

FACULTY OF ECONOMICS AND BUSINESS

**SYLLABUS
of
Bachelor of Science (Economics)
(Semester V-VI)
(Under Continuous Evaluation System)**

Session: 2025-26



**The Heritage Institution
KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)**

Bachelor of Science (Economics) Semester –V
Session 2025-26
Course Code: BECL-5175
Economics (Economics of Development)

Course outcomes:

After passing this course, students will be able to:

- CO1:** learn the measurement of economic development and understand the economic problems of developing and least developed countries
- CO2:** examine the models of growth critically and recognize the importance of their underlying assumptions
- CO3:** analyze the different strategies of economic development and policy implications of export promotion and import substitution strategies
- CO4:** understand the role of planning and contribution of capital formation and choice of techniques in the development of UDCs and their changing landscape after globalization and liberalization

Bachelor of Science (Economics) Semester –V
Session 2025-26
Course Code: BECL-5175
Economics (Economics of Development)

Time: 3 Hours

L-T-P (Credits):4-0-0
Max. Marks: 100
Theory: 80
CA: 20

Note: Instructions for the Paper Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT–I

Economic Development: Meaning and Measurement, Economic and Non-Economic Factors, Characteristics of Developing and Least Developed Countries. Human Development Index, Concept of Sustainable Development.

Dualism: Social and Technological Dualism

Lewis Model of Unlimited Supply of Labour, Problems of Unemployment and Disguised Unemployment.

UNIT–II

Models of Growth: Classical, Marxian, Schumpeter, Harrod-Domar, and Solow.

UNIT–III

Rostow's theory of Stages of Growth

Strategies of Economic Development-Balanced vs. Unbalanced Growth; Theory of Big Push; Leibenstein's Critical Minimum Efforts Thesis

Export Promotion and Import Substitution.

UNIT–IV

Capital Formation – Meaning and Sources; Choice of Techniques

Role of Planning in Under Developed Countries, Need, Objective, Strategy, Types and Problems of Planning.

Case Study: Growth Models for the development of different areas of Punjab

Suggested Readings:

1. Meier, G.M.(1995), *Leading Issues in Economic Development*, Oxford University Press, Delhi.
2. Thirlwall, A.P. (2011), *Economics of Development*, Palgrave Macmillan.
3. Todaro, M.P. and Smith, S.C. (2018), *Economic Development*, Pearson India
4. Misra and Puri (2016), *Economics of Development and Planning*, Himalaya Publishing House, New Delhi

5. Jhingan, M.L.(2011), *The Economics of Development and Planning*, Vrinda Publications Pvt. Ltd., Delhi

Note: The latest editions of the books are recommended.

Bachelor of Science (Economics) Semester–V
Session 2025-26
Course Code: BECL-5453
Quantitative Techniques (Quantitative Techniques–V)

Course outcomes:

After the successful completion of this course, the students will be able to

CO1: understand the basics of methods of estimation and the process of formulation and of testing the hypothesis.

CO2: understand the theoretical details of sampling distributions

CO3: understand the basic applications of sampling distributions.

CO4: understand ANOVA to split and analyze the variations in economic phenomenon.

Bachelor of Science (Economics) Semester–V
Session 2025-26
Course Code: BECL-5453
Quantitative Techniques (Quantitative Techniques–V)

Time: 3 Hours

L-T-P (Credits):4-0-0

Max. Marks: 100

Theory: 80

CA: 20

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e., a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT–I

Statistical Inference: Point & Interval Estimation, Properties of a Good Estimator, Maximum Likelihood Method of Estimation and derivation of mean and variance of Binomial, Poisson and Normal distributions using MLE. Basic Concepts of Null and Alternative Hypotheses, Types of Errors, One-Tailed and Two-Tailed Tests, Power of Test, Critical Region.

UNIT–II

Sampling Distributions: Derivation of properties of Z, T, Chi-Square and F distributions.

UNIT–III

Tests of significance based upon the distribution of Z, t, F and Chi-square.

UNIT–IV

Analysis of Variance: Introduction, Assumptions, Techniques of Analyzing Variance-Analysis of Variance of one-way and two-way classification.

Practical: t-test with any Statistical Software

Suggested Readings:

1. Gupta and Kapoor(2014) , *Fundamentals of Mathematical Statistics* , Sultan Chand & Sons, New Delhi
2. Rangi S.S.(2016), *Statistical Techniques*, S. Vikas &Co. (Publishing House) India.

Note: The latest editions of the books are recommended.

Bachelor of Science (Economics) Semester –VI
Session 2025-26
Course Code: BECL-6175
Economics (Quantitative Methods for Economists)

Course outcomes:

After passing this course, students will be able to:

CO1: learn basic techniques of mathematics and their applications in economics

CO2: analyze data by using means of central tendency and dispersion.

CO3: understand the shapes of the curve and the relationship between variables by using techniques of skewness, kurtosis, and correlation and learn prediction and forecasting by using regression

CO4: calculate relative changes in the magnitude of related variables and also missing values within the data.

Bachelor of Science (Economics) Semester –VI
Session 2025-26
Course Code: BECL-6175
Economics (Quantitative Methods for Economists)

Time: 3 Hours

L-T-P (Credits):4-0-0

Max. Marks: 100

Theory: 80

CA: 20

Note: Instructions for the Paper Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e., a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Sets, Relations, and Functions, Introduction to Matrices - definition, properties & inverse. Derivative of simple functions only (excluding log & exponential functions).Maxima/Minima for single variable functions.

UNIT-II

Measures of Central Tendency — Mean, Mode, Median, and Geometric Mean; Measures of Dispersion.

UNIT-III

Concepts and Measures of Skewness and Kurtosis: Boyle's & Karl Pearson's Measures. Simple Correlation & Regression (ungrouped & grouped data).

UNIT-IV

Interpolation: Concepts and Methods — Binomial expansion, Newton and Lagrange's Method (with emphasis on missing values only). Price Index Numbers—Weighted and Unweighted Index Numbers, various formulae and consistency tests.

Case Study – Real-Life Examples Based on Central Tendency and Dispersion

Suggested Readings

1. Gupta, S.P. (2014), *Statistical Methods*, Sultan Chand & Sons, New Delhi.
2. Gupta, S.C. (2018), *Fundamentals of Statistics*, Himalaya Publishing House, New Delhi
3. Elhance, D.N. and Elhance, V. (2018), *Fundamentals of Statistics*, Kitab Mahal, Allahabad
4. Croxton, F.E., Cowden, D.J., and Klein. S. (1973), *Applied General Statistics*, 3rd. Ed., Prentice Hall of India, New Delhi.
5. Nagar, A.L. and Das, R.K. (1976), *Basic Statistics*, Oxford University Press, Bombay.
6. Aggarwal, C.S and Joshi, S.C.(2017) ,*Mathematics for Students of Economics*, New Academic Publishing Co., Jalandhar

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Bachelor of Science (Economics) Semester–VI
Session 2025-26
Course Code: BECL-6453
Quantitative Techniques (Quantitative Techniques–VI)

Course outcomes:

After passing this course, students will be able to:

CO1: understand the nature and methodology of econometrics.

CO2: understand the OLS procedure of estimation of the model and tests of significance.

CO3: understand the nature and solutions of problems associated with the estimation of regression

CO4: understand the basics of dummy variables and estimation of models with lags.

Bachelor of Science (Economics) (Semester–VI)
Session 2025-26
Course Code: BECL-6453
Quantitative Techniques (Quantitative Techniques–VI)

Time: 3 Hours

L-T-P (Credits):4-0-0

Max. Marks: 100

Theory: 80

CA: 20

Note: Instructions for the Paper Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e., a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit – I

Definition, Scope and Nature of Econometrics. Simple Linear Regression Model (OLS method) with applications

Unit – II

General Linear Regression Model: assumptions, properties (BLUE). Gauss-Markov Theorem (Two Variable and K-variable). Concepts of R^2 and Adjusted R^2 , Test of Significance (Stress on Numericals)

Unit – III

Econometric Problems of Heteroscedasticity and Multicollinearity in the Regression Analysis: Sources, Consequences, Tests and Remedial Measures. Specification Bias.

Unit – IV

Problem of Auto-Correlation in the Regression Analysis: Sources, Consequences, Tests and Remedial Measures. Distributed Lag Models and Auto-Regressive Models (Introductory). Dummy Variable Technique and its uses.

Practical: Defining Variables and Entering Data, Estimation of Regression with statistical software

Suggested Readings:

1. Madnani GMK, (2015), *Introduction of Econometrics*, Oxford and IBH Publishing, N. Delhi.
2. Koutsoyiannis, A, (2001), *Theory of Econometrics*, The Macmillan Press Ltd., London.

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FACULTY OF ECONOMICS & BUSINESS

SYLLABUS

For

Bachelor of Arts

Economics (Semester: V-VI)

(Under Continuous Evaluation System)

(12+3 System of Education)

Session: 2024–25



**The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)**

Kanya Maha Vidyalaya, Jalandhar (Autonomous)
SCHEME AND CURRICULUM OF EXAMINATION OF THREE-YEAR DEGREE PROGRAM
Credit-Based Continuous Evaluation Grading System (CBCEGS)

Bachelor of Arts
Session 2025-26

Economics

		Semester V								
Course Code	Course Name	Course Type	Hours Per Week L-T-P	Credits L-T-P	Total Credits	Marks				Examination time (in Hours)
						Total	Ext.		CA	
							L	P		
BARL-3175	Economics (Economics of Development)	E	4-0-0	4-0-0	4	100	80	--	20	3

		Semester VI								
Course Code	Course Name	Course Type	Hours Per Week L-T-P	Credits L-T-P	Total Credits	Marks				Examination time(in Hours)
						Total	Ext.		CA	
							L	P		
BARL-4175	Economics (Quantitative Methods for Economists)	E	4-0-0	4-0-0	4	100	80	--	0	3

E-Elective

Bachelor of Arts (Semester-V)
Session: 2025-26
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Economics (Economics of Development)

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Bachelor of Arts (Semester–V)
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Economics (Economics of Development)

Time: 3 Hours

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Theory: 80

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Lewis Model of Unlimited Supply of Labour, Problems of Unemployment and Disguised Unemployment.

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