics, Theory and Applications, Fifth Edition, Oxford University Press, New Delhi.
2. Koutsoyiannis A. (1979), Microeconomic Theory, 2nd edition, Macmillan, London.

#### **Additional Readings:**

1. Robert S. Pindyck, Daniel L Rubinfeld and Mehtha (2006), Microeconomics, Seventh Edition, Prentice Hall of India Ltd, New Delhi.
2. Varian H. (2000), Intermediate Microeconomics: A Modern Approach, Fifth Edition, Affiliated East West Press Private Limited
3. Walter Nicholson and Christopher Snyder (2010 ), Theory and applications of intermediate microeconomics' 11th edition, South Western, Cengage learning
4. N. Gregory Mankiw (2012), Principles of Microeconomics, Seventh Edition, Cengage Learning.

## SEMESTER III

Course Category:	Core Course 3
No. of Credits:	4
No. of Contact Hours:	90
Course Title and Code:	Quantitative Methods for Economic Analysis-I, BEC3B03

### Quantitative Methods for Economic Analysis-I

#### Syllabus

#### **Module I: Algebra**

Exponents-Equations-Linear and Quadratic-solution to Quadratic equation-Quadratic Formula-Factorisation-completing the square-solutions of simultaneous equation (Up to three unknowns)

#### **Module II: Functions and Graphs**

Functions-Types of functions and its applications in economics-Rectangular co-ordinate system-graphs of functions-slope and intercept-equation of straight line-solution of two simultaneous equation by graphical method

#### **Module III: Meaning of Statistics and Data Collection Methods**

Definition- Scope and Limitations of Statistics-Primary vs Secondary data - Census Method vs Sample Method- Methods of primary data collection: Personal Interview, Questionnaires and Schedules - Methods of sampling: SRS, Systematic, Stratified, Cluster Quota and Snowball sampling methods.

#### **Module IV: Description of Data**

Types of Data-Scale of Measurement- Measures of Central tendency- Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic mean-Weighted and combined mean. Measures of Dispersion- Absolute and Relative measures of dispersion-Range, Quartile Deviation, Mean Deviation and Standard Deviation- Coefficient of variation Lorenz Curve-Gini Coefficient- Skewness and Kurtosis.

#### **Module V: Correlation and Regression Analysis**

Correlation-Meaning, Types and Degrees of Correlation- Methods of Measuring Correlation- Scatter Diagram and Correlation Graph- Karl Pearson's Coefficient of Correlation and Spearman Rank Correlation Coefficient - Properties and Interpretation of Correlation Coefficient.-Regression- Types- Properties--Meaning, Principle of Ordinary Least Squares and Regression Lines.

#### **References**

1. Dowling Edward. T (2003), Introduction to Mathematical Economics, 2nd/3rd Edition, Schaum's Outline Series, McGraw-Hill, New York.
2. Mike Rosser (2003), Basic Mathematics for Economists, Second Edition, Routledge
3. Barauh. S (2002), Basic Mathematics and Its Application in Economics, Macmillan.
4. Geoff Renshaw (2012), Maths for Economics, Third Edition, Oxford University Press, India
5. Anderson, Sweeney and Williams (2013), Statistics for Business and Economics, 12<sup>th</sup> Edition, Thomson Education.
6. Gupta S. P (2007), Statistical Methods, Sultan Chand and Sons, New Delhi.
7. Mann S Prem (2012), Introductory statistics, 8<sup>th</sup> Edition, John Wiley and Sons

## SEMESTER III

Course Category:	Core Course 7
Course Title and Code:	Macro Economics I, BEC3B04
No. of Credits:	4
No. of Contact Hours:	90

## **Macroeconomics I**

### **Syllabus**

#### **Module I: Introduction to Macroeconomics**

Macroeconomics: Meaning, origin and Growth. Scope and Limitations of Macroeconomics- Major macroeconomic issues – Macroeconomic models – Types of variable: Stock and flow, endogenous and exogenous, ex ante and ex post – Static, comparative static and dynamic analysis – Equilibrium: Partial and General.

#### **Module II: Measurement of National Income**

Introduction to MOSPI and National Account Statistics – Aggregate Income and Per capita Income – Methods of Estimating national income – Aggregate income categories Components of Aggregate Expenditure – Real vs Nominal GNP – Potential versus Actual GNP – Green GNP – GDP Growth Rate. – Difficulties in the Estimation of national income in India

#### **Module III: Classical Macro Economic Model**

Classical Postulates – Laissez-faire System – Full Employment - Wage-price flexibility - Say's Law of Markets and its criticisms – Homogeneity Postulates - Classical Dichotomy – Neutrality - Classical theory of Money – Classical theory of interest - Money illusion - Pigou effect – Real Balance Effects - Classical model of output and employment- Criticisms of classical theory.

#### **Module IV: Keynesian Macro Economic Model**

Principles of Effective demand – Aggregate demand and supply – Components of Aggregate Demand – Wage Price Rigidity – Under Employment Equilibrium – Keynesian Theory vs Classical Theory – Keynesian Consumption function – APC, MPC, APS, MPS and Multiplier– Determination of Income in two and three sectors (using Keynesian Cross diagrams) – Keynesian theory of demand for Money- Liquidity Trap.

#### **Module V: Theories of Consumption**

Absolute income hypothesis - Consumption puzzle of Kuznet - Life Cycle hypothesis - Permanent Income Hypothesis - Relative Income Hypothesis.

#### **References**

1. Gregory Mankiw (2010), Macroeconomics, Sixth Edition, Worth Publishers.
2. Richard T. Froyen (2008), Macroeconomics - Theories and Policies, Tenth Edition, Pearson education.
3. D.N Dwivedi (2016), Macroeconomics: Theory and Policy, Tata McGraw Hill, New Delhi.
4. Maria John Kennedy (2013) Macroeconomic Theory, PHI Learning, New Delhi.
5. Natrass, Nicoli and VisakhVarma, G (2014): Macroeconomics Simplified: Understanding Keynesian and Neoclassical Macroeconomic Systems, Sage publications India, New Delhi.
6. Errol D'Souza (2008), Macro Economics, Pearson Education.
7. Edward Shapiro (1982), Macroeconomic Analysis, Oxford University press.
8. Eugene Diuto (2010), Macroeconomic Theory, Shaums's Outline Series.

### **SEMESTER IV**

Course Category:	Core Course 3
No. of Credits:	4
No. of Contact Hours:	90

**Quantitative Methods for Economic Analysis-II**  
**Syllabus**

**Module I: Index Numbers and Time Series Analysis**

Index Numbers- Meaning and Uses- Unweighted and Weighted Index Numbers: Laspeyre's, Paasche's, Fisher's, Dorbish-Bowley, Marshall-Edgeworth and Kelley's Methods- Tests of Index Numbers: Time Reversal and Factor Reversal tests -Base Shifting, Splicing and Deflating - Time Series Analysis-Components of Time Series, Measurement of Trend by Moving Average and the Method of Least Squares.

**Module II – Fundamentals of Probability**

Set Theory – Probability – concept of probability – meaning and definition –Different approaches to probability – theorems of probability – addition – theorem – multiplication theorem – conditional probability – Inverse probability - Baye's theorem.

**Module III– Basics of Probability Distributions**

Random variable – Discrete and continuous random variables – Probability distributions – Mean and standard deviation of probability distributions– Binomial Distributions - Mean and Variance (without proof) - Characteristics and fitting of Binomial Distributions - Poisson Distributions - Mean and Variance (without proof) - Characteristics and fitting of Poisson Distributions –Normal Distributions (Definition & Properties only)Sampling Methods – Random Sampling and Non Random Sampling.

**Module IV– Applied Statistics Using MS Excel**

Excel Basics- Creation and Manipulation of Charts – Manipulation of data -Formulas and Formula Syntax -Functions - Function Library -Auto sum - Data Filter and Sorter - Descriptive statistics, Correlation and Regression using Data Analysis ToolPack – Trend lines: Linear and non-linear – Binomial and Poisson Distributions.

**References**

1. Anderson, Sweeney and Williams (2013), Statistics for Business and Economics, 12<sup>th</sup> Edition, Thomson Education.
2. Gupta S. P (2007), Statistical Methods, Sultan Chand and Sons, New Delhi.
3. Mann S Prem (2012), Introductory statistics, 8<sup>th</sup> Edition, John Wiley and Sons
4. Damodhar N Gujarati (2008), Basic Econometrics, 5<sup>th</sup> Edition, Tata McGraw Hill.
5. Mario F. Triola (2013), Elementary Statistics Using Excel, 5<sup>th</sup> Edition, Pearson.
6. A.L. Nagar and R.K. Das (2006), Basic Statistics, Second Edition Oxford University Press, New Delhi.
7. S.C. Gupta and V.K. Kapoor (2014), Fundamentals of Mathematical Statistics, Sultan Chand and Sons, New Delhi.
8. Speigal.M. R. (1992), Theory and problems of Statistics, McGraw Hill, London.
9. A.K. Md. Ehsanes Saleh and Vijay K. Rohatgi (2014), An Introduction to Probability and Statistics, 2ed, Wiley, New Jersey.

**SEMESTER IV**

Course Title and Code: Macroeconomics II, BEC6 B11

No. of Credits: 4

No. of Contact Hours: 90

## **Macroeconomics II**

### **Syllabus**

#### **Module I: Theories of Inflation and Unemployment**

Inflation, Disinflation and Deflation - Types of Inflation – Causes and Effects of Inflation - Disinflation and Sacrifice ratio - Measurement of inflation- Price Index Numbers: CPI and WPI – GDP deflator- Measures to control inflation - Demand pull versus cost push inflation- Mixed inflation – Expected Inflation - Stagflation - Inflationary gap and deflationary gap – Inflation and Interest Rate – Fisher Effect - Interest rate: Real vs Nominal – Meaning and types of unemployment - Okun’s law – Phillips curve: Short run and Long run

#### **Module II Saving and Investment**

Saving: Classical view and Keynesian View – Factors Determining size of Saving – Meaning and Types of Investment – Factors determining investment decision – Keynesian Investment Function – MEC and Investment Demand – Factors affecting MEC – Criticisms of MEC – MEI and Aggregate Demand for Capital – Accelerator Theory – Paradox of Thrift.

#### **Module III Elementary IS-LM Model**

Goods Market and IS Curve - Keynesian Cross - Government Purchase Multiplier - Tax Multiplier- Derivation of IS curve - Slope and Shifts of IS curve- Money Market and LM Curve-The liquidity Preference and derivation of LM curve – Slope and Shifts of LM curve - Short-run equilibrium.

#### **Module IV: Macro economic Instability:**

Business Cycle- meaning- types and phases- Great Depression and Interpretations- Keynesian Effective demand Hypothesis - The monetary approach of Friedman- Trade cycle theories: Hawtrey, Hayek and Schumpeter - Global recession of 2008: Genesis and impact over various countries.

#### **References**

1. Gregory Mankiw (2010), Macroeconomics, Sixth Edition, Worth Publishers.
2. Richard T. Froyen (2008), Macroeconomics - Theories and Policies, Tenth Edition, Pearson education.
3. D.N Dwivedi (2016), Macroeconomics: Theory and Policy, Tata McGraw Hill, New Delhi.
4. Maria John Kennedy (2013) Macroeconomic Theory, PHI Learning, New Delhi.
5. Rudiger Dornbusch, Stanley Fischer and Richard Startz (2005), Macroeconomics, Twelfth Edition, McGraw-Hill Economics.
6. Errol D’Souza (2008), Macro Economics, Pearson Education.
7. Edward Shapiro (1982), Macroeconomic Analysis, Oxford University press.
8. Eugene Diuto (2010), Macroeconomic Theory, Shaums’s Outline Series.
9. Natrass, Nicoli and VisakhVarma, G (2014): Macroeconomics Simplified: Understanding Keynesian and Neoclassical Macroeconomic Systems, Sage publications India, New Delhi.

#### **SEMESTER V**

Course Category: Core Course 7

Course Title and Code: Indian Economic Development: National and Regional-I,  
BEC5B07

No. of Credits: 4

No. of Contact Hours: 108

### **Indian Economic Development: National and Regional-I**

#### **Syllabus**

#### **Module I: Indian Economy in Pre – Independence Era**

Economic consequences of British Conquest - Decline of Indian Handicrafts - Changes in the Land System during British Rule -Commercialisation of agriculture - Colonial Exploitation: Forms and Consequences- Colonial rule and underdevelopment - Drain Theory - Nature and causes of famines – Industrial Transition under British rule.

#### **Module II: Development Policies and Planning**

Mixed Economic framework – Rationale and features of planning- Objectives of Planning - Strategies of planning: Mahalanobis Strategy and Its Appraisal- Departure from Mahalanobis Strategy- Economic Crisis of 1991-New Development strategy and Economic Reforms of 1991-Liberalisation, Privatisation, and Globalisation Strategies (General Introduction only)- Inclusive Growth Strategy- Achievements and Failures of Planning-NITI Ayog.

#### **Module III: Resource Base and Structure of Indian Economy**

Natural Resources in India - Human Resources: Size and Growth of Population-Demographic transition and Demographic Dividend- Issue of Missing women-Unemployment: Measurement, Trends and Causes-Employment programmes-Poverty Line and Incidence of Poverty: Official Estimates-Strategies for Poverty alleviation – Extent and Causes of Income inequality -HDI of India - State wise comparison- Trends in National Income and Per capita income - Sectoral composition (output and employment).

#### **Module IV – Social and Human Development in Kerala**

An Introduction to Kerala Model of Development - Indicators of Social and Human development- Sen- Bhagawati Debate–Demographic Transition - -Trends in employment and unemployment in Kerala –Migration – concepts in migration – Emigration from Kerala: trend and pattern – Remittance flow and economic impact on Kerala.

#### **Basic References for Indian Economy**

1. Gaurav Datt and Ashwini Mahajan (2013), Datt & Sundaram Indian Economy, 67<sup>th</sup> Edition, Sultan Chand and Co, New Delhi.
2. V.K Misra and Puri (2014), Indian Economy, 32<sup>nd</sup> Revised edition, Himalaya Publishing House, New Delhi.
3. Uma Kapila (2014), Indian Economy since Independence, 24<sup>th</sup> Edition, Academic Foundations, New Delhi.
4. Uma Kapila (2014), Indian Economy Performance and Policies, 14<sup>th</sup> Edition, Academic Foundations, New Delhi.
5. I.C Dingra (2014), Indian Economic Development, Sulthan Chand and Sons, New Delhi.
6. Ramesh Singh (2015), Indian Economy, for Civil Services Examination, Seventh Edition, McGraw Hill Education Series, New Delhi.
7. Tirtankar Roy (2011), *The Economic History of India*, Oxford University Press, New Delhi.
8. Ministry of Finance, Government of India, Economic Survey, Vol.1&2, 2017-18, Oxford University Press.

#### **Additional Readings for Indian Economy**

1. Vijay Johi and I. M.D Little (1998), India's Economic Reforms, Oxford University Press, New Delhi
1. Ahluwalia. I.J. and I.M.D Little (Eds) (1999), India's Economic Reforms and Development, Oxford University Press (OUP), New Delhi.
2. Bardhan, P.K. (1999), The Political Economy of Development in India, OUP, New Delhi.
3. Bawa,R.S. and P.S. Raikhy,(1997), Structural Changes in Indian Economy, Gurunanak Dev University press, Amritsar.
4. Chakravarty, S. (1987), Development planning: The Indian Experience, OUP, New Delhi.
5. Datt.R. (2001), Second Generation Economic Reforms in India, Deep & Deep Publications.
6. Dreze, Jean and AmartyaSen (2013): An Uncertain Glory – India and its Contradictions, Penguin Books.

### **References for Kerala Economy**

1. Planning Commission (2008), "Kerala Development Report", Academic Foundation, New Delhi.
2. Govt of Kerala - CDS (2006), Human Development Report 2005, Published by State Planning Board Government of Kerala.
3. Oommen, M.A. (1993): Essays on Kerala Economy, Oxford & IBH.
4. Government of Kerala, (2018), Economic Review, State Planning Board, Thiruvananthapuram.
5. B.A. Pakash (2004), Kerala's Economic Development: Performance and Problems in the post liberalization period, Sage Publications, New Delhi.
6. Rajasenan, D. and Gerard De Groot, (2005), Kerala Economy: Trajectories, Challenges and Implications, CUST, Kochi.
7. Centre for Development Studies (1975), Poverty, Unemployment and Development Policy-A Study of Selected Issues with Special Reference to Kerala, New York, United Nations.
8. V.K Ramachandran (1996), "On Kerala's Development Acheivements" in Jean Dreaze and Amrtya Sen (eds), Indian Development, Selected Regional Perspective, Oxford University Press.
9. John Kurien (1995), "The Kerala Model, Its central tendency and the outliers", Social Scientist, Vol.23, No. 1/3. Pp 70-90.
10. P.K Michael Tharakan (2008), "When the Kerala Model is Historicised: A Chronological Perspective", Working Paper No. 19, CSES, Kochi.
11. ET Mathew (1997): Employment and Unemployment in Kerala- Sage publishers, New Delhi.
12. K.C Zakaria and S Irudaya Rajan(2014), "Dynamics of Emigration and Remittances in Kerala: Results from Kerala Migration Survey-2014", Working Paper 463, Centre for Development Studies, Thiruvananthapuram.
13. K.P Kannan (2005), "Kerala's Turnaround in Growth, Role of Social Development, Remittances, and Reform", Economic and Political Weekly, February 5.
14. G.K Lieten (2002), "Human Development in Kerala: Structure and Agency in History." Economic and Political Weekly, April 20.

### **SEMESTER V**

Course Category:

Core Course 8

Course Title and Code:

History of Economic Thought, BEC5B08

No. of Credits: 4  
No. of Contact Hours: 108

## History of Economic Thought

### Module I: Introduction and Early Economic Thought

Why study History of Economic Thought? – Economic Ideas of Aristotle, Plateau – IbnKhalidun - St. Thomas Aquinas – Main Economic Ideas of Mercantilists and Physiocrats (mention important economists of Mercantelism and Physiocracy and their major works. Need not go into the details)

### Module II: Classical and Marxian School

Important contributions of: a Adam Smith – naturalism and optimism, division of labour, theory of value, concept of laissez-faire b. David Ricardo – theory of value, stationary state c. J.B. Say -law of market d. Malthus – population theory and theory of glut e. J.S. Mill - reciprocal demand- Jeremy Bentham – utilitarianism-Basic tenets of Marxian Political Economy: stages of development – theory of surplus value, theory of capitalist crisis

### Module III: Marginalism and Neo-classical School

Difference between classical and neo-classical approach – important ideas of Carl Menger, Leon Walras, Frederich List, Veblen, Wilfredo Pareto, A.C. Pigou, W.W. Rostow. Importance of Alfred Marshall in Neo-classical economics (avoid micro-economic theories)

### Module IV: Keynes and Post-Keynesians

Keynes as a critic of Classical Economics (introduce important books of Keynes). Keynesian concept of Welfare State Post-Keynesian developments – monetarism, rational expectation school.

### Module V: Indian Economic Thought

Drain theory of Dadabhai Navroji.-Trusteeship and other economic ideas of Gandhiji-economic ideas of Ambedkar.- Contributions of PC Mahalanobis, Amartya Sen and JN Bhagawathi.

### Reference :

1. Bhatia H.L (1994), History of Economic Thought, Vikas Publishing House, New Delhi.
2. Roll, Eric (1992), History of Economic Thought, Faber & Faber, London.
3. Louise Haney (2009), - History of economic Thought – Surjith publication New Delhi
4. Haney, Lewis H. (1977), History of Economic Thought, Macmillan, New York.
5. Shanmugasundaram, V. (1981), Indian Economic Thought and Policy, S. Chand & Co., New Delhi.
6. Ghosh, B. N. and R. Ghosh (1988), Concise History of Economic Thought, Palgrave Macmillan, New Delhi.
7. Ed. Abul Hassan M. Sadeq and Aidit Ghazali (1992), Readings in Islamic Economic Thought, Longman, Malaysia.
8. Scrapanti E and S Zamagiri (2005), An Outline of the Economic thought, OUP, Newdelhi.
9. Hajela T.N (2015), History of Economic Thought – Ane’s Student Edition.

## SEMESTER V

Course Category: Core Course 8  
Course Title and Code: Monetary Economics, BEC5B09  
No. of Credits: 4



**Monetary Economics**  
**Syllabus**

**Module I: Demand for Money**

Definitions of money – Evolution and kinds of money - Function of money – Theories of demand for money: Quantity theory of money- Cambridge Version - Keynesian theory of demand for money -Post Keynesian developments in demand for money: Boumol's Inventory theory of Approach, Tobin's portfolio balance Approach-Friedman's re-statement of Quantity theory of money.

**Module II: Money Supply**

Money Supply- RBI measures of money supply – Theories of money supply: mechanistic model of money supply determination – money multiplier, currency deposit ratio and high powered money.

**Module III: Banking**

Development of banking in India – Scheduled Commercial banks – Functions of Bank- Narasimham Committee Reforms in the banking sector –Stress Testing: Guidelines, remedial action and prudential regulations - Management of NPA- An Introduction to NBFIs -Role and Functions of a central bank.

**Module IV: Monetary Policy**

Monetary policy: Meaning, Goals, Instruments, and targets: quantitative and qualitative methods of credit control – bank rate policy, open market operations, CRR-SLR-Repo and Reverse Repo- selective methods. Evolution of monetary policy framework in India – programmes of RBI for financial inclusion

**Module V: Monetary Transmission Mechanism**

Meaning – interest rate channel, credit channel, bank lending channel, balance sheet channel, exchange rate channel, other asset price channels.

**References**

1. Pierce, D G and P J Tysome (1985), Monetary economics: Theories, Evidence and Policy, Butterworths, London.
2. Carl E Walsh (1998), Monetary Theory and Policy, MIT Press, Cambridge.
3. Bennett McCallum (1989), Monetary Economics: Thoery and Policy, Macmillan.
4. C Rangarajan (1999), Indian Economy: Essays in Money and Finance, UBSPD.
5. Narendra Jadhav (1994), Monetary Economics for India, Macmillan.
6. Boughton, James R., and Elmus R. Wicker, (1975). The Principles of Monetary Economics.
7. Clower, Robert W (1969). Monetary Theory: Selected Readings, Harmondsworth, Penguin.
8. Handa, Jagdish, (2007). Monetary Economics, 2nd ed. Routledge.
9. Harris, Laurence, (1981). Monetary Theory. New York: McGraw-Hill.
10. Walsh, Carl E., (2003). Monetary Theory and Policy, 2nd ed., MIT Press.
11. Bharati V Pathak (2014). Indian Financial System, 4<sup>th</sup> ed., Pearson, Delhi.
12. Dwivedi ,D.N.(2005). Macro economics—Theory and Policy (2nd ed): Tata Mc Graw Hill

**SEMESTER V**

Course Category: Core Course 10  
Course Title and Code: Financial Markets, BEC5B10

No. of Credits: 4  
No. of Contact Hours: 108

## **Financial Markets**

### **Syllabus**

#### **Module I: Financial System**

Financial System-meaning and functions-Components of Financial System: Financial institutions, Financial Markets, Financial Instruments, Financial services- Interactions among components of financial system- Elements of well functioning Financial System - Financial System and Economic Development- Growth and weaknesses of Indian Financial system.

#### **Module II: Financial Markets**

Financial Market: Features and Functions. Money Market: Features, Functions and Participants- Characteristics of a Developed Money Market- Structure of Money Market: Treasury Bill Market - Call money Market -Commercial Bill market-Certificates of Deposit- Defects of the Indian Money Market- Capital market: Structure and Functions- Money Market vs Capital Market- Capital market instruments – Equity shares, Debentures or Bonds-Global Financial Instruments.

#### **Module III: Primary and Secondary Market**

Industrial securities market- New issue Market-Functions-Origination, Underwriting and Distribution-Method of floating of New issues-Players in NIM- Secondary market and stock Exchanges-Functions-Development of stock exchanges in India- Organisation of stock exchanges- listing of securities- trading: rules, regulations, arrangements and procedure– Depositories and their role – BSE, NSE, OTCEI, stock indices-Mutual Funds–Securities and Exchange Board of India (SEBI).

#### **Module: IV Derivatives**

Definition, evolution and benefits of derivatives- Types of Derivatives: Forward-Futures- Options and Swaps-Participants in the derivative markets-Limitations of derivatives.

#### **References**

1. Bharati V Pathak (2014). Indian Financial System, 4<sup>th</sup> ed., Pearson, Delhi.
2. Guru Swamy, S (2009): Financial Markets and Institutions, 3rd ed, Vijay Nicole Imprints Pvt Ltd, Chennai, TATA Mc Graw Hills Co Ltd, New Delhi.
3. Faboozi, J Frank, Modigliani Franco (2008):Capital Markets-Institution and Instruments, 4th ed, Pearson Education, New Delhi (PHI).
4. Gordan K. Natarajan , Financial Markets and Services, Himalaya Publishing House, Mumbai
5. Guru Swamy, S (2006): Capital Markets, 2nd ed, Vijay Nicole Imprints Pvt Ltd, Chennai,
6. M.Y. Khan (2016), Indian Financial System, Tata McGraw Hill Education Private Limited, New Delhi.
7. Keith, P Ibeam (2005): Finance and Financial Markets, 2nd ed, Palgrave Mc Milan.
8. Bhole, L M (1999): Financial Institutions and Markets, TATA Mc Graw Hill Co Ltd, New Delhi
9. S.S.S Kumar (2012). Financial Derivatives, PHI Learning Pvt Ltd, New Delhi.

## **SEMESTER VI**

Course Category: Core Course 11

Course Title and Code: International Economics, BEC6B11  
No. of Credits: 4  
No. of Contact Hours: 90

## **International Economics**

### **Syllabus**

#### **Module I: Introduction to International Economics:**

Subject matter and importance of International Economics - Internal trade and International trade -Importance of International trade – International trade and economic development – Basic concepts - Terms of trade

#### **Module II: Theories of International Trade:**

Mercantilist approach to trade - Classical Theory: Absolute and Comparative Cost Advantage theories - Hecksher – Ohlin Theory and Leontief Paradox.

#### **Module III: Theory of Commercial Policy:**

Free trade - Arguments for and against free trade GAAT and WTO and Major Agreements – Protection - Arguments for and against protection - Methods of Trade Restriction : Tariff and non-tariff trade barriers - Types of tariffs – New protectionism - export subsidy and countervailing duties - Dumping and anti-dumping duties – Economic Integration –EU, NAFTA, ASEAN, SAARC

#### **Module IV: Foreign Exchange:**

Foreign exchange market – functions - Defining foreign exchange and exchange rate – Exchange rate concepts – exchange rate changes (devaluation, revaluation, depreciation, appreciation-overvaluation and undervaluation)–Different systems of exchange rate determination - fixed and flexible exchange rate – Hybrid exchange rate systems – Managed floating – Theories of exchange rate – Mint Parity theory – Purchasing Power Parity Theory – Balance of Payments Theory - Components of Foreign exchange market.

#### **Module V: Balance of Payments:**

Defining Balance of Trade and Balance of Payments - Structure of balance of payments – Equilibrium and disequilibrium in BOP – Policies to correct BOP disequilibrium: Expenditure switching and changing policies – International financial flows –, IMF-IBRD, Role and Functions

#### **Reference:**

1. Salvatore, Dominic. (1997), International Economics, PHI, New York
2. Paul Krugman and Maurice Obstfeld (2002), International Economics: Theory and policy, PHI, Newyork.
3. Dwivedi DN (2013), International economics Theory and policy, S.Chand (G/L) & Company Ltd; First edition
4. Prakash G (2013), International finance 2/e PB, McGraw Hill Education India
5. Soderstein and Geoffrey Reed (1999), International Economics, Palgrave.
6. Francis Cherumilam (2008), International Economics, McGraw Hill Education India Private Limited.
7. Mannur, H.G (1999). International Economics, 2<sup>nd</sup> Edition S. Chand (G/L) & Company Ltd; .
8. Robert J Carbaugh (2008), International Economics, 12<sup>th</sup> edition, South western Cenegage,

## **SEMESTER VI**

Course Category:	Core Course 12
Course Title and Code:	Development Economics, BEC6B12
No. of Credits:	4
No. of Contact Hours:	90

## **Development Economics**

### **Syllabus**

#### **Module I: Perspectives on Development Economics**

The subject matter of Development economics - Meaning of Growth and Development - measurements of development –GDP, PCI, PQLI, HDI, HPI, GDI, GEM, Multi-Dimensional Poverty index – Happiness Index

#### **Module II: Theories of Development**

Problems of under-developed countries, vicious circle of poverty, Low-level equilibrium trap, critical minimum effort, Big Push theory, Balanced versus Unbalanced growth theory, Stage theories – Marxian and Rostow

#### **Module III: Economic Planning**

Concept, meaning and types of planning, Relevance of planning in the context of globalization-

#### **Module IV: Population Growth and Economics development**

Population and Economic Development: Conflicting Views – Malthusian theory of Population and It's criticisms – Theory of demographic transition – Demographic dividend – Human capital approach to economic development – Role of education and health – Sen's Capability Approach.

#### **Module V: Issues in development**

Poverty – measurement and classification, Inequality and its measurement (Kuznet's inverted U Hypothesis, Lorenz curve and Gini coefficient), Trickle-down theory and its failures - Gender issues – the concept of missing women. Environment versus development – the concept of sustainable development, limits to growth, global warming.

#### **References**

1. Todaro, Michael P and Stephen C Smith (2014): Economic Development, Pearson, New Delhi
2. Ghatak, Subrata (2003): Introduction to Development Economics, 4th ed, Routledge, London.
3. Somasekhar, N T (2007): Development Economics, New Age International, New Delhi.
4. Taneja, M L and Myer R M (2014): The economics of Development and Planning, Vishal Publishing, Punjab.
5. Thirlwal, A P (2011): Growth and Development with special reference to developing Economies, Palgrave MacMillan, London.
6. Hayami, Yujiro and Yoshihisa Godo (2014): Development Economics-from Poverty of nations to the wealth of Nations, Oxford University Press, New Delhi.
7. Ray, Debraj (2014): Development Economics, Oxford University Press, New Delhi.
8. Perkins, et al (2001): Economics of Development, W.W Norton Company, USA.

## **SEMESTER VI**

Course Category:	Core Course 13
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Course Title and Code: Indian Economic Development: National and Regional-II,  
BEC5B13

No. of Credits: 4

No. of Contact Hours: 90

## **Indian Economic Development: National and Regional-II**

### **Syllabus**

#### **Module I: Indian Agriculture**

Role of Agriculture in the Indian Economy- Cropping pattern - Trends in Investment- Trends in Production and Productivity-Causes of Present Crisis-Agricultural Marketing: Problems and Government Measures - New Agricultural Strategy of 1960s (Green Revolution) and its impact on production and productivity - The Need, Scope and Appraisal of Land Reforms in India- Problem of Food Security – FCI, PDS and TPDS – Critical Evaluation of PDS-Food Security Act, 2013..

#### **Module II: Indian Industry**

Trends in industrial production and growth – Changes in the industrial pattern – Small scale and cottage industries – Large scale industries – Performance and Problems of Public Sector Enterprises – Industrial Sickness - Review of industrial policy prior to 1991 – New industrial policy of 1991 – Privatization and Disinvestment - National manufacturing policy and Make in India.

#### **Module III: India's External Sector**

Trends and composition of India's Imports - Trends, composition and direction of India's Exports - Import and Export Policy during Pre-Reform Period. New Trade Policy, 1991 - Trade Policy after 2015-Exchange rate management in India-Convertibility of rupee: Current and Capital Account-FDI and FPI flows - MNCs and Regulations - FERA - FEMA.

#### **Module IV: Kerala's Economic Growth, Agriculture and Industry**

Growth Pattern of Kerala – Lopsided Phase – Virtuous Phase - Trend and Composition of State Income – Agriculture: cropping pattern – Area and production of major crops –Industry: Growth and Structure – Tourism Sector and its Contributions.

#### **Basic References for Indian Economy**

1. Gaurav Datt and Ashwini Mahajan (2013), Datt & Sundaram Indian Economy, 67<sup>th</sup> Edition, Sultan Chand and Co, New Delhi.
2. V.K Misra and Puri (2014), Indian Economy, 32<sup>nd</sup> revised edition, Himalaya Publishing House, New Delhi.
3. Uma Kapila (2014), Indian Economy since Independence, 24<sup>th</sup> Edition, Academic Foundations, New Delhi.
4. Uma Kapila (2014), Indian Economy Performance and Policies, 14<sup>th</sup> Edition, Academic Foundations, New Delhi.
5. I.C Dingra (2014), Indian Economic Development, Sulthan Chand and Sons, New Delhi.
6. Ramesh Singh (2015), Indian Economy, for Civil Services Examination, Seventh Edition, McGraw Hill Education Series, New Delhi.
7. Ministry of Finance, Government of India, Economic Survey, Vol.1&2, 2017-18, Oxford University Press.

#### **Additional Readings for Indian Economy**

1. Vaidyanathan, A. (2010). Agricultural growth in India: Role of technology, incentives and institutions. New Delhi: Oxford University Press.

2. Uma Kapila and K.L Krishna (200), Readings in Indian Agriculture and Industry, Academic Foundations, New Delhi.
3. Hanumantha Rao C.H. (2005). Agriculture, food security, poverty and environment: Essays on post reform India. New Delhi: Oxford University Press.
4. Subir Gokarn, Anindya Sen and Rajendra R. Vaidya (2003), The Structure of Indian Industry, Oxford University Press (OUP), New Delhi.
5. Dilip Mookherjee (1996). Indian Industry: Policies and Performance, Oxford University Press (OUP), New Delhi.
6. Parthapratim Pal (2014). International Trade and India. Oxford University Press (OUP), New Delhi.

### **References for Kerala Economy**

1. Planning Commission, Government of India (2008), “Kerala Development Report”, Academic Foundation, New Delhi.
2. Oommen, M.A. (1993): Essays on Kerala Economy, Oxford & IBH.
3. K.P Kannan (2005), “Kerala’s Turnaround in Growth, Role of Social Development, Remittances, and Reform”, Economic and Political Weekly, February 5.
4. Kannan, K.P. (2011). Agricultural development in an emerging non agrarian regional economy: Kerala’s Challenges. Economic and Political Weekly, 46(9), 64-70.
5. K.K George (2009), Kerala Economy: Growth, Structure, Strength and Weakness, Working Paper No. 25, Centre for Socio-economic & Environmental Studies, (CSES).
6. D. Shyjan and A.S Sunitha (2009), “Changing Phases of Kerala’s Development Experience and the Exclusion of Scheduled Tribes: Towards an Explanation”. Artha Vijnana, December
7. Govt of Kerala - CDS (2006), Human Development Report 2005, Published by State Planning Board Government of Kerala.
8. Government of Kerala, (2018), Economic Review, State Planning Board, Thiruvananthapuram.
9. B.A. Pakash (2004, Kerala’s Economic Development: Performance and Problems in the post liberalization period, Sage Publications, New Delhi.
10. Kannan K.P and Pushpangadan K (1988) ‘Agricultural Stagnation in Kerala: An Exploratory Analysis’, Economic and Political Weekly, September 24.
11. Rajasenan, D. and Gerard De Groot, (2005), Kerala Economy: Trajectories, Challenges and Implications, CUST, Kochi.
12. Subrahmanian K.K (1990), ‘Development paradox in Kerala: Analysis of industrial stagnation’, Economic and Political Weekly, September 15.
13. Subrahmanian K.K and Abdul Azeez E. (1990), “Industrial Growth in Kerala: Trends and Explanations’, Working Paper No. 310, Centre for Development Studies, Thiruvananthapuram.
14. Achin Chakraborty (2005), “Kerala’s Changing Development Narratives”, Economic and Political Weekly, February 5.

### **SEMESTER VI**

Course Category: Core Course 14  
 Course Title and Code: Public Finance, BEC6B14

No. of Credits:	4
No. of Contact Hours:	90

## **Public Finance**

### **Syllabus**

#### **Module I: Introduction to Public Finance**

Meaning and scope of public finance - Musgrave's three function of government – Public and Private Finance – Principles of Maximum Social Advantage: Approaches of Dalton and Musgrave – Public Goods, Private Goods, Mixed Goods and Merit Goods (Concept only)

#### **Module II: Public Revenue**

Meaning and Sources of Public Revenue – Tax: Definition, Features and objectives – features of good tax system – Various classifications of taxes – Canons of Taxation – Principle of equity: Horizontal and Vertical – Principles of taxation: cost of service, ability to pay and benefit principles – Impact and incidence of tax–Tax Shifting and its influencing factors– Effects of Taxation– Laffer Curve – Taxable capacity–Indian Tax System: Features and Problems–Major direct and Indirect Taxes in India.

#### **Module III: Public Expenditure and Public debt**

Canons and classification of Public expenditure-Theories of public expenditure – Wagner's law – Peacock-Wiseman Hypothesis –Effects of Public Expenditure–Causes for the growth of public expenditure in India – Public Debt: Meaning, Types of Public Debt, Debt Redemption methods.

#### **Module IV: Basics of Budgeting and Fiscal policy**

Meaning of Budget– Procedures of Budgetary in India –Actual, Budget, and Revised Estimates - Development and non-development expenditure - Revenue Receipts and Revenue Expenditure- Capital Receipts and Capital Expenditure - Revenue deficit – Effective Revenue deficit - Fiscal Deficit - Primary Deficit- Deficit Financing- Fiscal policy: objectives and instruments.

#### **Module V: Federal Finance**

Meaning and Principles of Federal Finance - constitutional distribution of functions and revenues between centre and state-Meaning of vertical and horizontal imbalances- Functions of Finance commission-Local Finance: Functions and Revenues.

#### **References**

1. Kennedy, Maria John (2012): Public Finance, Prentice Hall of India.
2. Om Prakash (2012): Public Economic Theory and Practice, Vishal Publishing Co, Jalandhar,
3. Musgrave and Musgrave (1976): Public Finance Theory and Practice, Mc Graw-Hill, Kogakhusa, Tokyo.
4. Dalton, Hume (1971): Principles of Public Finance, Rontledge and Hegan Paul Limited, London.
5. Herber, B. P (1976): Modern Public Finance, Richard D Iruin, Homewood.
6. Hindrick, Jean and Gareth D Myles (2006): Intermediate Public Economics, Prentice Hall of India
7. N. Radhakrishnan (2012), Public Finance, Theory and Approach. Vrinda Publications.
8. Lekhi, R K (2003): Public Finance, Kalyani Publications, New Delhi.

## **DETAILED SYLLABUS - ELECTIVE COURSES**

### **SEMESTER VI**

Course Category: Elective Course

Course Title and Code: Environmental Economics, BEC6E01  
No. of Credits: 3  
No. of Contact Hours: 54

## **Environmental Economics** **Syllabus**

### **Module I: Introduction to Environmental Economics**

Environmental Economics – origin – development – Scope – Ecology and eco systems - Material balance model - Economics of natural resources - relationship between environment and economy – Resources taxonomy – renewable and non-renewable resources – common property resources – tragedy of commons.

### **Module II: Externalities, Market Failure and Environmental Valuation**

Public Goods – Externality – Market Failure – Pigovian Tax and Subsidies – Property rights and Coase theorem – valuation of environmental benefits and costs – direct and indirect methods of environmental valuation – cost benefit analysis – Net Present value – Contingent valuation method – travel cost method – hedonic price method – Averting expenditure method – market and non market benefits of pollution control – Environmental impact Assessment

### **Module III: Environmental Policy**

Instruments of Environmental Policy - CAC – price based and quantity based instruments– permit system – Choice among policy instruments – The Indian experience – Criteria for evaluating environmental policies - environmental regulations and local economic activity

### **Reference**

1. Ashwani Mahajan (2010), Environmental Economics, Centrem Press.
2. Charles D Kolstad (2012), Environmental Economics, Oxford University Press.
3. Dhingra I. C (2012), Indian Economy: Environment and Policy, Sultan Chand & Sons, New Delhi.
4. Eugene T, (2006), Environment Economics, Vrinda Publication New Delhi
5. Katar Singh and Anil Shishodia (2007), Environmental Economics, Theory and Applications, Sage Publications, New Delhi
6. Nick Hanley et al (2007), Environmental Economics: Theory and Practice, Palgrave Macmillan.
7. Paul Aekins (2000), Economic Growth and Environmental Sustainability, Routledge, London.
8. R N Bhattacharya (2002), Environmental Economics, An Indian Perspective, Oxford University Press, New Delhi.
9. Fisher, A.C. (1981), Resource and Environmental Economics, Cambridge University Press, Cambridge.
10. Hussen, A.M. (1999), Principles of Environmental Economics, Routledge, London.
11. Kolstad, C.D. (1999), Environmental Economics, Oxford University Press, New Delhi.

## **SEMESTER VI**

Course Category: Elective Course  
Course Title and Code: Basic Econometrics, BEC6E02  
No. of Credits: 3



## BASIC ECONOMETRICS

### Syllabus

#### **Module I: Introduction to Econometrics**

Econometrics: Meaning, Scope and Limitations – Methodology of Econometrics –Statistical versus deterministic relationships – Regression versus Causation – Regression versus Correlation – Terminologies – Types of data.

#### **Module II: – The Linear Regression Model: Simple and Multiple**

Meaning of Linearity –PRF and Stochastic Specification – Significance of disturbance term – SRF – Estimation: The Method of Ordinary Least Squares – Meaning and Derivation of estimators – Assumptions of OLS – Variances and Standard Errors of Estimates – Gauss Markov Theorem without proof (BLUE) – Measure of Goodness of fit- $r^2$ -Numerical Example of Estimation of coefficients and  $r^2$ – Steps of Hypothesis Testing (only  $t$  test) – Multiple linear regression model (3 variable):Notations and assumptions– meaning of partial regression coefficients – Adjusted  $R^2$ .

#### **Module III-Violations of Classical Assumptions: Detection and Remedial Measures**

Multicollinearity: consequences, detection and remedial measures- Heteroscedasticity: consequences, detection (Park test, Glejser Test, Goldfeld-Quandt test, White's Test) and remedial measures -Generalized Least Square Method. Autocorrelation: Consequences, detection (Runs Test, Durbin Watson test) and remedial measures-Feasible GLS and First difference method.

#### **References**

1. Damodhar. N. Gujarati and Sangeetha (2007), Basic Econometrics, Tata McGraw Hill.
2. A. Koutsoyamis (2004), Theory of Econometrics, Palgrave.
3. J.M Wooldridge (2014), Introductory Econometrics: A Modern Approach, South-Western.
4. Johnston. J (1991), Econometric Methods, Mcgraw Hill.
5. Christopher Dougherty (2007): Introduction to Econometrics, Oxford University, Press, 3rd ed, Indian Edition.
6. Jan Kmenta (2008): Elements of Econometrics, Indian Reprint, 2nd ed, Khosla Publishing House.
7. Robert. S.Pindyck and Daniel Rubinfeld (1998): Econometric Models and Economic Forecasts, MacGraw Hill, .
8. Stock, J.H. and M.W. Watson (2003): Introduction to Econometrics, 1st ed, Addison-Wesley.
9. GMK Madnani (2008): Introduction to Econometrics: Principles and Applications, Oxford & IBH Publishing Co.
10. Maddala, G. (1992), Introduction to Econometrics, 2nd ed., MacMillan, New York.

## **SEMESTER VI**

Course Category:	Elective Course
Course Title and Code:	Economics of Business and Finance, BEC6E03
No. of Credits:	3

No. of Contact Hours: 54

**Economics of Business and Finance**  
**Syllabus**

**Module 1: Introduction:**

Basic concepts of Business Economics, Financial Economics and Managerial Economics.

**Module II: Investments**

Meaning, nature and importance - Considerations in Investment decision and investment Process – Investment alternatives – Capital Budgeting – Introduction and methods

**Module III:** Organising financial asset- various financial assets and securities. Introduction to Balance Sheets – Evaluation of Balance Sheets – Break even Analysis – Linear and nonlinear – Time value of money – Future Value and Compounding – present value of discounting.

**Module IV:** Introduction to Demand Estimation, Demand forecasting – Production Function and its importance – Cost estimation, Cost functions – Economics of Scale, Cost cuts and estimation - Cartel, price leadership, price discrimination, pricing strategies

**References**

1. Kettell, Brian (2001), Financial Economics – Making sense of Market information, Financial Time, Prentice Hall, London..
2. Nellis J., and D. Parker (2006), Principles of Business Economics 2nd Edition – Pearson Education, London.
3. Griffith A. and S. Wall (2004), Economics for Business and Management – Pearson Education, London
4. Keat P.G. and P.K.Y. Young (2006), Managerial Economics – Tools for Today's Decision matters – Pearson Education New Delhi.

**DETAILED SYLLABUS – COMPLEMENTARY COURSE**  
**SEMESTER-I**

Course Category:	Complementary Course
Course Title and Code:	Mathematical Methods for Economics-I, BEC1C04
No. of Credits:	2

No. of Contact Hours: 54

## Mathematical Methods for Economics-I

### Syllabus

#### **Module I: Basic Mathematical Concepts:**

The real number system-Properties of real number system - Fractions: Addition, subtraction, multiplication and division of fractions - Ratios, Proportions and Percentages: Meaning, Problems and Solutions - Decimals: Addition and subtraction, multiplication and division of decimals.

#### **Module II- Algebra**

Meaning of algebra, Exponents-meaning and rules, Rules of algebra - Addition and subtraction of algebraic Expressions - Multiplication and division of algebraic expressions -Polynomials-meaning and types, Factorization of polynomials.

#### **Module III-Theory of Sets:**

Kinds of sets - Operations of sets – Laws of sets-Venn Diagrams –Problems based on intersection and union, Cartesian Products - Relations – Types of Relations – Functions-meaning, types and graphs.

#### **Reference:**

1. Edward T. Dowling (2011), Introduction to Mathematical Economics (3rd Edition), Schaum's Outline Series, McGraw-Hill
2. Geoff Renshaw, (2011) Maths for economics, 3<sup>rd</sup> edition, Oxford University Press.
3. Mike Rosser(1993), Basic Mathematics for Economists, Routledge.

#### **Note to faculty / examiner:**

1. This course is complementary of B.A. Economics course. The students of this course may not have studied mathematics at higher secondary level. Hence questions may be confined to intermediary level.

## SEMESTER-II

Course Category:	Complementary Course
Course Title and Code:	Mathematical Methods for Economics-II, BEC2C04
No. of Credits:	2

No. of Contact Hours: 54

**Mathematical Methods for Economics-II**  
**Syllabus**

**Module I: Sequence and Series**

Sequence-series and Progression-Arithmetic progression- Arithmetic Mean-Geometric Progression-Geometric mean- Harmonic progression- Present value and future value (basic only)

**Module I: Matrices**

Matrices - Definitions, terms and types - Addition and Subtraction of Matrices - Multiplication of Matrices - Determinants - Properties of a Determinant - Rank of a matrix - Inverse of a matrix - Solving Linear Equations with the Inverse – Cramer’s Rule for Matrix Solutions.

**Module III: The Derivative: One independent variable**

Limits – Continuity (Concept only) - The Concept of derivative - Rules of Differentiation - Higher-Order Derivatives - Implicit Differentiation

**Basic Reference:**

1. Edward T. Dowling (2011), Introduction to Mathematical Economics (3rd Edition), Schaum’s Outline Series, McGraw-Hill
2. Geoff Renshaw, (2011) Maths for economics, 3<sup>rd</sup> edition, Oxford University Press.
3. Mike Rosser(1993), Basic Mathematics for Economists, Routledge.
4. Adil H. Mouhammed, Quantitative Methods for Business and Economics, Prentice-Hall of India private limited

**Note to faculty / examiner:**

1. This course is complementary of B.A. Economics course. The students of this course may not have studied mathematics at higher secondary level. Hence questions may be confined to intermediary level.
2. Derivations and proofs not required.
3. For differentiation / integration trigonometric functions and logarithm are to be excluded.

**SEMESTER-III**

Course Category:	Complementary Course
Course Title and Code:	Mathematical Methods for Economics-III, BEC3C04
No. of Credits:	2
No. of Contact Hours:	54

## **Mathematical Methods for Economics-III**

### **Syllabus**

#### **Module I: Uses of derivatives in Mathematics**

Increasing and Decreasing Functions - Concavity and Convexity - Relative Extreme-maxima and minima - Inflection Points - Optimization of Functions

#### **Module II: Uses of derivatives in Economics**

Total cost – average cost – marginal cost – relationship between MC and AC. - total revenue and marginal revenue – the market demand function – demand, total and marginal revenue with perfect competition - Profit maximisation – cost minimisation. - Elasticity – price elasticity of demand.

#### **Module III: Calculus and Multivariable Functions:**

Functions of Several Variables and Partial Derivatives - Rules of Partial Differentiation - Second-Order Partial Derivatives - Optimization of Multivariable Functions - Constrained Optimization with Lagrange Multipliers - Significance of the Lagrange Multiplier – Differentials - Concept of Total and Partial Differentials - Concept of Total Derivatives

#### **Reference:**

1. Edward T. Dowling (2011), Introduction to Mathematical Economics (3rd Edition), Schaum's Outline Series, McGraw-Hill
2. Geoff Renshaw, (2011) Maths for economics, 3<sup>rd</sup> edition, Oxford University Press.
3. Mike Rosser(1993), Basic Mathematics for Economists, Routledge.
4. Adil H. Mouhammed, Quantitative Methods for Business and Economics, Prentice-Hall of India private limited

#### **Note to faculty / examiner:**

1. This course is complementary of B.A. Economics course. The students of this course may not have studied mathematics at higher secondary level. Hence questions may be confined to intermediary level.
2. Derivations and proofs not required.
3. For differentiation / integration trigonometric functions and logarithm are to be excluded.

## **SEMESTER-IV**

Course Category:	Complementary Course
Course Title and Code:	Mathematical Methods for Economics-IV, BEC4C04
No. of Credits:	2

## **Mathematical Methods for Economics-IV**

### **Syllabus**

#### **Module I: Application of Calculus of Multivariable Functions in Economics.**

Marginal concepts – marginal productivity - Elasticity concepts – price/cross/income elasticity of demand - Optimisation of multivariable functions in economics – constrained optimisation-substitution method and lagrangian multiplier method

#### **Module II: Integral Calculus**

Integration – Rules of Integration - Initial Conditions and Boundary Conditions - Integration by Substitution-Economic Applications of indefinite integrals. The Definite Integrals-properties of definite integrals-economic applications of definite integrals

#### **Module III: Linear Programming Problem**

Meaning and Objective of LP-Applications of LP-Basic terms in LPP-formulation linear programming problems-Solution to LPP (Graphical solution only)-Advantages and disadvantages of LP

#### **Reference:**

1. Edward T. Dowling (2011), Introduction to Mathematical Economics (3rd Edition), Schaum's Outline Series, McGraw-Hill
2. Geoff Renshaw, (2011) Maths for economics, 3<sup>rd</sup> edition, Oxford University Press.
3. Mike Rosser(1993), Basic Mathematics for Economists, Routledge.
4. Adil H. Mouhammed, Quantitative Methods for Business and Economics, Prentice-Hall of India private limited

#### **Note to faculty / examiner:**

1. This course is complementary of B.A. Economics course. The students of this course may not have studied mathematics at higher secondary level. Hence questions may be confined to intermediary level.
2. Derivations and proofs not required.
3. For differentiation / integration trigonometric functions and logarithm are to be excluded.

## **DETAILED SYLLABI – OPEN COURSES**

*(for Non-economics Students)*

### **SEMESTER-V**

#### **I. Economics in Everyday Life**

Course Category:	<b>Open Course</b>
Course Title and Code:	Economics in Everyday Life, BEC5D01.
No. of Credits:	3
No. of Contact Hours:	54

### Syllabus

#### **Module 1: Economics as a Policy Science**

Meaning of economics-Ten principles of economics-How people make decisions and how people interact-Economics as science-Role of Assumptions-Economic Models: Circular flow and Production Possibility frontier- Microeconomics and Macroeconomics-Positive vs Normative Analysis.

#### **Module 2: How Markets Works**

Meaning of Market and Competition-Demand, Law of demand, Shifts and market demand– Supply, Law of Supply, Shifts and market Supply– Market equilibrium– Price Elasticity of Demand: Types and determinants –Income and cross price elasticity. Price Elasticity of Supply: Types–Markets with price Ceiling and Price Floor –Effect of Indirect Tax.

#### **Module 3: Macro Economic Concepts**

National income - GNP, GDP, Per Capita income, GDP growth rate- Fiscal and monetary policies: meaning and instruments, bank rate, repo rates, reverse repo rate. (concepts only)

Inflation – meaning, types and effects.

Budget - Revenue Budget and Capital Budget – Deficit: Revenue Deficit, Fiscal Deficit.

Balance of trade and balance of payments - Current account and capital account-Exchange rate-FDI and FPI. (concepts only).

#### **Reference**

1. N. Gregory Mankiw (2012), Principles of Microeconomics, Seventh Edition, Cengage Learning.
2. Dominic Salvatore. (2008), Microeconomics, Theory and Applications, Fifth Edition, Oxford University Press, New Delhi.
3. Gregory Mankiw (2010), Macroeconomics, Sixth Edition, Worth Publishers.
4. D.N Dwivedi (2016), Macroeconomics: Theory and Policy, Tata McGraw Hill, New Delhi.
5. Kennedy, Maria John (2012): Public Finance, Prentice Hall of India.
6. Salvatore, Dominic. (1997), International Economics, PHI, New York.
7. Oxford Dictionary of Economics.
8. The Penguin Dictionary of Economics.
9. The New Palgrave Dictionary of Economics.

### **SEMESTER-V**

#### **II. International Trade and Finance**

Course Category:	<b>Open Course</b>
Course Title and Code:	International Trade and Finance, BEC5D02.

No. of Credits: 3  
No. of Contact Hours: 54

### **Syllabus**

#### **Module I: Introduction to International Trade**

Importance of International Trade - Inter-dependence among countries - The concept of Trade as an engine of Growth - Arguments for and against free trade - Terms of trade

#### **Module II: Basic Theories of International Trade**

Absolute and Comparative Cost Advantage theories - Heckscher – Ohlin Theory and Leontief Paradox.

#### **Module III: Theory of Commercial Policy:**

Protection - Arguments for and against protection - Methods of Trade Restriction: Tariff and non-tariff trade barriers - Types of tariffs – New protectionism - export subsidy and countervailing duties - Dumping and anti-dumping duties – Forms of Economic Integration.

#### **Module IV: Foreign Exchange and Balance of Payment**

Components of foreign exchange - Exchange rate determination (mention floating and fixed exchange rate; specify mint parity, PPP and supply and demand) - Devaluation, revaluation, appreciation and depreciation of currency. – BOP and BOT - Disequilibrium in BOP

#### **Reference:**

1. Salvatore, Dominic. (1997), International Economics, PHI, New York
2. Paul Krugman and Maurice Obstfeld (2002), International Economics: Theory and policy, PHI, Newyork.
3. Dwivedi DN (2013), International economics Theory and policy, S.Chand (G/L) & Company Ltd; First edition
4. Prakash G (2013), International finance 2/e PB, McGraw Hill Education India
5. Soderstein and Geoffrey Reed (1999), International Economics, Palgrave.
6. Francis Cherumilam (2008), International Economics, McGraw Hill Education India Private Limited.
7. Mannur, H.G (1999). International Economics, 2<sup>nd</sup> Edition S. Chand (G/L) & Company Ltd.
8. Robert J Carbaugh (2008), International Economics, 12<sup>th</sup> edition, South western Cenegage,

### **SEMESTER-V**

#### **III. Banking**

Course Category: **Open Course**



Course Title and Code: Banking, BEC5D03.  
No. of Credits: 3  
No. of Contact Hours: 54

## **Syllabus**

### **Module I**

Banks - Economic Importance - Growth of Banking in India. Commercial Banking - Branch Banking Vs Unit Banking, Group Banking, Chain Banking, Mixed Banking, Clearance Banks - Balance sheet - Rules of Management of funds – Assets and Liabilities, Financial Intermediaries - Deposit Insurances - Merchant Banking

### **Module II**

Negotiable Instruments, Cheques, Bills, Treasury bills - Acceptance Houses, Discounts - Money Market - Peculiarities of Indian Money Market; Deposits; Borrowings; Primary and Secondary sources - Loans, Practices in Lending, Credit creation, Limitations.

### **Module 3**

Accounts: Joint accounts, Partnership, Company guarantees, Individual Surety, Joint and Several Guarantee, Security, Exchange Securities, Life Policies, Payment and Collections of Cheques, Dishonouring, Negotiability, Crossing and Account payee.

### **Module 4**

Central Banking - Reserve Bank of India - Functions of RBI

### **Reference.**

1. Muraleedharan (2009). Modern Banking: Theory and Practice- PHI Learning Pvt Ltd.
2. Bharati V Pathak (2011). The Indian Financial System- Pearson Education.
3. Roger Le Roy Miller and David Van Hoose (1993). Modern Money and Banking- McGraw-Hill International.