

Curriculum Framework and Fifth and Sixth Semester  
Economics Syllabus of Undergraduate Programme in  
Bangalore University under  
NEP 2020.



5<sup>th</sup> and 6<sup>th</sup> Semester Syllabus for

B.Sc. in Economics

AS PER NEP -2020

With Effect from Academic Year 2023-24  
Onwards

**Bangalore University, Jnana Bharathi, Bengaluru**

## Dear Fellow Teacher

There are two models A1 and A3, out of which one has to be followed.

### **Economics as a Major Core Subject;**

In case if, A1 is followed for fifth and sixth semesters, there will be one major core subject, in our case, it will be economics in the fifth and sixth semesters. In each of these semesters, there will be four discipline-specific (economics) compulsory papers which will be of four credits each, one discipline (economics) specific elective which will be of three credits, one Vocational paper in economics which is of three credits and one Skill Enhancement Course which is of two credits.

### **Two Major core Subjects with Economics as one of it;**

**In case if, A3** is followed there will be two major core subjects in third Semester, in our case, one will be economics in the fifth and sixth semesters and the other will be of their chosen choice say Political Science / History/ Sociology. In each of these semesters, there will be three discipline-specific papers each of four credits from the economics and other chosen subjects and one Skill Enhancement Course which is of two credits.

In view of enhancing the skills and employability of the students, every Module is given a practicum, kindly follow in to. Kindly see that students will get theoretical as well as practical knowledge of economics.

**- S.R.Keshava**

### **Acknowledgement**

The Chairperson and Members thank Honourable Vice-Chancellor Dr. Jayakar S M for the opportunity provided to serve in BOS and other officials of the University for providing the logistics.

<b>BOS Members</b>	
<b>Dr.S.R.Keshava</b>	<b>Chairperson</b>
<b>Dr. Shuba Ramesh</b>	Member
<b>Dr.Shylaja M.G</b>	Member
<b>Dr.Ramakrishna</b>	Member
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<b>Dr.Pushpa B</b>	Member
<b>Prof.Muniraju.M.R</b>	Member

**Listing of Courses from I to VIII Semesters of B.Sc for the Four-Year Undergraduate Program (FYUGP) in ECONOMICS**

Sem. No.	Course Category	Course Code	Course Title	Credits Assigned	Instructional hours per week		Duration of Exam (Hrs.)	Exam/ Evaluation Pattern (Marks)		
					Theory	Practical		IA	Exam	Total
I	DSC	ECO C1	Basic Economics –I	3	3		2.30	40	60	100
		ECO C2	Contemporary Indian Economy	3	3		2.30	40	60	100
II	DSC	ECO C3	Basic Economics -II	3	3		2.30	40	60	100
		ECO C4	Karnataka Economy	3	3		2.30	40	60	100
III	DSC	ECO C5	Micro Economics	3	3		2.30	40	60	100
		ECO C6	Mathematical Economics/Agriculture Economics	3	3		2.30	40	60	100
IV	DSC	ECO C7	Macro Economics	3	3		2.30	40	60	100
		ECO C8	Statistics for Economics / Monetary Economics	3	3		2.30	40	60	100
V	DSC	ECO C9	Actuarial Economics	4	4		2.30	40	60	100
		ECO C10	Experimental Economics	4	4		2.30	40	60	100
		ECO C11	Introduction to R Software	4	4		2.30	40	60	100
		ECO C12	Economics of Artificial Intelligence	4	4		2.30	40	60	100
	DSE	ECO E1 (Anyone to be chosen)	A. Economics of GST B. Economics of Insurance C. Rural Economics D. Economics of Marketing	3	3		2.30	40	60	100
Vocational	ECO V1 (Anyone to be chosen)	Economics of Tourism Development	3	3		2.30	40	60	100	
VI	DSC	ECO C13	Economics of Information	4	4		2.30	40	60	100
		ECO C14	Methods of Data Analysis	4	4		2.30	40	60	100
		ECO C15	Game theory	4	4		2.30	40	60	100
		ECO C16	Operational Research in Economics	4	4		2.30	40	60	100
	DSE	ECO E2 (Anyone to be chosen)	A. Industrial Economics B. Labour Economics C. Welfare Economics D. Economics of Non Farm Sector	3	3		2.30	40	60	100
	Vocational	ECO V2 (Anyone to be chosen)	A Economics of Stock Market	3	3		2.30	40	60	100

**A1: Undergraduate Programme with two core subjects without practicals in the first two years and one Major Subject (Economics) in the third year.**

**A1 Curriculum and Credit Framework for the B.Sc Program with two core subjects without practical in the first two years and one Major (Economics) in the third year**

<b>Sem</b>	<b><i>Discipline Specific - Core (DSC), Elective (DSE) Courses (Credits) (L+T+P)</i></b>		<b>Vocational Courses(Credits) (L+T+P)</b>	<b>Skills Enhancement Courses (SEC) (Credits) (L+T+P)/ Value Added Courses (Credits) (L+T+P) (common for all UG Programs)/</b>	<b>Total Credits</b>
<b>V</b>	DSC - 9	Introduction to R Software	Vocational -1(3)  Economics of Tourism Development	<b>SEC-4:</b> Cyber Security (2)/ Soft skills and Communication Skills (1+0+2)	<b>24</b>
	DSC - 10	Public Economics			
	DSC - 11	Development Economics			
	DSC- 12 A	Indian Banking and Finance			
	DSE-E1, (Choose Anyone) (3)	Experimental Economics Economics of Artificial Intelligence			
<b>VI</b>	DSC- 13	Actuarial Economics	Vocational-2(3), Choose One  Micro Entrepreneurs Development Project, Planning & Management	<b>SEC-5:</b> General Aptitude (2) (1+0+2) / Internship (2)	<b>24</b>
	DSC -14	Indian Public Finance			
	DSC-15	International Economics			
	DSC 16	Economics of Environment			
	DSE-E2 (Choose Anyone) (3)	Economics of Information Methods of Data Analysis Game theory Operational Research in Economics			

**A1: Curriculum and Credit Framework for the B.Sc Program with two core subjects without practicals in the first two years and one Major (Economics) in the third year**

Sem. No.	Course Category	Course Code	Course Title	Credits Assigned	Instructional hours per week		Duration of Exam (Hrs.)	Exam/ Evaluation Pattern (Marks)		
					Theory	Practical		IA	Exam	Total
V	DSC	ECO C9	Introduction to R Software	4	4		2.30	40	60	100
		ECO C10	Public Economics	4	4		2.30	40	60	100
		ECO C11	Development Economics	4	4		2.30	40	60	100
		ECO C12	Indian Banking and Finance	4	4		2.30	40	60	100
	DSE	ECO E1 (Anyone to be chosen)	Experimental Economics Economics of Artificial Intelligence	3	3		2.30	40	60	100
	Vocational	ECO V1 (Anyone to be chosen)	Economics of Tourism Development	2+1	2	1	2.30	50	50	100
VI	DSC	ECO C13	Actuarial Economics	4	4		2.30	40	60	100
		ECO C14	Indian Public Finance	4	4		2.30	40	60	100
		ECO C15	International Economics	4	4		2.30	40	60	100
		ECO C16	Economics of Environment	4	4		2.30	40	60	100
	DSE	ECO E2 (Anyonetobe chosen)	Economics of Information Methods of Data Analysis Game theory Operational Research in Economics	3	3		2.30	40	60	100
	Vocational	ECO V2 (Anyonetobe chosen)	A. Micro Entrepreneurs Development B. Project, Planning & Management	2+1	2	1	2.30	50	50	100

**A3: Undergraduate Programme with two core subjects without practical's in the first two years and two Major (one of the major is Economics, out of two Major Subjects) in the third year.**

**A3. Curriculum and Credit Framework for B.Sc Programme with two core subjects without practicals in the first three years.**

Sem.	Discipline Specific - Core (DSC), DSC1: Economics		Discipline Specific Core DSC2: <b>Pol.Sc or Hist or Soci</b>	Skills Enhancement Courses (SEC)/ (Value Added Courses for all UG Programs)	Total Credits
	DSC-9	Introduction to R Software (4)			
V	DSC 10	Public Economics (4)	DSC- B9(4), DSC- B10(4), DSC- B11(4),	<b>SEC-4:</b> Cyber Security (2)/ Soft skills and Communication Skills (1+0+2)	26
	DSC 11	Development Economics(4)			
	DSC- 12	Indian Banking and Finance (4)			
VI	DSC-13	Actuarial Economics (4)	DSC-B12(4), DSC- B13(4), B14(4),	<b>SEC-5:</b> General Aptitude (2) (1+0+2) / Internship (2)	26
	DSC-14	Indian Public Finance (4)			

**A3: Curriculum and Credit Framework for the B.Sc Program with two core subjects without practicals in the first three years**

Sem. No.	Course Category	Course Code	Course Title	Credits Assigned	Instructional hours per week		Duration of Exam (Hrs.)	Exam/ Evaluation Pattern (Marks)		
					Theory	Practical		IA	Exam	Total
V	DSC	ECO C9	Introduction to R Software	4	4		2.30	40	60	100
		ECO C10	Public Economics	4	4		2.30	40	60	100
		ECO C11	Development Economics	4	4		2.30	40	60	100
VI	DSC	ECO C12	Indian Banking and Finance	4	4		2.30	40	60	100
		ECO C13	Actuarial Economics	4	4		2.30	40	60	100
		ECO C14	Indian Public Finance	4	4		2.30	40	60	100



## Formative Assessment

**Pedagogy:** Classroom lectures, tutorials, Problem-solving exercises, seminars, presentations, activities, group discussions, field visits, project work, etc.,

Formative Assessment	
Assessment Occasion/ type	Weightage in Marks
Internal Test	50%
Assignment	20%
Presentation/ Project	30%
<b>Total</b>	<b>100</b>
<i>Formative Assessment as per NEP guidelines are compulsory</i>	

**Note: Strictly follow the Practicum**

Pedagogy; Evaluation process IA MARKS

FORMATIVE ASSESSMENT			
	C1	C2	Total
Assessment Occasion/type			
Internal Test	10	10	20
Assignment/seminar	5	-	05
Quiz/GD	5	-	05
Presentation/Project etc	-	10	10
Total	20	20	40
Semester End Exam Theory			60

**Note: Strictly follow the Practicum**

### Question Paper Pattern for 60 Marks for BA/B.Sc. in Economics (DSC, DSEC &OEC) Section A

#### Section A (objective type/multiple choice)

Answer any ten of the following out of 12 questions (1X10 = 10),

1.

- a)
- b)
- c)
- d)
- e)
- f)
- g)
- h)
- i)
- j)
- k)
- l)

**Section B** (Questions for testing the knowledge of theories and application)

Answer any **six** of the following out of 8 questions (5X6=30)

- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

**Part C** (Questions for testing the critical ability of understanding)

Answer any two of the following out of 4 questions (10 X2=20)

- 10.
- 11.
- 12.
- 13.

**BSc Honours**  
**in**  
**Economics**  
**5<sup>th</sup> & 6<sup>th</sup> Semester**

**BANGALORE UNIVERSITY,  
JNANA BHARATHI, BENGALURU**

**BSc–ECONOMICS**  
**V<sup>th</sup> SEMESTER**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Introduction to R Software</b>		
Course Code:	<b>ECO C9</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. Enables to do programming in R
- CO2. Students can able to gain skill in analyzing the data.
- CO3. To acquaint with the recent advances in R

<b>Modules</b>	<b>Description</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to R</b>	<b>10</b>
	Installation Procedure - Help - Demo Examples - Packages and Libraries - Command Line - Data Editor - R Studio.	
<b>Practicum</b>	Develop an R script and execute it	
<b>Module II</b>	<b>Basics in Calculations</b>	<b>16</b>
	Basics and R as a Calculator - Multiplication and Division - Addition and Subtraction Built in Functions and Assignments - Matrix Operations - Creation of a Matrix - Properties - Transpose - Multiplication - Addition and Subtraction - Submatrices - Inverse.	
<b>Practicum</b>	Solve a problem on Submatrices - Inverse	
<b>Module III</b>	<b>Missing Data and Logical Operations</b>	<b>16</b>
	Missing Data - Logical Operations and Comparisons - Control Statements - Loops - Conditional Execution - Sequences - Repeats, Sorting and Ordering - Lists - Vector Indexing - Data Management with Strings - Display and Formatting.	
<b>Practicum</b>	Group Discussion on Missing Data and Logical Operations	
<b>Module IV</b>	<b>Descriptive Statistics and Functions in R</b>	<b>18</b>
	Frequencies - Absolute and Relative, Partition Values - Quartile - Decile - Percentile, Graphics - Bar Plots - Pie Chart - Histogram - Scatter Plot, Descriptive Statistics - Mean - Median - Mode - Variability - Variance - Range - Standard Deviation, Statistical Distribution - Skewness - Kurtosis, Statistical Functions - Correlation - Regression - Regression Line - Goodness of Fit.	
<b>Practicum</b>	Presentation on Descriptive Statistics and Functions in R	

## References

1	Alain F. Zuur, Elena N. Ieno, Erik H.W.G. Meesters (2009), A Beginner's Guide to R (Use R), Springer Cham Publications.
2	Gareth James, Daniela Witten, Trevor Hastie, and Robert Tibshirani, (2013), Introduction to Statistical Learning with Applications in R, Springer Cham Publications.
3	Christian Heumann, Michael Schomaker, Shalabh (2017), Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R, Springer Cham Publications.
4	McKinney, W. (2012). Python for data analysis: Data wrangling with Pandas, NumPy, and IPython, O'Reilly Media, Inc.

**BSc–ECONOMICS**  
**V<sup>th</sup> SEMESTER**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Public Economics</b>		
Course Code:	<b>ECO C10</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

CO1. Understand introductory Public Finance concepts.

CO2. Study the causes of market failure and corrective actions

CO3. Understand the impact, incidence and shifting of tax

CO4. Study the Economic Effects of tax on production, distribution and other effects

CO5. Enable the students to know the Principles and Effects of Public Expenditure

CO6. Understand the Economic and functional classification of the budget; Balanced and Unbalanced budget

CO7. Understand the Burden of Public debt and know the Classical/ Ricardian views, Keynesian and post-Keynesian views

CO8. To acquaint with the advantages and disadvantages of Deficit Financing,

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Public Economics</b>	<b>15</b>
	Public Economics: Meaning, definitions, Scope and Significance, Public Finance and Private Finance: Meaning, and Distinction; Public good and private good: Meaning, Characteristics, and Distinction, Principle of Maximum Social Advantage, Market Failures: Meaning, causes-role of externalities; Market failure and role of government; Corrective actions.	
<b>Practicum</b>	Group Discussions on Public Finance and private finance; public good and private good Assignment on Market failure and government intervention	
<b>Module II</b>	<b>Public Revenue and Public Expenditure</b>	<b>18</b>
	Meaning and sources of revenue; Taxation –Cannons of taxation, Characteristics of a sound tax system, Impact, Incidence- Division of Tax burden, Shifting of tax, Economic Effects of tax on production, distribution and other effects, Progressive and Regressive, Proportional Tax, Direct and Indirect Taxes –Merits and Demerits, Taxable Capacity: Meaning and determinants. Public Expenditure; Meaning, classification, principles, Types & Cannons, Reasons for the growth of public	

	expenditure, Wagner’s law of increasing state activities, Peacock-Wiseman hypotheses, Effects of public expenditure: Production, Distribution & Other effects	
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<b>Practicum</b>	Mini-project/study to ascertain the impact of GST on retailers/wholesalers in your vicinity A case study on the taxable capacity of the different sections of society in the vicinity Assignment on Effects of public expenditure: Production, Distribution & Other Effects	
<b>Module III</b>	<b>Public Debt</b>	<b>12</b>
	Public Debt: Meaning, Purpose, Types & Effects; Sources of Public Borrowing; Burden of Public Debt -Classical/ Ricardian views, Keynesian and post-Keynesian views; Intergenerational equity of public debt; Causes of the Rise in Public Debt; Methods of debt redemption; Debt management.	
<b>Practicum</b>	Studying the burden of public debt through a project/ case study Assignment on Debt Management	
<b>Module IV</b>	<b>Public Budget, Fiscal Policy and Fiscal Deficit</b>	<b>15</b>
	Budget: Meaning, process & Types of budget, Economic and functional classification of the budget; Balanced and unbalanced budget, Types of Budget Deficits; Fiscal Policy: Meaning, objectives & Tools; Fiscal deficit: Meaning, Computation, Deficit Financing: Meaning, Advantages and Disadvantages	
<b>Practicum:</b>	Calculation of various types of budget deficit using the budget data Group discussion on the advantages and disadvantages of deficit financing	

<b>References</b>	
1	Lekhi R.K., Joginder Singh (2018) Public Finance, Kalyani publication, New Delhi
2	Tyagi B.P. (2014) Public Finance published by Jaya Prakash Nath and CO, Meerut
3	Hindriks J. and G. Myles (2006): Intermediate Public Economics, MIT Press.
4	Bhatia H L (2018): Public Finance. Vikas Publishing House.
5	Musgrave, R.A. (1989), The Theory of Public Finance, McGraw Hill
6	Musgrave, R.A. and P.B. Musgrave (1989), Public Finance in Theory and Practice, McGrawHill,

**BSc–ECONOMICS**  
**V<sup>th</sup> SEMESTER**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Development Economics</b>		
Course Code:	<b>ECO C11</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the basic concepts and measurements of Development.
- CO2. Learn some classical and partial theories of Development economics and identify the difference.
- CO3. Identify the difference between Developed and Developing Countries.
- CO4. Analyse and tackle the Development issues effectively.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hrs</b>
<b>Module 1</b>	<b>Introduction to Economic Development</b>	<b>14</b>
	Concept - Definitions - Distinction between Economic Growth and Development - Indicators of Growth and Development, Measures of Economic Development: Gross National Product (GNP) - Physical Quality of Life Index (PQLI), Human Development Index (HDI), Happiness Index, Inequality and Poverty: Meaning, causes, indicators - Gini Coefficient Index, Human Poverty Index (HPI).	
<b>Practicum:</b>	Assignment on various indicators of growth and development Group discussions about the characteristic features of different countries and their development levels	
<b>Module 2</b>	<b>General Theories of Economic Growth and Development</b>	<b>16</b>
	Adam Smith's Theory, David Ricardo's Theory, T.R. Malthus' Theory, Karl Marx's Theory, Schumpeter's Theory and Rostow's Growth Theory - Harrod-Domar Model.	
<b>Practicum:</b>	Assignment on different theories and their relevance to developing Countries, Debate on present stage of India's growth and estimated stage it may reach by 2047	
<b>Module 3</b>	<b>Partial Theories of Economic Development</b>	<b>16</b>
	Lewis Labour Surplus Model - Rodan's Big Push Theory - Lieberstein's Critical Minimum Effort Approach - Balanced Vs. Unbalanced Growth, Factors in the Development Process Capital Accumulation - Capital-Output Ratio - Technology and Economic Development.	
<b>Practicum:</b>	Group Discussion on Balanced and unbalanced growth strategies in Developed and developing countries Assignment on the Factors in the Development Process Capital Accumulation	
<b>Module 4</b>	<b>Sustainable Development</b>	<b>14</b>



	Inclusive Development - Millennium Development Goals - Sustainable Development Goals, Targets and Achievements with reference to India.	
<b>Practicum</b>	Seminar on MDGs and SDGs and the challenges	

<b>References</b>	
1	Higgins Benjamin & W.W. Norton Economic Development New York & Company.Inc.
2	Mishra S.K and Puri V.K, Economic Development and Planning, Himalaya Pub., House, Mumbai.
3	Taneja M.L. and Meier G. M, Economics of Development and Planning, S. Chand and Co, Delhi.
4	Thirlwall A.P. Growth and Development: With Special Reference to Developing Economies, Palgrave Macmillan, New York.
5	Todoaro. M.P & Orient Longman Economic Development in the Third World, United Kingdom
6	Sustainable Development Reports

**BSc–ECONOMICS**  
**V<sup>th</sup> SEMESTER**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Indian Banking and Finance</b>		
Course Code:	<b>ECO C12</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the structure of Indian banking and the role of banks in monetary policy.
- CO2. Analyze the functioning of banks and different types of accounts and other services offered by banks.
- CO3. Evaluate recent developments in the Indian banking sector, including digital banking, payment banks, and non-performing assets.
- CO4. Describe the overview of the Indian financial system, including financial markets, financial instruments, and financial regulation.
- CO5. Analyze the challenges faced by Indian banks and the implications of banking reforms for the Indian economy.
- CO6. Develop critical thinking and analytical skills in evaluating various financial products and services banks and capital markets offer.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to banking: India</b>	<b>15</b>
	Indian Banks: Evolution, structure, functions, types and features- Public sector, private sector, foreign, Cooperative, RRB, Small finance banks, payment banks; Role and importance of banks in the Indian economy; Credit creation and financial intermediation; Central Bank and banking regulation; Regulatory and supervisory powers; Monetary policy and banking channel of credit control; Policy rates and banking; repo, reverse repo, MCLR, Bank rate, CRR, SLR, MSF; Issues in banking sector; NPA crisis; impact of global events on Indian banks.	
<b>Practicum</b>	Compare and contrast the different types of banks, highlighting their strengths and weaknesses- Presentation. Conduct a class discussion and compare and contrast the different scenarios on various loans, highlighting the risks involved and the measures taken by banks to manage these risks.	
<b>Module II</b>	<b>Banking services</b>	<b>15</b>

	Banking services: Bank deposits; Types and features of bank accounts; account opening and importance of KYC; Bank loans; types, features, documents required; eligibility, interest rates, maturity, loan default and consequences; Other services: Locker facility, payment and remittance services and channels; currency exchange; debit cards, credit cards, pre- paid cards; ATMs; internet and mobile banking; Modern banking products: Insurance on deposits and loans, Investment services in capital market- stocks, bonds and mutual funds; advisory services; retirement products.	
<b>Practicum</b>	Group discussion on bank accounts and loan products and making recommendation to different classes Comparison of banking services by visiting bank branches	
<b>Module III</b>	<b>Modern Banking</b>	<b>15</b>
	Modern banking facilities; Digital banking; Digital Wallets; Digital account opening; Biometrics; contact less payment system; instant payments; personal finance management tools; Use of artificial intelligence and machine learning in banks; Cyber security in banking; Credit scoring; Direct lending; Corporate banking; Investment Banking	
<b>Practicum:</b>	Survey bank customers to understand their usage and satisfaction levels with digital banking services. Analyze the adoption rates of digital banking services across different age groups and demographic segments	
<b>Module IV</b>	<b>Financial Market</b>	<b>15</b>
	Introduction to Indian financial markets; Equity markets and stock exchanges; Debt markets and bond markets; Currency markets and forex trading; Commodity markets and trading; Derivatives markets; Mutual funds; Insurance products Investing in capital market products- access, channels; risk in capital market investments; Role of SEBI, Fintech and innovation in capital markets;	
<b>Practicum</b>	Debate: Investing in capital market products. Assignment on Indian financial markets	

<b>References</b>	
1	Khan, M. Y. (2019). Indian Financial System (11th ed.). McGraw Hill Education (India) Private Limited.
2	RBI (2022) report on the trend and Progress of Banking in India
3	Pathak, B. V. (2018). Indian financial system. Pearson Education
4	Principles and Practices of Banking (2023), Indian Institute of Banking & Finance (IIBF), MacMillian
5	Shekhar, K. C. & Shekhar, L. (2013). Banking Theory and Practice, 21st Edition
6	Taxman's Digital Banking, Indian Institute of Banking & Finance (IIBF), Bharati Law House
7	Reserve Bank of India. (2017). Basic Financial Literacy Guide.

	<a href="https://www.rbi.org.in/Scripts/BS_FlgGuidelines.aspx">https://www.rbi.org.in/Scripts/BS_FlgGuidelines.aspx</a>
8	Securities and Exchange Board of India. (2021). Handbook of Statistics on Indian Securities Market. <a href="https://www.sebi.gov.in/reports-and-statistics/publications/dec-2022/handbook-of-statistics-2021_66158.html">https://www.sebi.gov.in/reports-and-statistics/publications/dec-2022/handbook-of-statistics-2021_66158.html</a>
9	Financial Education Handbook (2021) National Centre for Financial Education (NCFE) <a href="https://www.ncfe.org.in/resources/downloads">https://www.ncfe.org.in/resources/downloads</a>
10	Investor Education material by National Stock Exchange ( <a href="https://www.nseindia.com/invest/how-to-invest-in-capital-market">https://www.nseindia.com/invest/how-to-invest-in-capital-market</a> )

**BSc–ECONOMICS**  
**V<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>EXPERIMENTAL ECONOMICS</b>		
Course Code:	<b>ECO E1A</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. name several experiments performed in each fields of economics, and describe how the results affirm (or differ from) economic theory and/or field data.
- CO2. Understand how to design and run an experiment.
- CO3. Develop the ability to read recent journal articles in experimental economics and evaluate the quality of the papers. Students are expected to read assigned journal articles and book chapters during class and present one article and/or chapter in class.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Introduction to Experimental Economics</b>	<b>15</b>
	Experimental Economics and Behavioral Game Theory-Risk and Time Preferences - Basic Principles of Experimental Design	
<b>Practicum</b>	Group Discussion on Basic Principles of Experimental Design	
<b>Module II</b>	<b>Behavioral Game Theory</b>	<b>15</b>
	Social Preferences: Ultimatum, Dictator and Trust Games- Mixed-Strategy Equilibrium-Bargaining - Dominant Solvable Games - Level-k Model	
<b>Practicum</b>	Conduct an Experimental session on Behavioral Game Theory	
<b>Module III</b>	<b>Markets and Strategic Behavior</b>	<b>15</b>
	Learning - Coordination and Equilibrium Selection-Signaling, Reputation and Cheap Talk - Neuroeconomics: fMRI and Eye tracking - Field Experiments-Prediction Markets and Asset Bubbles -Market Design	
<b>Practicum</b>	Demonstrate the difference between economic theoretical predictions and actual behavior.	

<b>References</b>	
1	C. A. Holt, Pearson Addison Wesley (2007) Markets, Games & Strategic Behavior,
2	J. H. Kagel and A. E. Roth, Princeton University Press (1997), The Handbook of Experimental Economics.

**BSc–ECONOMICS**  
**V<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Economics of Artificial Intelligence</b>		
Course Code:	<b>ECO E1B</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

<b>Course Outcome:</b> After the successful completion of the course, the student will be able to:		
<ul style="list-style-type: none"> <li>• CO1 Acquaint with Artificial Intelligence?</li> <li>• CO2. Understand the importance of Artificial Intelligence in the growth and development of the economy.</li> <li>• CO3. Understand the impact and implications of Artificial Intelligence on the various aspects of the economy</li> <li>• CO4. The Implications of Artificial Intelligence for Public Policy</li> </ul>		
<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Introduction to Artificial Intelligence</b>	<b>15</b>
	What is Intelligence? - agents and their goals, substrates; Evolution of biological intelligence – history, benefits and costs, emotions, empathy and cooperation, language and human culture; Evolution of artificial intelligence: history of AI - second machine age, the third digital revolution, the fourth industrial revolution; Machine Learning – Its impact on Economics, Ubiquitous computing, Clouds, Big data, Block chains, Software agents, robots and Digital Innovations; Artificial Intelligence - Theory of Decision Making, General Purpose Technology; Economic Potential of Artificial Intelligence – Innovations; AI and Privacy	
<b>Practicum</b>	Presentation on Machine Learning – Its impact on Economics	
<b>Module II</b>	<b>Artificial Intelligence and the Economy</b>	<b>18</b>
	Intelligent Economy – Platform economy, Gig economy, Sharing economy, Block chain economy, Crypto currency economy; Artificial Intelligence and Economic Growth – Productivity Gains, Knowledge Production Function; Implications of automation and AI on the demand for labor, wages, and employment; Artificial Intelligence – Research and Development, Structural Transformation, Income redistribution and Employment, Role of Demand; AI and Industrial Organization – Need for firm level data; Impact of AI and Machine Learning on Market Design; Macroeconomic Impact of AI.	
<b>Practicum</b>	Identify the role of Crypto currency in economic development and write a report	
<b>Module III</b>	<b>Policy Implications of Artificial Intelligence</b>	<b>12</b>
	Public Policy in an AI Economy - redistribution vs predistribution, concerns about inequality, steering technological progress; What shall be taxed? - labour vs capital; robots vs scarce factors? AI and International Trade -	

	policy implications with respect to investments in research, and behind-the-border regulations such as privacy, data localization, standards, and competition; Economics of Tort Liability – Punishing Robots; AI and Behavioural Economics; Ethical Challenges in the Intelligent economy – Challenges for Society, Challenges for ethics; Social attitudes: deriving meaning & dignity from work	
<b>Practicum</b>	Debate on Policy implications of Artificial Intelligence	

### References

1	Agrawal Ajay, Gans Joshua & Goldfarb Avi (2019). <i>The Economics of Artificial Intelligence – An Agenda</i> , NBER and University of Chicago Press
2	Brynjolfsson, Erik and Andrew McAfee (2015), <i>The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies</i> , W.W. Norton.
3	Kahin.B & Brynjolfsson.E (2000), <i>Understanding the Digital Economy: Data, Tools and Research</i> , Cambridge, Mass: The MIT Press

### Academic Articles

1	Berg, Andrew, Edward F. Buffie, and Luis-Felipe Zanna (2017), “Robots, Growth, and Inequality: Should We Fear the Robot Revolution? (The Correct Answer is Yes),” forthcoming, <i>IMF Working Paper</i> .
2	European Political Strategy Centre, <i>The age of artificial intelligence</i> , EPSC Strategic Notes, March 2018.
3	Frey, Carl Benedikt, and Michael A. Osborne (2013), “The Future of Employment: How Susceptible Are Jobs to Computerisation?” Oxford University paper.
4	Gries T. and Naudé W., <i>Artificial Intelligence, Jobs, Inequality and Productivity: Does Aggregate Demand Matter?</i> , Institute of Labor Economics, Discussion paper No 12005, November 2018.
5	Korinek, Anton and Joseph Stiglitz (2019), “Artificial Intelligence and Its Implications for Income Distribution and Unemployment,” in Agrawal et al.: <i>The Economics of Artificial Intelligence</i> , NBER and University of Chicago Press, May 2019.
6	McKinsey Global Institute, <i>Notes from the AI frontier – Modeling the impact of AI on the world economy</i> , discussion paper, September 2018.
7	OECD, <i>Digital economy outlook 2017</i> , October 2017.
8	PricewaterhouseCoopers, <i>The macroeconomic impacts of artificial intelligence</i> , February 2018.

**BSc–ECONOMICS**  
**V<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Economics of Tourism Development</b>		
Course Code:	<b>ECO V1A</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course outcomes;** On completion of the course, the students should be able to

- CO1. Interpret and evaluate tourism as a phenomenon and as a business system.
- CO2. Understand economic benefits such as tax revenues, job creation, or diversification of Local economies
- CO3. Contextualize tourism within broader cultural, environmental and economic Dimensions
- CO4. Develop and evaluate tourism policy and planning initiatives.
- CO5. Propose and conduct a research project to inform tourism practice
- CO6. Critique tourism practices for their implications locally and globally

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Tourism</b>	<b>15</b>
	<b>Tourism:</b> Concepts, definition, objectives, Nature and scope, significance, History, Tourist, Traveler, Excursionist .Types and forms: Inter-regional and intra-regional tourism, Inbound, outbound, Domestic and International. . Forms of Tourism: religious, Medical Tourism, historical, social, adventure, health, business, conferences, conventions, incentives, sports and adventure tourism. Tourism system: Nature, characteristics and components of Tourism Industry. Tourism Demand and supply: Measures, patterns, Characteristics and factors influencing tourism Demand and Supply.	
<b>Practicum</b>	Assignments on Types and forms of Tourism, Group discussions on factors influencing Demand and supply of Tourism.	
<b>Module II</b>	<b>Growth, Development &amp; Impact of Tourism on Economic development</b>	<b>15</b>
	Growth and Development of Tourism: post - second world war phenomenon, causes of rapid growth and modern tourism. Role and functions of Important Tourism Organizations: ITDC, State Tourism Development Corporations, Ministry of Railways & Civil Aviation, WTO, IATA, (International Air Transport Association), TAAI, (Travel Agents Association of India) WTTC (World Travel and Tourism Council) FHRAI. (The federation of Hotel and Restaurant Association of India), Important Tourism Destinations of India and Karnataka. Policy initiatives of Tourism Development Economic Impact: contribution to GDP/SDP, Economic benefits, the multiplier effect, development of infrastructure, Regional development, effects on	
	employment, tourism & economic value of cultural resources. Social, Cultural and Environmental Impacts.	



<b>Practicum</b>	Presentation on economic, social, cultural and Environmental impacts	
<b>Experiential Learning/ Practicum</b>	<b>Education trip to important tourist destinations for the students and submit report consisting 15-20 pages</b>	<b>30</b>
<b>Format of the report</b>	Name of the place – location - means of traveling to the destination - employability of tourism- climate - best season to visit - picturesque landscape - lodging and food - recreational facilities - places of interest in the area - local language/dress - handicrafts/products - overall experience	

<b>References</b>	
1	Bhatia A.K (2003) International Tourism, Sterling Publishers Pvt Ltd, New Delhi
2	Bhatia A.K (2003) International Tourism, Sterling Publishers Pvt Ltd, New Delhi
3	Bhatia AK (2002), Tourism Development: Principles and Practices, Revised edition Sterling Publishers Private Limited, New Delhi.
4	Dennis L & Foseter – Glencoe (2003), an Introduction to Travel & Tourism, McGrawHill International
5	Revathy Girish (2007), Indian Tourist Panorama, Dominant Publishers and Distributors, New Delhi.
6	Introduction to Tourism-A K Bhatia
7	Tourism System-Mill R C and Morrison
8	Tourism Development- R Garther
9	Sati V.P (2001), Tourism Development in India, Pointer Publications,Jaipur.
10	Singh Anand (2005), Tourism in Ancient India, Serials Publications, New Delhi.
11	Sinha R.K (2003), Growth and Development of Modern Tourism, Dominant Publishers, New Delhi.

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Actuarial Economics</b>		
Course Code:	<b>ECO C13</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Objective:**

- To understand the basic actuarial techniques
- To understand the concepts of finance and its application in actuarial economics

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. Enables understanding on Actuarial Economics and Insurance sector.
- CO.2.To acquaint with advances in financial models

<b>Modules</b>	<b>Description</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Actuarial Economics</b>	<b>10</b>
	Principles of Actuarial Economics - Importance of Finance and Mathematics in Actuarial Economics - The concept of Insurance - Classification of Insurance - Types of Life Insurance - History of Insurance in India - Insurance regulatory and development Act.	
<b>Practicum</b>	Assignment on Principles and Importance of Finance and Mathematics in Actuarial Economics	
<b>Module II</b>	<b>Theory of Interest</b>	<b>18</b>
<b>Chapter 4</b>	Time value of money - Simple interest, compound interest, depreciation, investing over a period. Cash flow models - Zero coupon bonds, fixed interest securities, index linked securities, equity, annuity, an interest on loan, repayment loan. Interest rates - Nominal rate, effective rate and force of interest.	
<b>Practicum</b>	Calculate Simple interest, compound interest, depreciation	
<b>Module III</b>	<b>Theory of Uncertainty and Risk Models</b>	<b>18</b>
	Axioms of choice under uncertainty; utility functions; expected utility theorem; measures of risk-absolute and relative risk aversions; measures of investment risk-variance of return, semi-variance of return Decision Theory: Zero-sum two-player games – Domination - The Minimax criterion - Saddle points.	
<b>Practicum</b>	Presentation on Theory of Uncertainty and Risk Models	
<b>Module IV</b>	<b>Portfolio Theory</b>	<b>14</b>
	Portfolio Theory - Benefits of Diversification, Models of Asset Returns: - Multifactor Models - The Single Index Model, Asset Pricing Models: - The	
	Capital Asset Pricing Models (CAPM) – Limitations of CAPM.	

<b>Practicum</b>	Group discussion on Portfolio Theory and Benefits of Diversification
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<b>References</b>	
1	Stephen G. Kellison, The theory of interest. Irwin Mc Graw Hill, 2008.
2	John Hull, Futures, Options and financial derivatives, Prentice hall publication
3	Panjer, Harry,H. (1998), Financial economics with applications to investments, Insurance and pensions. The Actuarial foundation.

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Fifth Semester</b>
Course Title	<b>Indian Public Finance</b>		
Course Code:	<b>ECO C14</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the structure of Indian Public Finance
- CO2. Enable the students to know the Source and nature of public revenue and expenditure
- CO3. Understand the Budget and different concept of deficits
- CO4. Know the Public debt and its management
- CO5. Understand the fiscal and monetary policy and their tools and importance
- CO7. To enable the students to know the Indian federal financing system and Financial Commissions

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Public Revenue</b>	<b>18</b>
	<b>Direct Tax Revenue</b> - Sources of Revenue-Tax and Non-Tax Revenue; Trends and Patterns of Tax Revenue in India; Direct and Indirect Taxes in India; Personal Income Tax Rates and Slabs; Corporate Tax- Tax Rate and Slabs; <b>Indirect Tax Revenue</b> - Indirect Taxes – Earlier Taxes-VAT and MODVAT; Goods and Services Tax (GST)- Objectives and Classification of GST, Tax Rates of GST; Trends and Patterns of GST; Impact of GST on Indian Economy; Tax Reform Commissions.	
<b>Practicum</b>	Collection and analysis of data on Direct tax Collection and analysis of GST from businesses	
<b>Module II</b>	<b>Public Expenditure</b>	<b>15</b>
	<b>Revenue Expenditure</b> - Classification of Public Expenditure in India; Revenue Account Expenditure- Trends and Patterns; Capital Account Expenditure-Trends and Patterns; Fiscal Responsibility and Budget Management (FRBM) Act; Impact of Public Expenditure on Indian Economy; Expenditure Reforms Commission (ERC) in India; <b>Union Budget and Its Analysis</b> - Meaning and Classification of Budgets; Zero-Based Budget; Composition of Union Budget; Union Budget Analysis (current one); Different Concept of Deficits- Revenue, Fiscal, Primary Deficits	
<b>Practicum</b>	Analysis of Union Budget (Current one) Group Discussion on Budget Deficits	
<b>Module III</b>	<b>Public Debt and Its Management</b>	<b>14</b>

	<b>Public Borrowings and Debt</b> - Meaning and Nature of Public Debt; Sources of Public Borrowings; Classification of Public Debt; Trends and Patterns of Central Government Debt; Main Characteristics of Indian Public Debt; Crowding out of Private Investment; Causes of Public Debt in India; <b>Burden of Public Debt and Management in India</b> - Meaning of Burden of Public Debt; Importance of Public Management; Principles of Public Debt Management; Repayment of Public Debt in India; Impact of Public Debt on Indian Economy; Finance Commissions in India	
<b>Practicum</b>	Assignment to write on Indian Public Debt and sources of repayment Group Discussion on Burden of Public Debt	
<b>Module IV</b>	<b>Fiscal and Monetary Policies and Federal Finance in India</b>	<b>13</b>
	<b>Fiscal and Monetary Policy India</b> - Meaning and Objectives of Fiscal Policy; Importance of Fiscal Policy; Tools of Fiscal Policy; Meaning and Objectives of Monetary Policy; Importance of Monetary Policy; Tools of Monetary Policy; <b>Indian Federal Finance</b> - Meaning and Importance- Stages of Growth; Allocation of Resources- Division of Functions and Resources; Principles of Federal Finance; Shortcomings of Federal Financing; Finance Commission and Their Recommendations.	
<b>Practicum</b>	Group Discussion about the Role of Fiscal and Monetary Policies in controlling inflation Assignment to write the State List, Union List and Concurrent list	

<b>References</b>	
1	Bhatia H L (2021): Public Finance, S. Chand and Co., New Delhi.
2	Lekhi R.K (2020): <i>Public Finance</i> , Kalyani Publishers, New Delhi.
3	Musgrave R.A and Musgrave P.A (2017): <i>Public Finance in Theory and Practice</i> , McGraw- Hill Kogakusha, Tokyo.
4	Om Prakash (2021): <i>Public Economics: Theory a practice</i> , Vishal Publishing Co. Ludhiana.
5	S.K. Singh (2019): <i>Public Economics: Theory and Practice</i> S. Chand and Co., New Delhi.
6	Tyagi, B.P (2018): <i>Public Finance</i> , Jai Prakash Nath and Company, Meerut, India.

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>International Economics</b>		
Course Code:	<b>ECO C15</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the international trade theories and their application in international trade
- CO2. Explain the concept of terms of trade and demonstrate the effect of trade barriers; and display the ability to analyse the stages of economic integration
- CO3. Understand the concept of BoP and assess the BoP position and examine the changes in forex rate
- CO4. Analyse the role of International trade and financial institutions
- CO5. Demonstrate good inter-personal and communication skills through class participation and contributing to critical discussion on trade issues

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>International Trade Theories</b>	<b>15</b>
	Meaning and Importance of International trade; Differences between Internal and International Trade; Trade Theories: Mercantilist view; Absolute cost and comparative cost advantage theories; Haberler's Opportunity cost theory; Hecksher-Ohlin theory; Leontief's paradox	
<b>Practicum</b>	Assignment on Ricardo's Comparative cost advantage and Leontief's paradox	
<b>Module II</b>	<b>Terms of Trade and Commercial Policy</b>	<b>18</b>
	Terms of trade- Concept and Types, Factors determining Terms of Trade; Commercial Policy: Free trade v/s Protection; Tariffs: Types and effects; Quotas; Anti-dumping; Economic Integration: Meaning and stages.	
<b>Practicum</b>	Debate: Free trade v/s Protection Mini project: Trace the evolution of India towards Economic Integration	
<b>Module III</b>	<b>Balance of Payment and Capital Flow</b>	<b>12</b>
	Balance of Payment: Concept, Components; Disequilibrium in Balance of Payment: Causes and Measures to correct disequilibrium; Foreign Exchange rate: Meaning and types; determination of Foreign exchange rate: Demand for and Supply of Forex; Purchasing Power Parity (PPP) theory; Capital Flow: Meaning and concept of Foreign Investment; Forms of FDI; Advantages and disadvantages of FDI.	
<b>Practicum</b>	Prepare India's Balance of Payment statement using recent Economic Survey Assignment on Forms of FDI	
<b>Module IV</b>	<b>International Finance and Trade Institutions</b>	<b>15</b>

	Bretton Woods Institutions: IMF and IBRD -IDA and IFC: Organization, Objectives, Functions and their role in developing countries; Evolution of WTO: GATT – principles and objectives; WTO: Organization, Objectives, Functions, Agreements and current issues; WTO and developing countries;	
<b>Practicum:</b>	Group Discussion: Effectiveness of IMF and IBRD in developing countries Seminar: Agreements of WTO or current issues of WTO	
<b>References</b>		
1	Sodersten. B. (1993): International Economics, MacMillan, 3 Edition, London,	
2	Salvatore, D. (2016): International Economics, 12 Edition, Wiley Publication	
3	Vaish, M. C. and Sudama Singh (1980): International Economics, 3 Edition, Oxford and IBH Publication, New Delhi.	
4	Carbaugh, R. J. (1999): International Economics, International Thompson Publishing, New York	
5	Dana, M. S. (2000): International Economics: Study Guide and work Book, 5. Edition, Routledge Publishers, London.	
6	Kenen, P. B. (1994). The International Economy, Cambridge University Press, London.	
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8	Jackson, JD. (1998) The World Trading System, Cambridge University Press, Mass.Cherunilam, International Economics, TMH, New Delhi.	
9	D M Mithani, International Economics, Himalaya , Mumbai.	
10	Jhingan M.L.(2016): International Economics, Vrinda Publications Pvt Ltd-Delhi	
11	Dwivedi D.N.(2013): International Economics Theory & Policy,Vikas Publishing House Pv.t Ltd.	
12	K.C. Rana & K.N. Verma (2017): International Economics;Vishal Publishing Co.	
13	Krishnamurthy H.R (2013) : Antararashreeya Arthashastra ; (Kannada version), Sapna, Bengaluru	

**BSc–ECONOMICS  
VI<sup>th</sup> SEMESTER**

Program Name	<b>B.Sc. in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Environmental Economics</b>		
Course Code:	<b>ECO C16</b>	No. of Credits	<b>4</b>
Contact hours	<b>60 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand how economic methods can be applied to environmental issues facing society
- CO2. Examine the linkages between Environmental Degradation and Economic Development
- CO3. Develop an informed view regarding the potential of economics to help societies achieve their environmental goals
- CO4. Demonstrate good inter-personal and communication skills through writing an essay and contributing to critical discussion
- CO5. Analyze environmental problems and to assess environmental policies

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Environment and Ecology</b>	<b>15</b>
	Meaning, Nature and Scope of Economics of Environment; Linkages between Environment and the Economy; Environmental Kuznets curve; Environmental Stress; Population and Environment; Poverty and Environment; Meaning and elements of ecology; Biotic and Abiotic components; Food, Hydrological and Carbon Cycles; Material Balanced Principle (Entropy law); Meaning and strategies to achieve Sustainable Development; Rio Summit; Green Accounting Introduction to SDGs	
<b>Practicum:</b>	Making charts relating to SDGs or Assignments on environment-economy linkages at the local level	
<b>Module II</b>	<b>Natural Resources Scarcity and Conservation</b>	<b>15</b>
	Meaning and Characteristics of Renewable and Non-renewable resources; Non-Renewable Resources and the problem of depletion and problem of overuse ; Resource Scarcity and Economic Growth (Limits to Growth Model); Energy and Economic Development; Energyresources and their Pricing; Alternative energy sources; Conservation of Natural Resources-3Rs – Reduce, Reuse and Recycling Measures	
<b>Practicum:</b>	Identifying local resources; Project on resource conservation (esp. water) at the College level; Discussion on Limits to Growth	
<b>Module III</b>	<b>Environmental Pollution</b>	<b>15</b>



	Environmental regulatory system in India; Pollution Control Boards and their Functions; Provisions of the Environmental Protection Act, 1986; Environmental Movements in India (Chipko); Role of Citizens and NGOs in Environmental Protection.	
<b>Practicum:</b>	visiting the Pollution Control Board office and observing its functions	
<b>Module IV</b>	<b>Environmental Pollution and Regulation</b>	<b>15</b>
	Environmental regulatory system in India; Pollution Control Boards and their Functions; Provisions of the Environmental Protection Act, 1986; Environmental Movements in India (Chipko); Role of Citizens and NGOs in Environmental Protection.	
<b>Practicum:</b>	Assignments on types of pollution in local areas; Seminars on climate change and its consequences; visiting the Pollution Control Board office and observing its functions	

References	
1	Bhattacharya, R.N (Ed) (2001), <i>Environmental Economics: An Indian Perspective</i> , Oxford University Press.
2	Karpagam M. (1993), <i>Environmental Economics</i> , Sterling Publishers, New Delhi.
3	Shankar, U, (2001), <i>Environmental Economics</i> , Oxford University Press, New Delhi.
4	Singh, Katar and Anil Shisodia (2007): <i>Environmental Economics: Theory and Applications</i> , Sage Publications, New Delhi
5	Mahajan V.S (2003): <i>Environmental Protection – Challenges &amp; Issues</i> , Deep & Deep Publishers New Delhi
6	Sengupta, R.P. (Ed.) (2001), <i>Ecology and economics: An Approach to Sustainable Development</i> , Oxford University Press, New Delhi.
7	Nick Hanley, Jason F, Shogren and Ben White (2005): <i>Environmental Economics in Theory and Practice</i> , Macmillan India Ltd.

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Economics of Information</b>		
Course Code:	<b>ECO E2A</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. Students shall be able to understand the role of information in contemporary economics.
- CO2. Students are expected to understand the strategies for pricing information.
- CO3. Students are expected to understand relevance of information policy in contemporary digital economy.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Role of Information in Economy</b>	<b>15</b>
	Foundations of the Information economy-Introduction to Information economy-Definition of information good-The cost of producing information-Managing intellectual property-Economic and public good-The economics of attention-Technology Systems competition Lock-in and switching costs-Positive feedback, network externalities, and standards Policy	
<b>Practicum</b>	Assignment on Role of Information in Economy	
<b>Module II</b>	<b>Strategies for Pricing Information</b>	<b>15</b>
	Pricing Information Goods-Cost of producing information-Costs and competition-Product Personalization-Product pricing-Personalized pricing-Versioning-Group pricing- Price sensitivity, Network effects, Lock-in, Sharing Versioning Information-Types of versioning-Value-subtracted versions-Avoiding pitfalls in versioning-On-line and off-line versions-Goldilocks pricing-Customizing the browser-Bundling-Promotional pricing	
<b>Practicum</b>	Survey on Strategies for Pricing Information and write a report on it	
<b>Module III</b>	<b>3 Strategies for Information Industries and Information Policy in New Economy</b>	<b>15</b>
	Cooperation and Compatibility-How standards change the game-Winners and Loser from standards-Tactics in formal standard-setting-Managing open standards-Case Study- Linux Adoption in the Public Sector: An Economic Analysis-Waging a Standards War-Classification of standards wars-Information-age standards wars-Key assets in network markets-Two basic tactics in standards wars-Capstone case: Microsoft Netscape Information Policy overview-Price differentiation-Competition policy-Telecommunications regulation and policy in brief (Indian context)	

	The components of Digital Economics-Twelve theme of the new economy-The ten technology shift-The Internet Economy and its Indicators-E-commerce and Digital Economy	
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<b>Practicum</b>	Presentation on 3 Strategies for Information Industries and Information Policy in New Economy
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<b>References</b> [Please refer to the Latest Editions]	
1	Don Tapscott. The digital economy: Promise and peril in the age of networked intelligence. McGraw-Hill. (ISBN : 0-07-063342-8)
2	Amrit Tiwana. The knowledge Management Toolkit: Practical techniques for building a knowledge Management System. Pearson Education . (ISBN 981-405-873-4)

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>METHODS OF DATA ANALYSIS</b>		
Course Code:	<b>ECO E2B</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. What are Theoretical Distributions?
- CO2. Hypothesis Testing
- CO3. Techniques of Data Analysis – t test, ANOVA, Factor Analysis, Regression and correlation

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Hypothesis Testing</b>	<b>15</b>
	Types of Analysis: Univariate, Bivariate and Multivariate Data Analysis - Descriptive vs. Inferential Analysis – Theoretical Distributions – Normal, Chi-square, t, F, Binomial and Poisson Distributions – Concept of Estimator - Sampling Distribution of Estimator - Point and Interval Estimation - Properties of Good Estimator for Small and Large Samples Hypothesis Testing: Steps in Testing of Hypothesis - Approaches to Hypothesis Testing - Confidence Interval Approach -Test of Significance Approach and P-Value Approach- Formulation of Hypothesis - Null and Alternative - Level of Significance - One Sided and Two Sided Hypothesis - Type-I and Type-II Error - Test Statistic- Critical Value	
<b>Practicum</b>	Conduct independent research and analysis and formulate and test the hypothesis	
<b>Module II</b>	<b>Techniques of Data Analysis</b>	<b>15</b>
	Estimation of Mean and Variance - Test of Single Sample Mean - Two Independent Means Test - Testing for Means of Paired Data - Test of Single Sample Variance - Two Sample Variance Test – Test of Proportions - Non-Parametric Tests - Testing of Hypotheses: Concepts,. Non-Parametric Tests: Advantages & Disadvantages - Chi-square Tests - Tests for Randomness. Analysis of Variance - Assumptions for Analysis of Variance - Testing for the Equality of K Proportion Means - Between Treatments Estimate of Population Variance - Within Treatments Estimate of Population Variance - Comparing the Variance of Estimates - The F Test - Multiple Comparison Procedures.	
<b>Practicum</b>	Presentation on Techniques of Data Analysis	
<b>Module III</b>	<b>Advanced Data Analysis</b>	<b>15</b>

	<p><b>Factor Analysis:</b> Meaning of Factor Analysis - Objectives of Factor Analysis - Designing a Factor Analysis - Assumptions in Factor Analysis - Deriving Factors and Assessing Overall Fit - Interpreting the Factors - Validation of Factor Analysis.</p> <p><b>Regression Analysis:</b> Simple Regression, Partial Regression and Multiple Regression Analysis - Assumptions - Estimation of Regression Model.</p> <p><b>Correlation Analysis:</b> Correlation Analysis - Types of Correlation: Cross Tabulation, Charles Spearman's Coefficient of Correlation, Karl Pearson's Coefficient of Correlation, Coefficient Multiple and Partial Correlation.</p>	
<b>Practicum</b>	Debate on Applications of advanced data analysis	

<b>References</b>	
1	Anderson, Sweeney and Willams, (2012) <i>Statistics for Business and Economics</i> , Thomson South Western, US.
2	Hair, Anderson, Tatham and Black (2009) <i>Multivariate Data Analysis</i> , Pearson Education, Singapore

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Game Theory</b>		
Course Code:	<b>ECO E2C</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. Describe the basic elements of a game, including players, strategies, and preferences and explain the basic assumptions for the analysis.
- CO2. Analyze games with simultaneous moves and apply best response analysis to determine the equilibrium of a game.
- CO3. Analyze games with sequential moves and apply backwards induction to determine the equilibrium of a game.
- CO4. Describe and analyze a number of strategic situations frequently observed in economic, political, and social environments and explain the nature of the equilibrium.
- CO5. Describe and analyze a number of strategic situations frequently observed in the business world, including imperfect competition and incentives in organizations.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Introduction to Game Theory</b>	<b>15</b>
	Basic Ideas and Examples – The GPA RAT Race – Why Professors So Mean? - How to Think about Strategic Games – Decisions versus Games - Classifying games : Sequential or Simultaneous - Conflict or Commonality – Single or Repeated with same or changing opponents - Equal or Asymmetric Information – Games with Fixed rules or Manipulable –Cooperative or Non-cooperative – some Terminology: Strategies – Payoffs – Rationality – Common Knowledge of Rules – Equilibrium – Observation and experiment – Uses of game Theory.	
<b>Practicum</b>	Group Discussion on the notion of a strategic game and equilibria and identify the characteristics of main applications of these concepts and write an assignment	
<b>Module II</b>	<b>Games with Sequential Moves</b>	<b>10</b>
	Game Trees: Nodes – Branches – Paths of Play – Uncertainty and Nature’s Moves – Outcomes and Payoff – Strategies – Tree Construction — Adding More Players – Adding More Moves	
<b>Practicum</b>	Solve Games using Trees – Solve Games Adding More Players and Moves	
<b>Module III</b>	<b>Simultaneous Move Games – Discrete and Continuous Strategies</b>	<b>20</b>
	Depicting Simultaneous Move Games with Discrete Strategies – Nash Equilibrium – Nash Equilibrium as a System of Beliefs and Choices –	

	Dominance; Both Players have Dominant Strategies - One Players has a Dominant Strategy – Successive Elimination of Dominant Strategies – Best-Response Analysis - Simultaneous Move Games with Continuous Strategies; Pure Strategies that are Continuous variables - Price Competition – Some Economics of Oligopoly – Political campaign Advertisement – General Method of Finding Nash Equilibria	
<b>Practicum</b>	Real World Evidence of Nash Equilibrium Computer Software to Solve Game Problems	

<b>References</b>	
1	Avinash K. Dixit and Barry J. Nalebuff: The Art of Strategy, W.W. Norton, 2008.
2	Martin Osborne, An Introduction to Game Theory, Oxford University Press, 2003

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Operational Research in Economics</b>		
Course Code:	<b>ECO E2D</b>	No. of Credits	<b>3</b>
Contact hours	<b>45 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>40</b>	Summative Assessment Marks	<b>60</b>

**Course Outcome:** After the successful completion of the course, the student will be able to:

- CO1. Explain the concepts of operational research and history of it.
- CO2. Explain the different approaches to decision analysis
- CO3. To optimize the objective function with given constraints.
- CO4. Solve different types of problems involving linear programming
- CO5. Discuss the concept of system analysis and identify the various categories of systems
- CO6. Describe model and analyze the different types of models
- CO7. Able to draw decision tree
- CO8. Defined simulation and highlight the various types of simulation models
- CO9. Able to perform Monte Carlo simulation.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>45 Hours</b>
<b>Module I</b>	<b>Fundamentals of Operation Research</b>	<b>15</b>
	Operations Research (OP) – Objectives, History and Development, Definition, Characteristics of Operation Research; Scientific Methods in Operations Research- The Judgment Phase, The Research Phase, The Action Phase ; Necessity of Operations Research in Industry ; Scope and Applications of Operations Research; Scope of Operations Research in Financial Management <b>Tools of OP: Linear Programming (LP)-</b> Formulation of LP Problems, Constrained maximization and minimization, Graphical and algebra solution for LP problems.	
<b>Practicum</b>	Designing LP Problem Empirically optimizing objective function Verification of graphical solutions with algebra method. Solving the LP problem in Excel Sheet.	

<b>Module II</b>	<b>Modeling in Operational Research</b>	<b>15</b>
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	<b>Introduction</b> , Objectives, Definition, and Classification of Modeling; Characteristics of Good Models , Advantages of Models, Limitations of Models, Constructing a Model ; Types of Mathematical Models ; <b>Introduction to Decision Tree:</b> Definition, Benefits and Disadvantages of Using Decision Tree, Components of the Decision Tree, Structure of a , Decision Tree , Analysis of Decision Tree.	
<b>Practicum</b>	Construction of different operation research models Drawing decision tree	
<b>Module III</b>	<b>Simulation and System Analysis</b>	<b>15</b>
	<b>Introduction to Simulation:</b> Objectives, Definition, Advantages of Simulation Technique, Application of Simulation, Limitations of Simulation Technique, Monte Carlo Simulation <b>Introduction to System Analysis:</b> Objectives, Definition, The Systems Theory, Elements of a System, Types of Systems; Forms of Systems - Conceptual System, Mechanical System, Social System, Deterministic System, Probabilistic System; The Concept of Entropy in a System.	
<b>Practicum</b>	Simulation experiments Monte Carlo Simulation using software Analysis of probability systems.	

<b>References</b>	
1	Dixon – Ogbechi, B.N. (2001). <i>Decision Theory in Business</i> . Lagos: Philglad Nig. Ltd.
2	Gupta, P.K. & Hira, D.S. (2012). <i>Operations Research</i> , New Delhi: S. Chand & Company.
3	Rama Murthy P (2007). <i>Operations Research</i> , New Delhi: New Age International (P) Limited, Publishers
4	Taylor III, B.W. (2007). <i>Introduction to Management Science</i> , (9th ed.). New Jersey: Pearson Education Inc.

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Economics of Stock Market</b>		
Course Code:	<b>ECO V2A</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course Outcomes (COs):** After the successful completion of the course, the student will be able to:

- CO1. Understand the functioning, structure, and regulation of the stock market in India.
- CO2. Analyze different types of stocks, their characteristics, and their impact on risk and returns tradeoffs.
- CO3. Demonstrate the process of investing in the stock market, including opening a demat account, understanding trading windows, and buying and selling stocks.
- CO4. Utilize technical analysis tools such as chart analysis, trend analysis, and major indicators to develop effective trading strategies.
- CO5. Conduct fundamental analysis by interpreting financial statements, calculating financial ratios, and applying valuation methods.
- CO6. Apply risk management techniques and investment biases in real-time stock trading scenarios.

Modules	Description	60 Hrs
<b>Module I</b>	<b>Fundamentals of stock market</b>	<b>15</b>
	Overview of capital market, Stock market in India: Function, structure and regulation, features and participants; Types of stocks and their characteristics; Stock market indices; Equity Issue methods; primary and secondary markets; Risk and returns tradeoff; Diversification, The process to invest: Opening demat account; Trading window; Day trade vs. long term investment; Buying and selling stocks; types of orders in stock trading; payments and trade settling cycle; stop-loss	
<b>Practicum</b>	Conducting mock stock trading sessions using real-time data Analyze the risk associated with stock market investments	
<b>Module II</b>	<b>Technical and Fundamental analysis</b>	<b>15</b>
	Technical analysis: Meaning, advantages and role, Chart analysis- types of charts and interpretation; candle charts and pattern study. Trend analysis, moving averages, support and resistance levels, sentimental indicators, volume and open interest; Major Indicators & Oscillators; Trading Strategies; Dow Theory And Elliot Wave Theory; Trading Psychology And Risk Management; Fundamental analysis: Introduction, relevance and steps; Time value of money; discount factors; risk free rate; equity risk premium; CAPM Beta; Sharpe ratio;	

	Financial Statements: Balance Sheet, Income statement, cash flow statement; Financial ratios; Valuation methods: Discounted cash flow method; Dividend discount method; Free cash flows;	
<b>Practicum:</b>	Complete National Stock Exchange Academy's certification in technical analysis. Using charts, demonstrate a trading strategy Assignment on various investor biases in trading	
<b>Experiential Learning/ Practicum</b>	<b>Visit an Retail Brokerage Firm and write an report to know about opening a demat trading account, Online Trading and research to wide area Financial Products</b>	<b>30</b>
<b>Format of the Report</b>	<ol style="list-style-type: none"> <li>1. Name and Address of the Retail Brokerage Firm Visited</li> <li>2. Certificate from the Retail Brokerage Firm Stating the students visit and learning about the Fundamentals of stock market</li> <li>3. Certificate from the concerned HOD &amp; Concerned teacher</li> <li>4. Brief Profile of the Retail Brokerage Firm</li> <li>5. Lessons Learnt about Fundamentals of stock market, Technical and Fundamental analysis, Sources of finances, Challenges faced, Strategies to Overcome it, etc.....,</li> </ol>	

<b>References</b>	
1	Graham, B. (2006). The Intelligent Investor. Collins Business Essentials.
2	NCFM, Technical Analysis module. National Stock Exchange Academy
3	NCFM, Fundamenta Analysis module. National Stock Exchange Academy
4	Patel, R. (2010). Guide to Technical Analysis & Candlesticks. Mumbai: Vision Books.
5	Sadekar, B. M. (2011). How to Make Money Trading with Candlestick Charts.
6	Palat, R. (2019). Fundamental analysis for investors (4th ed.). McGraw-Hill Education.
7	Gala, K., & Gala, A. (2019). Fundamental Analysis Shares: Become An Intelligent Investor.
8	Khan, M. Y. (2019). Indian Financial System (11th ed.). McGraw Hill Education
9	Lynch, P., & Rothchild, J. (2000). One Up on Wall Street: How to Use What You Already Know to Make Money in the Market. Penguin.
10	Paul, P. (2015). How to Avoid Loss and Earn Consistently in the Stock Market: An Easy-to-understand and Practical Guide for Every Investor. Vision Books.

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Micro Entrepreneurs Development</b>		
Course Code:	<b>ECO V2B</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course outcomes;** On completion of the course, the students should be able to

- CO1. To know how to start own Micro Entrepreneur Unit.
- CO2. To enable the students to find out various procedure of operations of Micro Entrepreneurship.
- CO3. To enable the students to gain knowledge and skills needed to run micro enterprises successfully.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Micro Enterprises : Technical Feasibility</b>	<b>15</b>
	Management Evaluation – Micro Enterprises Promotion - Types of Enterprises and Management – Sole Proprietorship, Partnership, Limited Liability Partnership, Private Limited - Profile of the Management - Idea of Product – Product Line – Product Demand Estimation – Promotion and Competition Management. Technical Feasibility – Manufacturing Process – Digital Technology – AI in Manufacturing – Plant Location, Plant and Machinery Technical Feasibility, Raw-material Utilities and Human Resources, Contracts and Annual Maintenance Agreements (AMCs) – Project Monitoring and Implementation – Plant Optimization.	
<b>Practicum</b>	Assignment on Micro Entrepreneurs Development Survey to analyse Technical Feasibility in Micro Enterprises	
<b>Module II</b>	<b>Micro Enterprises: Financial and Economic Viability</b>	<b>15</b>
	Appraisal of Financial Feasibilities – Cost of the Project – Land and Building, Plant and Machinery, Furniture’s and Fixtures, Pre-Operative Expenses, Fixed and Working Capital – Means of Strategic Finance – Own Contribution and Venture Capital, Term Loans, Subsidy and Government Schemes, Other Sources, Economic Viability – Profit and Losses, Break Even and Bottom Line.	
<b>Practicum</b>	Identify the factors of economics viability in micro enterprises and write an assignment	
<b>Experiential Learning/ Practicum</b>	<b>Visit a Micro Enterprise and write a report of 15-20 pages about consisting of the following:</b>	<b>30</b>

<b>Format of the Report</b>	<ol style="list-style-type: none"> <li>1. Name and Address of the Micro Enterprise Visited</li> <li>2. Certificate from the Micro Enterprise Stating the students visit and learning about the Micro Enterprises : Technical Feasibility</li> <li>3. Certificate from the concerned HOD &amp; Concerned teacher</li> <li>4. Brief Profile of the Micro Enterprise</li> <li>5. Lessons Learnt about Micro Enterprises: Technical Feasibility, Financial and Economic Viability, Launching a Business, Product Marketing, Sources of finances, Challenges faced, Strategies to Overcome it, etc.....,</li> </ol>	
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<b>References</b>	
1	Bessant J and Tidd J (2011): Innovation and Entrepreneurship, 2nd Edition, John Wiley & Sons.
2	Desai, V (2021): Small Scale Industries and Entrepreneurship, Himalaya Publishing House, Mumbai.
3	Desai, V ( 2011) : Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, Mumbai.
4	Donald F K (2014): Entrepreneurship – Theory, Process and Practice, 9th Edition, Cengage learning.
5	Hirsch, R.D., Peter, M and Shepherd D (2006): Entrepreneurship, 6 <sup>th</sup> Edition, Tata McGraw-Hill, Mumbai.
6	Kanaka S S (2013): Entrepreneurial Development, S.Chand & Co. New Delhi.
7	Nagendra and Manjunath, V.S. (2010): Entrepreneurship and Management, Pearson.
8	Roy R (2011): Entrepreneurship, 2 <sup>nd</sup> Edition, Oxford University Press.
9	Stokes, D and Wilson, N. (2010): Small Business Management and Entrepreneurship, 6 <sup>th</sup> Edition, Cengage Learning.
10	Sundar, K (2011) : Entrepreneurial Development, Vijay Nicole Imprints Pvt. Ltd.

**BSc–ECONOMICS**  
**VI<sup>th</sup> SEMESTER**

Program Name	<b>BSc in Economics</b>	Semester	<b>Sixth Semester</b>
Course Title	<b>Project Planning and Management</b>		
Course Code:	<b>ECO V2C</b>	No. of Credits	<b>2+1</b>
Contact hours	<b>30+30 Hours</b>	Duration of SEA/Exam	<b>2.30</b>
Formative Assessment Marks	<b>50</b>	Summative Assessment Marks	<b>50</b>

**Course outcomes;** On completion of the course, the students should be able to

- CO1-formulate and present a practicable project idea
- CO2-prepare a realistic economic plan
- CO3-describe models and methods to lead, carry out, document and evaluate project
- CO4-describe an intended project in a complete project plan
- CO5-review and evaluate own and others' project plans critically.
- CO6-Understand the content for preparing a Project Report for new projects and differentiate between financial, technical analysis and business feasibility.

<b>MODULES</b>	<b>DESCRIPTION</b>	<b>60 Hours</b>
<b>Module I</b>	<b>Introduction to Project Planning and Management</b>	<b>15</b>
	Meaning, Definition, Nature & Scope, Types - Schedule planning, Resource planning, Budget planning, Procurement management, Quality planning, Communications planning. Key elements of a successful project planning, and Process of Project planning.	
<b>Practicum</b>	Assignments on project planning and management activities. Group discussion on project planning.	
<b>Module II</b>	<b>Project Management Implementation and Stakeholder Management and Project Controlling</b>	<b>15</b>
	<b>Project Management:</b> Meaning, definition, Objectives, Nature and Importance, Project Management Skills - Qualities of the best project manager, Project Management life Cycle; <b>Project Implementation:</b> Definition, Implementation Tools, and Process, Performance and quality control measurements. <b>Stakeholder Management:</b> Definition, Features, Importance, Risk Management; Definition, importance, techniques; Project Controlling System: Meaning, Pre-requisites, Process, Essentials, Methods, Project completion.	
<b>Practicum</b>	Discussion on the Skills of project management, Decision Making, Problem-Solving, and risk-management skills In small groups, try to identify the LARGEST project each of you has been involved with.	
<b>Experiential Learning/ Practicum</b>	<b>Visit an Enterprise and write a report of 15-20 pages about consisting of the following:</b>	<b>30</b>
<b>Format of the</b>	1. Name and Address of the Enterprise Visited	

<b>Report</b>	<ol style="list-style-type: none"> <li>2. Certificate from the Enterprise Stating the students visit and learning about the Project Planning and Management</li> <li>3. Certificate from the concerned HOD &amp; Concerned teacher</li> <li>4. Brief Profile of the Enterprise</li> <li>5. Lessons Learnt about Project Planning and Management Implementation, Stakeholder Management and Project Controlling Launching a Business, Product Marketing, Sources of finances, Challenges faced, Strategies to Overcome it, etc.....,</li> </ol>	
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<b>References</b>	
1	Adrienne Watt (2014) Project Management – 2nd Edition, publisher, BC CAMPUS open access books library.
2	<u>Davies A. Igberaese</u> (2023) .Introduction to Project Management ,Routledge Taylor &Francis Group
3	Harold Kerzner (2013), Project Management; A Systems Approach to Planning, Scheduling, and Controlling, WILEY INDIA
4	Joseph Heagney (2019) Fundamentals of Project Management, 5th Edition, Amacom Publication
5	Kalpesh Ashar (2022), Project Management Essentials; You Always Wanted To Know, Vibrant Publication
6	Project Management from Simple to Complex, open text book Publisher: University of Minnesota Libraries Publishing
7	Albert lester(2021)Project management ,planning and control
8	Rory Burke (2009), Project Management Planning And Control Techniques, 4Th Edition, WILEY INDIA.

# CBCS Question Paper Pattern for UG Semester

## DSC, DSEC & OEC

Paper Code:		Paper Title:	
Duration of Exam	2.30	Max Marks	60 Marks
Instruction:	Answer all the sections		

### Section-A

1. Answer <b>ALL</b> the following sub-questions, each sub-question carries <b>ONE</b> mark	(10X1=10)
A. B. C. D. . J.	
<i>Note for Section-A: Three sub-questions from each unit and remaining one sub-question (J) from unit I to III.</i>	

### Section-B

Answer any <b>FOUR</b> of the following questions, each question carries <b>FIVE</b> marks	(4X5=20)
2. 3. 4. 5. 6. 7.	
<i>Note for Section-B: Minimum Two question from each unit (Q No 2 to 6)</i>	

### Section-C

Answer any <b>THREE</b> of the following questions, each question carries <b>TEN</b> marks	(3X10=30)
8. 9. 10. 11. 12.	
<i>Note for Section-C: Minimum Two question from each unit (Q No 8 to 12) Sub-questions such as 'a' and 'b' may be given for a question in section-C only.</i>	



