

FACULTY OF ECONOMICS AND BUSINESS

SYLLABUS

Bachelor of Science (Economics) (Semester–VI)

Session 2022-2023

(Under Continuous Evaluation System)



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

Program Specific Outcome – Bachelor of Science (Economics)

B.Sc. (Economics) is a three year graduation degree program. The program aims at creation and dissemination of knowledge regarding core economic principles and issues; focusing on the link between theory and real world.

Upon successful completion of this course, students will be able to:

- PSO1:** understand the basic concepts and principles of economics.
- PSO2:** have in depth knowledge of concepts and basic theories of consumer behaviour, cost and market structure, and production behaviour.
- PSO3:** have in depth knowledge of concepts and basic macroeconomics theories such as employment, consumption, investment and international trade, money, banking, development and public finance.
- PSO4:** understand basic techniques of presentation and analysis of data; and some advanced applications and theory of theoretical and sampling distribution and econometric estimation methodologies.
- PSO5:** understand Indian experience with planning and various problems faced by Indian economy and latest developments in Indian economy.

Bachelor of Science (Economics) (Semester-I)

Session 2022-2023

Course Code: BECL-1421

PUNJABI (COMPULSORY)

COURSE OUTCOMES

CO1 ਦੇ ਰੰਗ(ਕਵਿਤਾ ਭਾਗ) ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਕਵਿਤਾ ਪ੍ਰਤੀ ਦਿਲਚਸਪੀ, ਸੂਝ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਤਾਂ ਕਿ ਉਹ ਆਧੁਨਿਕ ਦੌਰ ਵਿਚ ਚੱਲ ਰਹੀਆਂ ਕਾਵਿ ਧਾਰਾਵਾਂ ਅਤੇ ਕਵੀਆਂ ਬਾਰੇ ਗਿਆਨ ਹਾਸਿਲ ਕਰ ਸਕਣ।

CO2:ਇਸ ਦਾ ਹੋਰ ਮਨੋਰਥ ਕਵਿਤਾ ਦੀ ਵਿਆਖਿਆ, ਵਿਸ਼ਲੇਸ਼ਣ ਤੇ ਮੁਲੰਕਣ ਦੀ ਪ੍ਰਕਿਰਿਆ ਤੋਂ ਜਾਣੂ ਕਰਾਉਣਾ ਵੀ ਹੈ ਤਾਂ ਕਿ ਉਹ ਸਮਕਾਲੀ ਸਮਾਜ ਦੀਆਂ ਸਮੱਸਿਆਵਾਂ ਨੂੰ ਸਮਝ ਸਕਣ ਅਤੇ ਆਲੋਚਨਾਤਮਕ ਦ੍ਰਿਸ਼ਟੀ ਬਣਾ ਸਕਣ।

CO3:ਸੰਸਾਰ ਦੀਆਂ ਪ੍ਰਸਿਧ ਹਸਤੀਆਂ ਜੀਵਨੀ ਦੀ ਵਿਧਾ ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਿਲ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਜੀਵਨੀ ਨੂੰ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ ਜੀਵਨੀ ਜਗਤ ਨਾਲ ਜੋੜਣਾ ਹੈ।

CO4:ਪੈਰਾ ਰਚਨਾ ਅਤੇ ਪੈਰਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉਤਰ ਦੇਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਬੁੱਧੀ ਨੂੰ ਤੀਖਣ ਕਰਦਿਆਂ ਉਨਾਂ ਦੀ ਲਿਖਣ ਪ੍ਰਤਿਭਾ ਨੂੰ ਉਜਾਗਰ ਕਰਨਾ ਹੈ।

CO5:ਧੁਨੀ ਵਿਉਂਤ ਪੜ੍ਹਣ ਨਾਲ ਵਿਦਿਆਰਥੀ ਧੁਨੀਆਂ ਦੀ ਉਚਾਰਨ ਪ੍ਰਣਾਲੀ ਤੋਂ ਵਾਕਫ਼ ਹੋਣਗੇ।

Bachelor of Science (Economics) (Semester-I)
Session 2022-2023
Course Code: BECL-1031
PUNJABI (Basic)

Course outcomes

CO1:ਮੁੱਢਲੀ ਪੰਜਾਬੀ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨੂੰ ਸਿਖਾਉਣ ਦੀ ਪ੍ਰਕਿਰਿਆ ਵਿਚ ਪਾ ਕੇ ਇਕ ਹੋਰ ਭਾਸ਼ਾ ਸਿੱਖਣ ਦਾ ਮੌਕਾ ਪ੍ਰਦਾਨ ਕਰਨਾ ਹੈ।

CO2:ਇਸ ਵਿਚ ਵਿਦਿਆਰਥੀ ਨੂੰ ਬਾਰੀਕਬੀਨੀ ਨਾਲ ਭਾਸ਼ਾ ਦਾ ਅਧਿਐਨ ਕਰਵਾਇਆ ਜਾਵੇਗਾ।

CO3:ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਸ਼ਬਦ ਰਚਨਾ ਤੋਂ ਜਾਣੂ ਕਰਵਾਇਆ ਜਾਵੇਗਾ।

CO4:ਮੁੱਢਲੀ ਪੰਜਾਬੀ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਨਿੱਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ ਬਾਰੇ ਦੱਸਣਾ ਹੈ।

CO5:ਮੁੱਢਲੀ ਪੰਜਾਬੀ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਦਾ ਸ਼ਬਦ ਘੇਰਾ ਵਿਸ਼ਾਲ ਕਰਨਾ ਹੈ।

CO6:ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਵਿਚ ਹਫਤੇ ਦੇ ਸੱਤ ਦਿਨਾਂ ਦੇ ਨਾਂ, ਬਾਰਾਂ ਮਹੀਨਿਆਂ ਦੇ ਨਾਂ, ਰੁੱਤਾਂ ਦੇ ਨਾਂ, ਇਕ ਤੋਂ ਸੌ ਤੱਕ ਗਿਣਤੀ ਸ਼ਬਦਾਂ ਵਿਚ ਸਿਖਾਉਣਾ ਹੈ।

Bachelor of Science (Economics) (Semester–I)
Session 2022-2023
Course Code: BECL-1431
Punjab History and Culture (From Earliest Times to C 320)
(Special paper in lieu of Punjabi Compulsory)
(For those students who are not domicile of Punjab)

COURSE OUTCOMES

After completing Semester I and course on Punjab History and Culture students of History will be able to identify and have a complete grasp on the sources & writings of Ancient Indian History of Punjab.

CO1: Identify and understand the sources and physical features of Punjab

CO 2:- To study the earliest civilisation (Indus Valley Civilization) and original home of Aryans

CO 3:- To examine the Social, Religious and Economic life during Early and Later Vedic Age

CO 4: To comprehend the Buddhist, Jain and Hindu faith and their relevance in the modern times

Bachelor of Science (Economics) (Semester–I)
Session 2022-2023
Course Code: BECL-1212
ENGLISH (COMPULSORY)

COURSE OUTCOMES

After passing this course, the students will be able to:

CO1: understand fundamental grammatical rules governing tenses, the use of modal verbs and make correct usage in their language through the study of “English Grammar in Use” by Raymond Murphy

CO2: write paragraphs on any given topic and translate any passage from Hindi/Punjabi to English

CO3: comprehend the meaning of texts and answer questions related to situations, episodes, themes and characters depicted in them through the study of the stories in text “Tales of Life”.

CO4: appreciate the writings of various Indian and foreign story and prose writers and relate them to their socio-cultural milieu through the study of the essays in text “Prose for Young Learners”

Bachelor of Science (Economics) (Semester–I)

Session 2022-2023

Course Code: BECL-1333(I)

Course Title: Mathematics (Algebra)

Course Outcomes

After passing this course, the students will be able to:

CO 1: Understand the concept of matrix congruence of skew symmetric matrices and its reduction in real field. Solve system of linear equations.

CO 2: Obtain Eigen values, Eigen vectors, minimal and characteristic equation of a matrix and to apply it in advanced dynamics and electric current.

CO 3: Classify real quadratic form in variables, definite, semi- definite and indefinite real quadratic form.

CO 4: To find the relations between the roots and coefficients of general polynomial equation in one variable, distinguish between solution of cubic equations and Bi-quadratic equations.

Bachelor of Science (Economics) (Semester–I)
Session 2022-2023
Course Code: BECL-1333(II)
Course Title: Mathematics (Calculus and Trigonometry)

Course Outcomes

After passing this course, the students will be able to:

CO 1: Understand real number system, lub & glb of set of real numbers, limit of a function, basic properties of limit & to apply it in real world problem. Analyse continuous and discontinuous function, Apply concept of continuity in uniform continuity.

CO 2: Manage to solve problems related to successive differentiation, Leibnitz theorem, Taylor's & Maclaurin's theorem with various forms of remainders and to use these expansion to compute values of Sine, Cosine, tangent or log function.

CO 3: Understand the concept of De Moivre's theorem & its applications. Identify circular, hyperbolic function and their inverses.

CO 4: Demonstrate exponential and logarithmic function of complex numbers, and to solve Gregory's series and summation of series.

Bachelor of Science (Economics) (Semester–I)
Session 2022-2023
Course Code: BECL-1453
Course title: Quantitative Techniques–I

Course Outcomes

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

CO 1: Solve linear equations of two variables and its applications in economics under the quadratic equations, arithmetic progression, geometric progression and their applications in economics.

CO 2: Develop understanding of elements of analytical geometry, straight lines, basic concepts of trigonometry and permutations and combinations.

CO 3: Differentiate between a constant and a variable, graph of linear and quadratic functions and its applications in economics.

CO 4: Recognize derivative of implicit functions, parametric functions, exponential functions, logarithmic functions and how to apply these derivatives in economics theory.

Bachelor of Science (Economics) (Semester–I)
Session 2022-2023
Course Code: BECL-1134
COMPUTER SCIENCE
(COMPUTER FUNDAMENTALS AND PC SOFTWARE)

Course Outcomes:

After passing this course the student will be able to:

CO1: comprehend about computer hardware, operating system concepts and various system software.

CO2: Identify various input, output and memory devices.

CO3: Apply office automation software to create professional and academic documents.

CO4: Apply skills to make effective presentations using associated application software.

Bachelor of Science (Economics) (Semester–I)
Session 2022-2023
Course Code: BECL-1124
COMPUTER APPLICATIONS (VOCATIONAL)
(COMPUTER FUNDAMENTALS AND PC SOFTWARE)
(THEORY)

Course Outcomes:

After passing this course the student will be able to:

CO1: comprehend about computer hardware, operating system concepts and various system software.

CO2: Identify various input, output and memory devices.

CO3: Apply office automation software to create professional and academic documents.

CO4: Apply skills to make effective presentations using associated application software.

Bachelor of Science (Economics) (Semester-I)

Session 2022-2023

Course Code: BECL-1175

Economics (Microeconomics)

Course outcomes:

After passing this course, students will be able to

CO1: describe and apply the methods of analyzing consumer behavior through demand and supply ,elasticity and utility.

CO2: learn about the various cost and revenue curves and the production function.

CO3: learn about various market structures.

CO4: have an in-depth understanding of various theories of rent, interest, profit and distribution.

Bachelor of Science (Economics) (Semester-II)
Session 2022-2023
Course Code: BECL-2421
PUNJABI (COMPULSORY)

COURSE OUTCOMES

CO1:ਦੋ ਰੰਗ (ਕਹਾਣੀ ਭਾਗ) ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਕਵਿਤਾ ਪ੍ਰਤੀ ਦਿਲਚਸਪੀ, ਸੂਝ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਤਾਂ ਕਿ ਉਹ ਆਧੁਨਿਕ ਦੌਰ ਵਿਚ ਚੱਲ ਰਹੀਆਂ ਕਾਵਿ ਧਾਰਾਵਾਂ ਅਤੇ ਕਵੀਆਂ ਬਾਰੇ ਗਿਆਨ ਹਾਸਿਲ ਕਰ ਸਕਣ।

CO2:ਇਸ ਦਾ ਹੋਰ ਮਨੋਰਥ ਕਵਿਤਾ ਦੀ ਵਿਆਖਿਆ, ਵਿਸ਼ਲੇਸ਼ਣ ਤੇ ਮੁਲੰਕਣ ਦੀ ਪ੍ਰਕਿਰਿਆ ਤੋਂ ਜਾਣੂ ਕਰਾਉਣਾ ਵੀ ਹੈ ਤਾਂ ਕਿ ਉਹ ਸਮਕਾਲੀ ਸਮਾਜ ਦੀਆਂ ਸਮੱਸਿਆਵਾਂ ਨੂੰ ਸਮਝ ਸਕਣ ਅਤੇ ਆਲੋਚਨਾਤਮਕ ਦ੍ਰਿਸ਼ਟੀ ਬਣਾ ਸਕਣ।

CO3:ਸੰਸਾਰ ਦੀਆਂ ਪ੍ਰਸਿਧ ਹਸਤੀਆਂ ਜੀਵਨੀ ਦੀ ਵਿਧਾ ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਿਲ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਜੀਵਨੀ ਨੂੰ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ ਜੀਵਨੀ ਜਗਤ ਨਾਲ ਜੋੜਣਾ ਹੈ।

CO4:ਸ਼ਬਦ ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ ਪੜ੍ਹਣ ਨਾਲ ਵਿਦਿਆਰਥੀ ਇਸਦੇ ਮੁੱਢਲੇ ਸੰਕਲਪਾਂ ਨੂੰ ਆਧਾਰ ਬਣਾ ਕੇ ਇਹਨਾਂ ਸੰਕਲਪਾਂ ਤੋਂ ਜਾਣੂ ਹੋਣਗੇ।

CO5:ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੀ ਅਮੀਰੀ ਦਾ ਅਤੇ ਬਾਰੀਕੀਆਂ ਨੂੰ ਸਮਝਣ ਲਈ ਵੱਖਰੇ-ਵੱਖਰੇ ਸਿਧਾਂਤਾਂ ਦਾ ਵਿਕਾਸ ਕਰਨਾ ਹੈ।

CO6:ਮੁਹਾਵਰਿਆਂ ਦੀ ਵਰਤੋਂ ਨਾਲ ਗੱਲਬਾਤ ਵਿਚ ਪਰਪੱਕਤਾ ਆਉਂਦੀ ਹੈ। ਇਹ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਗੱਲਬਾਤ ਵਿਚ ਨਿਖਾਰ ਲਿਆਉਣ ਦਾ ਕੰਮ ਕਰਨਗੇ।

Bachelor of Science (Economics) (Semester–II)
Session 2022-2023
Course Code: BECL-2431
Punjab History and Culture (C. 320 to 1000 A.D.)
(Special paper in lieu of Punjabi Compulsory)
(For those students who are not domicile of Punjab)

COURSE OUTCOMES

After completing Semester II and course on Ancient History of Punjab students will be able to understand:

CO 1: The reasons and impact of Alexander's invasions

CO 1 (a): To understand the various factors leading to rise and fall of empires and emergence of new dynasties and their administration specifically of Maurya rule in general and Ashok in particular

CO 2: art and architecture of Gupta period and the Indo-Greek style of architecture under Gandhara School

CO 3: To have an insight into the socio-cultural history under Harshvardhan and punjab under the stated period

CO 4: To enable students to have thorough insight into the various forms/styles of Architecture and synthesis of Indo - Greek Art and Architecture in Punjab

Bachelor of Science (Economics) (Semester–II)
Session 2022-2023
Course Code: BECL-2212
ENGLISH (COMPULSORY)

COURSE OUTCOMES

After passing this course, the students will be able to:

CO1: change the narration and voice of sentences after understanding fundamental grammatical rules governing them through the study of “English Grammar in Use” by Raymond Murphy

CO2: Write personal letters and increase their knowledge of vocabulary by studying the synonyms and antonyms in the prescribed text *The Students’ Companion* by Wilfred D. Best

CO3: comprehend the meaning of texts and answer questions related to situations, episodes, themes and characters depicted in them through the study of the stories in text “Tales of Life”.

CO4: appreciate the writings of various Indian and foreign story and prose writers and relate them to their socio-cultural milieu through the study of the essays in text “Prose for Young Learners”

Bachelor of Science (Economics) (Semester–II)
Session 2022-2023
Course Title: Mathematics (Calculus and Differential Equations)
Course Code: BECM -2333(I)

Course Outcomes

After passing this course, the students will be able to:

CO 1: Demonstrate Asymptotes, points of inflexion, multiple points, concavity and convexity of a curve and apply these concepts in curve tracing.

CO 2: Find arc length of a curve and able to establish reduction formulae for various functions.

CO 3: Understand concept of Exact Differential Equations and demonstrate the geometrical meaning of a differential equation & orthogonal trajectories

CO 4: Understand the concept of linear differential equation with constant and variable coefficients and to apply in a wide variety of disciplines like Bio, Eco, Physics and Engineering. Manage to solve the problem related to series solution of differential equations like Bessel and Legendre equation by Power series method.

Bachelor of Science (Economics) (Semester–II)

Session 2022-2023

Course Title: Mathematics (Calculus)

Course Code: BECM -2333(II)

Course Outcomes

After passing this course, the students will be able to:

CO 1: Differentiate between limit and continuity of function of two variables and apply this concept in partial derivatives & differentiability of real valued function of two variables. Application of inverse & implicit function theorems.

CO 2: Manage to solve problems related to Maxima, Minima & Saddle points of functions of two variables. Classify Envelopes & Evolutes.

CO 3: Understand the concept of Double and Triple integrals.

CO 4: Apply double and triple integral to evaluation of areas, volumes, surfaces of solid of revolution and to find out area and volume of plane and solid figure.

Bachelor of Science (Economics) (Semester –II)

Session: 2022-2023

Course Code: BECL-2453

Quantitative Techniques–II

Course outcomes:

After passing this course, students will be able to:

CO1: organize, manage and present data.

CO2: analyze the data by using central tendency , dispersion and understand the slope of the curve .

CO3: learn the relationship between variables and prediction using correlation and regression.

CO4: compare magnitudes of related variables to each other and over a period of time.

CO5: understand the concept of time series in analyzing economics problems.

Bachelor of Science (Economics) (Semester–II)
Session 2022-2023
Course Code: BECM-2134
COMPUTER SCIENCE
(PROGRAMMING IN C)

Course Outcomes:

After passing this course the student will be able to:

CO1: Design symbolic representation of a problem and its solution through tools like algorithms, flowcharts, etc.

CO2: Comprehend different programming constructs involved in C programming.

CO3: Apply programming concepts such as arrays, control structure and strings to provide solution in different problem domains.

CO4: Work with functions, storage classes, structures and union.

Bachelor of Science (Economics) (Semester–II)
Session 2022-2023
Course Code: BECM-2124
COMPUTER APPLICATIONS (VOCATIONAL)
(PROGRAMMING IN C)

Course Outcomes:

After passing this course the student will be able to:

CO1: Comprehend the working of various programming constructs involved in C Programming.

CO2: Apply various operators and control sequence of program using various control statements.

CO3: Apply programming concepts such as arrays, functions and strings to provide solution in different problem domains.

CO4: Work with pointers, structures and union.

Bachelor of Science (Economics) (Semester –II)

Session 2022-2023

Course Code: BECL-2175

Economics (Macroeconomics)

Course outcomes:

After passing this course students will be able to:

After passing this course students will be able to:

CO1: learn the determination of equilibrium in the economy using classical and Keynesian models.

CO2: understand the Consumption behaviour of an economy and factor affecting consumption decisions.

CO3: understand the investment behaviour of an economy and different theories of trade cycle.

CO4: understand the nature and functions of money and the role of financial markets and institutions in the economy.

CO5: understand the basic causes and solution to problem of inflation.

Bachelor of Science (Economics) (Semester-III)
Session 2022-2023
Course Code: BECL-3421
PUNJABI (COMPULSORY)

COURSE OUTCOMES

- CO1: ਚੋਣਵੇ ਪੰਜਾਬੀ ਨਿਬੰਧ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ □□□□ ਪ੍ਰਤੀ ਦਿਲਚਸਪੀ, ਸੂਝ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ।
- CO2: 'ਸਮਾਂ ਮੰਗ ਕਰਦਾ ਹੈ' ਇਕਾਂਗੀ ਸੰਗ੍ਰਹਿ ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਲ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਇਕਾਂਗੀ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ ਇਸ ਸਾਹਿਤ ਰੂਪ ਨਾਲ ਜੋੜਣਾ ਹੈ।
- CO3: ਸੰਖੇਪ ਰਚਨਾ ਕਰਨ ਨਾਲ ਵਿਦਿਆਰਥੀ ਆਪਣੀ ਗੱਲ ਨੂੰ ਸੰਖੇਪ ਵਿਚ ਕਹਿਣ ਦੀ ਜਾਚ ਸਿੱਖਣਗੇ ਅਤੇ ਇਹ ਦਿਮਾਗੀ ਕਸਰਤ ਵਿਚ ਸਹਾਈ ਹੋਵੇਗੀ।
- CO4: ਲੇਖ ਰਚਨਾ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਬੁੱਧੀ ਨੂੰ ਤੀਖਣ ਕਰਦਿਆਂ ਉਨ੍ਹਾਂ ਦੀ ਲਿਖਣ ਪ੍ਰਤਿਭਾ ਨੂੰ ਉਜਾਗਰ ਕਰਨਾ ਹੈ।
- CO5: ਮੂਲ ਵਿਆਕਰਣਕ ਇਕਾਈਆਂ : ਪਰਿਭਾਸ਼ਾ ਅਤੇ ਵੰਨਗੀਆਂ (ਭਾਵੰਸ਼, ਸ਼ਬਦ, ਵਾਕੰਸ਼, ਉਪਵਾਕ ਅਤੇ ਵਾਕ) ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਭਾਸ਼ਾ ਦੀ ਅਮੀਰੀ ਅਤੇ ਬਾਰੀਕੀਆਂ ਨੂੰ ਸਮਝਣ ਲਈ ਵੱਖਰੇ-ਵੱਖਰੇ ਸਿਧਾਂਤਾਂ ਦਾ ਵਿਕਾਸ ਕਰਨਾ ਹੈ।

Bachelor of Science (Economics) (Semester-III)

Session 2022-2023

Course Code: BECL-3031

PUNJABI (Basic)

Course outcomes

CO1:ਸੰਖੇਪ ਰਚਨਾ ਕਰਨ ਨਾਲ ਵਿਦਿਆਰਥੀ ਆਪਣੀ ਗੱਲ ਨੂੰ ਸੰਖੇਪ ਵਿਚ ਕਹਿਣ ਦੀ ਜਾਚ ਸਿੱਖਣਗੇ ਅਤੇ ਇਹ ਦਿਮਾਗੀ ਕਸਰਤ ਵਿਚ ਸਹਾਈ ਹੋਵੇਗੀ।

CO2:ਪੈਰਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉਤਰ ਦੇਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਬੁੱਧੀ ਨੂੰ ਤੀਖਣ ਕਰਦਿਆਂ ਉਨਾਂ ਦੀ ਲਿਖਣ ਪ੍ਰਤਿਭਾ ਨੂੰ ਉਜਾਗਰ ਕਰਨਾ ਹੈ।

CO3:ਕਵਿਤਾ ਭਾਗ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਕਵਿਤਾ ਪ੍ਰਤੀ ਦਿਲਚਸਪੀ, ਸੂਝ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਤਾਂ ਕਿ ਉਹ ਆਧੁਨਿਕ ਦੌਰ ਵਿਚ ਚੱਲ ਰਹੀਆਂ ਕਾਵਿ ਧਾਰਾਵਾਂ ਅਤੇ ਕਵੀਆਂ ਬਾਰੇ ਗਿਆਨ ਹਾਸਿਲ ਕਰ ਸਕਣ।

CO4:ਕਹਾਣੀ ਭਾਗ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਕਵਿਤਾ ਪ੍ਰਤੀ ਦਿਲਚਸਪੀ, ਸੂਝ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਤਾਂ ਕਿ ਉਹ ਆਧੁਨਿਕ ਦੌਰ ਵਿਚ ਚੱਲ ਰਹੀਆਂ ਕਾਵਿਧਾਰਾਵਾਂ ਅਤੇ ਕਵੀਆਂ ਬਾਰੇ ਗਿਆਨ ਹਾਸਿਲ ਕਰ ਸਕਣ।

CO5:ਨਿਬੰਧ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ ਮੁੱਲਵਾਨ ਇਤਿਹਾਸ ਤੋਂ ਜਾਣੂ ਕਰਵਾਉਣਾ ਹੈ।

Bachelor of Science (Economics) (Semester–III)
Session 2022-2023
Course Code: BECL -3431
PUNJAB HISTORY AND CULTURE (From 1000-1605 A. D.)
(Special paper in lieu of Punjabi Compulsory)
(For those students who are not domicile of Punjab)

After completing the paper the students will have a thorough insight into the origin of Sikh faith and its major institutions in Punjab. They will be able to

CO 1: Understand the society and culture of Medieval Punjab.

CO 2: Understand the growth of various sects during the Bhakti Movement in Punjab.

CO 3: Comprehend and analyse the teachings of Guru Nanak Dev and its relevance today

CO 4: Make a comparison between the philosophy and teachings of first five Sikh Gurus and their relevance in the present scenario.

CO4 (a): Understand and analyze the institutions started by Sikh Gurus and their implications till date

Bachelor of Science (Economics) (Semester–III)
Session 2022-2023
Course Code: BECL-3212
ENGLISH (COMPULSORY)

COURSE OUTCOMES

After passing this course, the students will be able to:

CO 1: comprehend the basics of grammatical rules governing relative clauses, adjectives, adverbs, conjunctions and prepositions through the study of “English Grammar in Use” by Raymond Murphy

CO 2: develop skills to write an essay on a given topic and enhance their vocabulary through the study of “The Students’ Companion” by Wilfred D. Best

CO 3: enhance their reading and analysing power of texts through guided reading through the study of “Making Connections” by Kenneth J. Pakenham

CO 4: develop an understanding of the poems taught, relate to the socio-cultural background of England and be able to answer questions regarding tone, style and central idea through the study of the poems in the prescribes text “Moments in Time”

Bachelor of Science (Economics) (Semester–III)

Session 2022-2023

Course Code: BECL-3333(I)

Course Title: Mathematics (Analysis)

Course Outcomes

After passing this course, the students will be able to:

CO 1: Demonstrate an understanding of limits and how they are used in sequences.

CO 2: Understanding how limits are used in series and apply various test on series.

CO 3: To understand the concepts of Riemann sum, partitions, upper and lower sums, Riemann Integrability of continuous functions and of monotone functions. Distinguish between the absolute convergence and conditional convergence.

CO 4: To know and describe the converging behaviour of improper integrals and Beta , Gamma functions. To find the relation between Beta and Gamma functions.

Bachelor of Science (Economics) (Semester–III)
Session 2022-2023
Course Code: BECL-3333(II)
Course Title: Mathematics (Analytical Geometry)

Course Outcomes

After passing this course, the students will be able to:

CO 1: Understand the concept of the geometry of lines, shifting of origin and rotation of axis in the Euclidian plane.

CO 2: Develop geometry with a degree of confidence and will gain fluency in the basics of parabola in Euclidian geometry.

CO 3: Demonstrate the concept of ellipse and hyperbola in general quadratic equation.

CO 4: Understand the concept of geometry and real time characteristics of plain and spheres.

Bachelor of Science (Economics) (Semester –III)
Session 2022-2023
Course Code: BECL-3453
Quantitative Techniques–III

Course outcomes:

After passing this course students will be able to:

- CO1:** understand and apply the concept of differentiation in economic applications such as profit maximization, cost minimization or utility optimization.
- CO2:** understand and apply the concept of indefinite and definite integrals to the economics concepts like consumer and producer surplus.
- CO3:** explain and use matrix operations to solve system of equations.
- CO4:** understand the basics of linear programming for the efficient computation of optimal solutions of a problem in decision making.

Bachelor of Science (Economics) (Semester–III)
Session 2022-2023
Course Code: BECL-3134
COMPUTER SCIENCE
(COMPUTER ORIENTED NUMERICAL AND STATISTICAL METHODS)

Course Outcomes:

After passing this course the student will be able to:

CO1: Solve non-linear and linear equations using different methods.

CO2: comprehend interpolation and numerical integration.

CO3: Calculate different means and deviations using statistical techniques.

CO4: Comprehend correlation, curve fitting and regression for finding solutions to various statistical problems.

Bachelor of Science (Economics) (Semester–III)
Session 2022-2023
Course Code: BECL-3124
COMPUTER APPLICATIONS (VOCATIONAL)
(OPERATING SYSTEM)

Course Outcomes:

After passing this course the student will be able to:

CO1: Describe, contrast and compare different types of Operating System.

CO2: Analyze CPU scheduling and memory management policies.

CO3: Comprehend about deadlock along with its prevention and detection.

CO4: Apply commands to perform various tasks in Linux operating system.

Bachelor of Science (Economics) (Semester –III)
Session 2022-2023
Course Code: BECL-3175
Economics (Indian Economy)

Course outcomes:

After passing this course students will be able to:

CO1: understand the nature, importance and problems of Indian agriculture and new agriculture strategy.

CO2: understand the role and problems of industrial development in India and role of public and private sector, latest industrial policy.

CO3: understand composition, direction and volume of international trade along with balance of payment problems and role of foreign capital and MNC's.

CO4: understand major economic problems of Indian economy, Indian economic planning – its objectives, strategy and evaluation.

Bachelor of Science (Economics) (Semester-IV)
Session 2022-2023
Course Code: BECL-4421
PUNJABI (COMPULSORY)

COURSE OUTCOMES

CO1: ‘ਪਗਡੰਡੀਆਂ’ (□□□□□□□□) ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ □□□□□□ ਇਸ ਸਾਹਿਤ ਰੂਪ ਪ੍ਰਤੀ ਦਿਲਚਸਪੀ, ਸੁਝ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ।

CO2: ‘□□□□□□’ (□□□□□) ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਿਲ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ □□□□□ ਨੂੰ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ □□□□ ਜਗਤ ਨਾਲ ਜੋੜਣਾ ਹੈ।

CO3: ਦਫ਼ਤਰੀ ਚਿੱਠੀ ਪੱਤਰ ਲਿਖਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂਨੂੰ ਇਸ ਕਲਾ ਵਿਚ ਨਿਪੁੰਨ ਕਰਨਾ ਹੈ।

CO4: ਸ਼ਬਦ ਜੋੜਾਂ ਦੇ ਨਿਯਮ ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਿਲ ਕਰਨ ਦਾ ਮਕਸਦ ਵਿਦਿਆਰਥੀਆਂ ਦੁਆਰਾ ਲਿਖਤ ਵਿਚ ਕੀਤੀਆਂ ਜਾਣ ਵਾਲੀਆਂ ਗਲਤੀਆਂ ਨੂੰ ਸੁਧਾਰਨਾ ਹੈ।

CO5: ਗੁਰਮੁਖੀ ਲਿਪੀ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੀ ਅਮੀਰੀ ਦਾ ਅਤੇ ਬਾਰੀਕੀਆਂ ਨੂੰ ਸਮਝਣ ਲਈ ਵੱਖਰੇ-ਵੱਖਰੇ ਸਿਧਾਂਤਾਂ ਦਾ ਵਿਕਾਸ ਕਰਨਾ ਹੈ।

Bachelor of Science (Economics) (Semester–IV)
Session 2022-2023
Course Code: BECL-4431
PUNJAB HISTORY AND CULTURE (From 1605 to 1849 A.D.)
(Special paper in lieu of Punjabi Compulsory)
(For those students who are not domicile of Punjab)

CourseOutcomes

After completing the paper the students will have a thorough insight into the origin of Sikh faith and its major institutions in Punjab

CO 1:- understand the adoption of new policy by Guru Hargobind and martyrdom of Guru Tegh Bahadur

CO 2: To understand the factors leading to the establishment of Khalsa Panth and its impact .

CO 3: Have deep insight into the conflict with Mughals and the rise of Banda Singh Bahadur and aftermath.

CO 4: Understand the administration under Maharaja Ranjit Singh , also the fairs, festivals and folk music of Punjab.

Bachelor of Science (Economics) (Semester–IV)
Session 2022-2023
Course Code: BECL-4333(I)
Course Title: Mathematics (Statics and Vector Calculus)

Course Outcomes

After passing this course, the students will be able:

CO 1: To apply parallelogram law of forces, triangle law of forces, Lami's theorem to real life problems and also understand that how one can resolve number of coplanar forces, parallel forces and concurrent forces acting at a body.

CO 2: To find the applications of CG of a rod, triangular lamina, solid hemisphere, hollow hemisphere, solid cone and hollow cone.

CO 3: To find the values of gradient, divergence and curl operator of given vectors

CO 4: To find the application of Gauss theorem, Green's theorem and Stokes's theorem in real life problems.

Bachelor of Science (Economics) (Semester–IV)
Session 2022-2023
Course Code: BECL-4333(II)
Course Title: Mathematics (Solid Geometry)

Course Outcomes

After passing this course, the students will be able to:

CO 1: Understand the concept of cylinder, enveloping cylinder and its limiting form.

CO 2: Demonstrate the concept of cone, classification of cone, intersection of line and cone, reciprocal cone.

CO 3: Describe the concept of conicoids or quadratic surface, its classification, trace different types of conicoids and hence find surface of revolution.

CO 4: Describe the concept of tangent and normal plane to the conicoid and identify the conicoids, representing it in the form of hyperboloid, ellipsoid, paraboloid.

Bachelor of Science (Economics) (Semester –IV)
Session: 2022-2023
Course Code: BECL-4453
Quantitative Techniques–IV

Course outcomes:

After passing this course students will be able to:

- CO1:** understand the concept of correlation and regression, and learn how to apply these statistical techniques in practice
- CO2:** understand the axiomatic formulation of modern probability theory and think of random variables as intrinsic need for analysis of random phenomena.
- CO3:** recognize the connection between theory and applications by appropriately fitting, assessing and interpreting the results/ outcomes
- CO4:** understand the basic principles underlying survey design and estimation.

Bachelor of Science (Economics) (Semester–IV)
Session 2022-2023
Course Code: BECL-4134
COMPUTER SCIENCE
(DATA STRUCTURES)

Course Outcomes:

After passing course the student will be able to:

- CO1: Analyze complexity of algorithms to determine their efficiency.
- CO2: Comprehend various hashing method, sorting and searching algorithms.
- CO3: Comprehend various operations of stack and queue along with different scenarios.
- CO4: Comprehend advanced data structures such as tree and graph.

Bachelor of Science (Economics) (Semester–IV)
Session 2022-2023
Course Code: BECL-4124
COMPUTER APPLICATIONS (VOCATIONAL)
(RELATIONAL DATA BASE MANAGEMENT SYSTEMS)

Course Outcomes:

After passing this course the student will be able to:

CO1: Illustrate the concept of data models, database normalization along with its various forms.

CO2: Apply SQL to design basic to intermediate level of databases.

CO3: Apply various built-in functions for formatting of data.

CO4: Comprehend the concept of PL/SQL and its relationship with SQL.

Bachelor of Science (Economics) (Semester –IV)
Session 2022-2023
Course Code: BECL-4175
Economics (International Economics and Public Finance)

Course outcomes:

After studying this course, students will be able to:

- CO1:** understand the basis of and gains from international trade and basic understanding of terms of trade and commercial policy.
- CO2:** To understand basic concept of BOP and methods to correct disequilibrium and determination of exchange rate.
- CO3:** To understand the basics of public finance and public expenditure.
- CO4:** To understand taxes and burden of public debt.

Bachelor of Science (Economics) (Semester-V)
Session 2022-2023
Course Code: BECL-5421
PUNJABI (COMPULSORY)

COURSE OUTCOMES

CO1:ਚੋਣਵੀਆਂ ਪੰਜਾਬੀ ਕਹਾਣੀਆਂ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਕਹਾਣੀਆਂ ਪ੍ਰਤੀ ਦਿਲਚਸਪੀ, ਸੁਝ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ।

CO2:ਨਾਵਲ ਏਹੁ ਹਮਾਰਾ ਜੀਵਣਾ (ਦਲੀਪ ਕੌਰ ਟਿਵਾਣਾ) ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਿਲ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਨਾਵਲ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ ਇਸ ਸਾਹਿਤ ਰੂਪ ਨਾਲ ਨਾਲ ਜੋੜਣਾ ਹੈ।

CO3:ਪੈਰੂਾ ਰਚਨਾ ਕਰਨ ਨਾਲ ਵਿਦਿਆਰਥੀ ਆਪਣੀ ਗੱਲ ਨੂੰ ਕਹਿਣ ਦੀ ਜਾਚ ਸਿੱਖਣਗੇ ਅਤੇ ਇਹ ਦਿਮਾਗੀ ਕਸਰਤ ਵਿਚ ਸਹਾਈ ਹੋਵੇਗੀ।

CO4:ਸਰਲ ਅੰਗਰੇਜ਼ੀ ਪੈਰੇ ਦਾ ਪੰਜਾਬੀ ਵਿਚ ਅਨੁਵਾਦ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਬੁੱਧੀ ਨੂੰ ਤੀਖਣ ਕਰਦਿਆਂ ਉਨਾਂ ਦੀ ਲਿਖਣ ਪ੍ਰਤਿਭਾ ਨੂੰ ਉਜਾਗਰ ਕਰਨਾ ਹੈ।

CO5:ਵਾਕਾਤਮਕ ਜੁਗਤਾਂ : ਮੇਲ ਤੇ ਅਧਿਕਾਰ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਭਾਸ਼ਾ ਦੀ ਅਮੀਰੀ ਅਤੇ ਬਾਰੀਕੀਆਂ ਨੂੰ ਸਮਝਣ ਲਈ ਵੱਖਰੇ-ਵੱਖਰੇ ਸਿਧਾਂਤਾਂ ਦਾ ਵਿਕਾਸ ਕਰਨਾ ਹੈ।

Bachelor of Science (Economics) (Semester-V)
Session 2022-2023
Course Code: BECL-4031
PUNJABI (Basic)

COURSE OUTCOMES

CO1: ਇਹ ਪਰਚਾ ਵੀ ਸਿਧਾਂਤਕ ਤੇ ਵਿਹਾਰਕ ਗਿਆਨ ਦਾ ਸੁਮੇਲ ਹੈ।

CO2: ਇਸ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੁਰਾਤਨ ਪੰਜਾਬੀ ਲੋਕ ਨਾਚ, ਲੋਕ ਕਲਾਵਾਂ, ਲੋਕ ਗੀਤਾਂ ਨੂੰ ਸਮਝਣ ਦੇ ਕਾਬਲ ਬਣਾਉਣ ਦਾ ਯਤਨ ਹੈ।

CO3: ਇਨ੍ਹਾਂ ਦੇ ਅਧਿਐਨ ਦੇ ਮਾਧਿਅਮ ਰਾਹੀਂ ਵਿਦਿਆਰਥੀ ਪੁਰਾਤਨ ਲੋਕਾਂ ਦੇ ਜੀਵਨ ਨੂੰ ਸਮਝ ਸਕਣਗੇ ਕਿਉਂਕਿ ਆਪਣੀਆਂ ਜੜ੍ਹਾਂ ਦੀ ਪਛਾਣ ਕਰ ਸਕਣ ਦੇ ਬਗੈਰ ਕੋਈ ਵੀ ਕੌਮ ਜਾਂ ਲੋਕ ਆਪਣਾ ਵਰਤਮਾਨ ਜੀਵਨ ਚੰਗੀ ਤਰ੍ਹਾਂ ਬਿਤਾ ਸਕਣ ਦੇ ਸਮਰੱਥ ਨਹੀਂ ਹੋ ਸਕਦੇ।

CO4: ਸਿਧਾਂਤ ਪੱਧਰ ਦੇ ਗਿਆਨ ਤੋਂ ਬਾਦ ਇਸ ਗਿਆਨ ਦੇ ਆਧਾਰ ਤੇ ਪੁਰਾਤਨ ਲੋਕ ਗੀਤਾਂ ਜਾਂ ਲੋਕ ਕਹਾਣੀਆਂ ਦਾ ਵਿਹਾਰਕ ਅਧਿਐਨ ਕਰ ਸਕਣ ਦੇ ਸਮਰੱਥ ਬਣਾ ਸਕਣਾ ਹੈ।

CO5: ਇਸ ਪਰਚੇ ਦਾ ਯਤਨ ਨਿਸਚੈ ਹੀ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਆਪਣੀਆਂ ਜੜ੍ਹਾਂ ਪ੍ਰਤੀ ਸੁਚੇਤ ਕਰਨ ਤੇ ਯਤਨ ਨਾਲ ਸੰਬੰਧਿਤ ਹੈ।

Bachelor of Science (Economics) (Semester–V)
Session 2022-2023
Course Code: BECL-5431
Punjab History and Culture (From 1849-1947A.D.)
(Special paper in lieu of Punjabi Compulsory)
(For those students who are not domicile of Punjab)

COURSE OUTCOMES:-

After completing the course students will be able to understand:

CO 1:- the causes that led to war between the British and Sikhs that led to the annexation of the Punjab and how the region was put under the control of Board of Administration

CO 2:- various agrarian, industrial and educational policies introduced by the British in Punjab

CO 3:- analyse and evaluate the socio-religious reforms movements of Punjab

CO 4:- factors that led to Gurudwara reform movement and various other freedom struggle movements in which the Punjab played a prominent role

Bachelor of Science (Economics) (Semester–V)
Session 2022-2023
Course Code: BECL-5212
ENGLISH (COMPULSORY)

COURSE OUTCOMES

After passing this course, the students will be able to:

CO 1: analyze and appreciate the dramatic technique, plot development and art of characterisation in the prescribed play, “All My Sons” by Arthur Miller

CO 2: widen their knowledge about various literary devices used in poetry such as tone, style, imagery, figures of speech, symbolism etc. thorough the study of prescribed poems from the text “Poems of Nature and Culture”

CO 3: develop the knowledge, skills and capabilities for effective business writing such as formal letter writing, job application and resume writing

Bachelor of Science (Economics) (Semester–V)

Session 2022-2023

Course Code: BECL-5333(I)

Course Title: Mathematics (Dynamics)

Course Outcomes

After passing this course, the students will be able to:

CO 1: Demonstrate the basic relations between distance, time, velocity and acceleration, manage to solve the problems of Newton's Laws of Motion and the motion of particles connected by a string.

CO 2: Illustrate motion along a smooth inclined plane. Solve different types of problems with Variable Acceleration. Discuss Simple Harmonic Motion .

CO 3: Understand the concept of projectile, oscillating system.

CO 4: Define Work, Power and Energy and explain their relationship. Use measurement tools to apply the concepts of Work and power to solve real life problems. Identify the different types of energy.

Bachelor of Science (Economics) (Semester–V)
Session 2022-2023
Course Code: BECL-5333(II)
Course Title: Mathematics (Number Theory)

Course Outcomes

Successful completion of this course will enable the students to:

CO 1: Prove results involving divisibility and greatest common divisors.

CO 2: Find solutions of specified linear Diophantine equation, basic properties of Congruences.

CO 3: Solve system of linear congruences. Apply Fermat's and Wilson's theorem to solve numerical problems.

CO 4: Apply Euler's theorem and apply properties of phi functions in real world problems. Understand application of important arithmetic functions.

Bachelor of Science (Economics) (Semester-V)
Session 2022-2023
Course Code: BECL-5453
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 2022-2023
Course Code: BECL--5134
COMPUTER SCIENCE
(DATA BASE MANAGEMENT SYSTEM)

Course Outcomes:

After passing course the student will be able to:

CO1: Understand data, database and database models.

CO2: Gain knowledge of normalization, security and recovery of database.

CO3: Create, manage and access database using SQL.

CO4: Comprehend the application of programming language constructs in database access.

Bachelor of Science (Economics) (Semester-V)
Session 2022-2023
Course Code: BECL-5124
COMPUTER APPLICATIONS (VOCATIONAL)
(INTERNET AND WEB DESIGNING)

Course Outcomes:

After passing course the student will be able to:

CO1: Understand Internet and search engine basics and their working.

CO2: Gain knowledge of email service on different mail servers.

CO3: Understand different Internet protocols at application layer.

CO4: Have knowledge of basic web designing using HTML.

Bachelor of Science (Economics) (Semester–V)

Session 2022-2023

Course Code: BECL-5175

Economics (Economics of Development)-V

Course outcomes

CO1: evaluate economic problems of developing and least developed countries and participate in the contemporary policy debate on development priorities

CO2: examine the models of growth critically and recognize the importance of their underlying assumptions

CO3: analyze the different strategies of economic development and their policy implications.

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–VI)
Session 2022-2023
Course Code: BECL-6421
PUNJABI (COMPULSORY)

COURSE OUTCOMES

CO1:ਕਾਵਿ ਗੌਰਵ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਕਵਿਤਾਵਾਂ ਪ੍ਰਤੀ ਦਿਲਚਸਪੀ, ਸੁਝ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ।

CO2:ਧਰਤੀਆਂ ਦੇ ਗੀਤ(ਸਫ਼ਰਨਾਮਾ)ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਿਲ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਸਫ਼ਰਨਾਮਾ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ ਇਸ ਸਾਹਿਤ ਰੂਪ ਨਾਲ ਨਾਲ ਜੋੜਣਾ ਹੈ।

CO3:ਲੇਖ ਰਚਨਾ ਅਤੇ ਸੰਖੇਪ ਰਚਨਾ ਕਰਨ ਨਾਲ ਵਿਦਿਆਰਥੀ ਆਪਣੀ ਗੱਲ ਨੂੰ ਕਹਿਣ ਦੀ ਜਾਚ ਸਿੱਖਣਗੇ ਅਤੇ ਇਹ ਦਿਮਾਗੀ ਕਸਰਤ ਵਿਚ ਸਹਾਈ ਹੋਵੇਗੀ।

CO5:ਵਿਆਕਰਨਕ ਸ਼੍ਰੇਣੀਆਂ : ਲਿੰਗ, ਵਚਨ,ਕਾਰਕ ਕਿਰਿਆ ਵਾਕੰਸ਼ : ਪਰਿਭਾਸ਼ਾ, ਬਣਤਰ ਤੇ ਪ੍ਰਕਾਰ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਭਾਸ਼ਾ ਦੀ ਅਮੀਰੀ ਅਤੇ ਬਾਰੀਕੀਆਂ ਨੂੰ ਸਮਝਣ ਲਈ ਵੱਖਰੇ-ਵੱਖਰੇ ਸਿਧਾਂਤਾਂ ਦਾ ਵਿਕਾਸ ਕਰਨਾ ਹੈ।

Bachelor of Science (Economics) (Semester–VI)
Session 2022-2023
Course Code: BECL-6431
Punjab History and Culture (1947- 2000 A.D.)
(Special paper in lieu of Punjabi Compulsory)
(For those students who are not domicile of Punjab)

COURSE OUTCOMES:-

After completing this paper the students will be able to

CO 1:-comprehend Punjab's contribution in the freedom struggle, the exodus and Rehabilitation

CO 1 (a):- understand the history of Punjab from independence with special reference to partition

CO 2:- comprehend the causes that led to the formation of New Punjab in 1966 and outcomes of Green Revolution in the Punjab

CO 3:- understand nature of diaspora and growth of education in Punjab Punjabi literature and Drama in the Punjab after Independence

CO 4: understand the drug abuse problem, management and prevention in the Punjab

CO 4 (a) understand the problem of drug addiction and Female Foeticide in context to the Punjab

Bachelor of Science (Economics) (Semester–VI)
Session 2022-2023
Course Code: BECL-6212
ENGLISH (COMPULSORY)

COURSE OUTCOMES

After passing this course, the students will be able to:

- CO 1:** comprehend, appreciate and critically analyse a novel through the story of the novel *Train to Pakistan* by Khushwant Singh
- CO2:** analyze and appreciate the dramatic technique, plot development and art of characterisation through the study of the prescribed plays from the book *Glimpses of Theatre*
- CO 3:** enhance their writing skills by writing essay on any given topics well as to write report on any incident witnessed

Bachelor of Science (Economics) (Semester–VI)

Session 2022-2023

Course Code: BECL-6333(I)

Course Title: Mathematics (Linear Algebra)

Course Outcomes

After the completion of this course, students should be able to:

CO 1: Express the algebraic concepts such as binary operation, groups, rings and fields. Define a vector space and subspace of a vector space and check the linear dependence and linear independence of vectors.

CO 2: Describe the concepts of basis and dimension of vector spaces.

CO 3: Investigate properties of vector spaces and subspaces using linear transformation.

CO 4: Find the matrix representing a linear transformation.

Bachelor of Science (Economics) (Semester–VI)
Session 2022-2023
Course Code: BECL-6333(II)
Course Title: Mathematics (Numerical Analysis)

After passing this course, the students will be able to:

- CO 1. Know how to find the roots of transcendental and polynomial equations.
- CO 2. Perform computation for solving a system of equations.
- CO 3. Learn how to interpolate the given set of values.
- CO 4. Learn numerical solution of differential equations & compute numerical integration and differentiation, numerical solution of ordinary differential equations.

Bachelor of Science (Economics)(Semester–VI)
Session 2022-2023
Course Code: BECL-6453
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 model and tests of significance.

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

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

Bachelor of Science (Economics) (Semester–VI)
Session 2022-2023
Course Code: BECL-6134
COMPUTER SCIENCE
(INFORMATION TECHNOLOGY)

Course Outcomes:

After passing course the student will be able to:

CO1: Identify usage of various communication media and internet.

CO2: Acquaint with the usage of various information systems.

CO3: Comprehend digital marketing concepts and content.

CO4: Create and manage YouTube channel and blog.

Bachelor of Science (Economics) (Semester–VI)
Session 2022-2023
Course Code: BECL-6124
COMPUTER APPLICATIONS (VOCATIONAL)
(BUSINESS DATA PROCESSING)

Course Outcomes:

After passing course the student will be able to:

CO1: Identify the impact of data and information on working of various organizations.

CO2: Comprehend different types of Data Processing Methods and File Processing techniques.

CO3: Create, edit, save, format and print spreadsheets.

CO4: Apply function and formulas in spreadsheets for data processing.

Bachelor of Science (Economics) (Semester –VI)
Session 2022-2023
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 its applications in economics

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

CO3: understand the shapes of the curve and relationship between variables by using techniques of skewness, kurtosis and correlation.

CO4: learn prediction and forecasting by using regression

CO5: to find out relative changes in magnitude of related variables and also missing values with in the data.