FACULTY OF ECONOMICS AND BUSINESS

SYLLABUS
of
B.Sc. Economics
(Semester I -II)
(Under Continuous Evaluation System)

Session: 2018-19

The Heritage Institution
KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)

B. Sc. (Economics) Semester I
Session 2018-19
Scheme of Studies and Examination

B.Sc Economics Semester I							
Course Code	**Course Name**	**Course Type**	**Marks**				**Examination time (in Hours)**
			Total	**Ext.**		**CA**	
				L	**P**		
BECL-1421 BECL-1031 BECL-1431	Punjabi (Compulsory) Basic Punjabi PHC	C	50	40	-	10	3
BECL-1212	English (Compulsory)	C	50	40	-	10	3
BECM-1333 BECL-1453	Maths/ Quantitative Techniques	E	100/ 100	80 (40+40)/ 80	- -	20 20	3+3 3
BECM-1134 BECM-1124	Computer Science/ Computer Applications	E	100	50	30	20	3+3
BECL-1175	Economics (Micro Economics)	C	100	80	-	20	3
BECL-1026	*Banking (O)	O	100	80	-	20	3
AECD-1161	*Drug Abuse: Problem Management and Prevention (Compulsory)	AECC	50	40	-	10	3
SECF-1492	*Foundation Programme	VBCC	25	25	-	-	2
Total			**400**				

C-Compulsory
E-Elective
O-Optional
AECC- Ability Enhancement Compulsory Course
VBCC- Value Based Compulsory Course

***Marks of these papers will not be added in total marks. Only grades will be given**.

B. Sc. (Economics) Semester II
Session 2018-19
Scheme of Studies and Examination

B.Sc Economics Semester II							
Course Code	**Course Name**	**Course Type**	**Marks**				**Examination time (in Hours)**
			Total	**Ext.**		**CA**	
				L	**P**		
BECL-2421 BECL-2031 BECL-2431	Punjabi (Compulsory) Basic Punjabi PHC	C	50	40	-	10	3
BECL-2212	English (Compulsory)	C	50	40	-	10	3
BECM-2333 BECL-2453	Maths/ Quantitative Techniques	E	100/ 100	80 (40+40)/ 80	- -	20/ 20	3+3/ 3
BECM-2134 BECM-2124	Computer Science/ Computer Applications	E	100	50	30	20	3+3
BECL-2175	Economics(Indian Economy)	C	100	80	-	20	3
BECL-2026	*Banking (O)	O	100	80	-	20	1:30
AECD-2161	*Drug Abuse: Problem Management and Prevention (Compulsory)	AECC	50	40	-	10	3
SECF-2492	*Moral Education Programme	VBCC	25	25	-	-	2
Total			**400**				

C-Compulsory
E-Elective
AECC- Ability Enhancement Compulsory Course
VBCC- Value Based Compulsory Course

***Marks of these papers will not be added in total marks. Only grades will be given**.

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code : BECL-1421
Punjabi (Compulsory)
ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਸਮਾਂ : 3 ਘੰਟੇ

Maximum Marks: 50
Theory: 40
CA: 10

ਅੰਕ ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

1. ਪ੍ਰਸ਼ਨ ਪਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਦਸ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅਗੋਂ ਵਧ ਤੋਂ ਵਧ ਚਾਰ ਉਪ੍ ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

ਪਾਠ੍ਕ੍ਰਮ ਅਤੇ ਪਾਠ੍ਪੁਸਤਕਾਂ

ਸੈਕਸ਼ਨ - ਏ

ਦੋ ਰੰਗ (ਕਵਿਤਾ ਭਾਗ) (ਸੰਪਾ. ਹਰਜਿੰਦਰ ਸਿੰਘ ਢਿ!ਲ੍ਹੋ ਅਤੇ ਪ੍ਰੀਤਮ ਸਿੰਘ ਸਰਗੋਧੀਆ), ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।

(ਲੇਖਕ ਦਾ ਜੀਵਨ ਤੇ ਰਚਨਾ /ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ/ਕਵਿਤਾ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ)

ਸੈਕਸ਼ਨ - ਬੀ

ਸੰਸਾਰ ਦੀਆਂ ਪ੍ਰਸਿਧ ਹਸਤੀਆਂ (ਜੀਵਨੀ ਨੰ: 1 ਤੋਂ 9 ਤਕ)
(ਸੰਪਾ. ਪ੍ਰਿੰ. ਤੇਜਾ ਸਿੰਘ, ਹਰਨਾਮ ਸਿੰਘ ਸ਼ਾਮ),ਪੰਜਾਬੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।

(ਵਿਸ਼ਾ-ਵਸਤੂ/ਸਾਰ/ਨਾਇਕ ਬਿੰਬ)

ਸੈਕਸ਼ਨ - ਸੀ

(ੳ) ਪੈਰ੍ਹਾ ਰਚਨਾ (ਤਿੰਨ ਵਿਚੋਂ ਇਕ)
(ਅ) ਪੈਰ੍ਹਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉਤਰ।

ਸੈਕਸ਼ਨ - ਡੀ

(ੳ) **ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ** : ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉਪ੍ਭਾਸ਼ਾ ਵਿਚ ਅੰਤਰ, ਪੰਜਾਬੀ ਉਪਭਾਬਾਵਾਂ ਦੇ ਪਛਾਣ ਚਿੰਨ੍ਹ।
(ਅ) **ਪੰਜਾਬੀ ਭਾਸ਼ਾ : ਨਿਕਾਸ ਤੇ ਵਿਕਾਸ**

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code: BECL-1031
ਮੁੱਢਲੀ ਪੰਜਾਬੀ
(In lieu of Compulsory Punjabi)

ਸਮਾਂ : 3 ਘੰਟੇ

Max. Marks: 50
Theory: 40
CA: 10

ਅੰਕ ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

1. ਪ੍ਰਸ਼ਨ ਪਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਅੱਠ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅਗੋਂ ਵਧ ਤੋਂ ਵਧ ਚਾਰ ਉਪ ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

<u>ਪਾਠ ਕ੍ਰਮ</u>

ਸੈਕਸ਼ਨ ਏ

ਪੈਂਤੀ ਅਖਰੀ, ਅਖਰ ਕ੍ਰਮ, ਪੈਰ ਬਿੰਦੀ ਵਾਲੇ ਵਰਣ ਅਤੇ ਪੈਰ ਵਿਚ ਪੈਣ ਵਾਲੇ ਵਰਣ ਅਤੇ ਮਾਤ੍ਰਵਾਂ (ਮੁਢਲੀ ਜਾਣ ਪਛਾਣ) ਲਗਾਖਰ (ਬਿੰਦੀ, ਟਿਪੀ, ਅਧਕ) : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ । 08 ਅੰਕ

ਸੈਕਸ਼ਨ ਬੀ

ਪੰਜਾਬੀ ਸ਼ਬਦ ਬਣਤਰ : ਮੁਢਲੀ ਜਾਣ ਪਛਾਣ (ਸਾਧਾਰਨ ਸ਼ਬਦ, ਸੰਯੁਕਤ ਸ਼ਬਦ, ਮਿਸ਼ਰਤ ਸ਼ਬਦ, ਮੂਲ ਸ਼ਬਦ, ਅਗੇਤਰ ਅਤੇ ਪਿਛੇਤਰ) 08 ਅੰਕ

ਸੈਕਸ਼ਨ ਸੀ

ਨਿਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ : ਬਾਜ਼ਾਰ, ਵਪਾਰ, ਰਿਸ਼ਤੇਨਾਤੇ, ਖੇਤੀ ਅਤੇ ਹੋਰ ਧੰਦਿਆਂ ਆਦਿ ਨਾਲ ਸੰਬੰਧਤ। 08 ਅੰਕ

ਸੈਕਸ਼ਨ ਡੀ

ਹਫਤੇ ਦੇ ਸਤ ਦਿਨਾਂ ਦੇ ਨਾਂ, ਬਾਰ੍ਹਾਂ ਮਹੀਨਿਆਂ ਦੇ ਨਾਂ, ਰੁਤਾਂ ਦੇ ਨਾਂ, ਇਕ ਤੋਂ ਸੌ ਤਕ ਗਿਣਤੀ ਸ਼ਬਦਾਂ ਵਿਚ ।

08 ਅੰਕ

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code: BECL-1431

Punjab History & Culture (From Earliest Times to C 320)
(Special Paper in lieu of Punjabi compulsory)

Time: 3 Hours **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setters:
Question paper shall consist of four Units. Candidates shall attempt 5 questions in all, by at least selecting One Question from each section and the 5th question may be attempted from any of the four sections. Each question will carry 8 marks.

Unit A

1. Physical features of the Punjab and impact on history.
2. Sources of the ancient history of Punjab

Unit- B

3. Harappan Civilization: Town planning; social, economic and religious life of the India Valley People.
4. The Indo-Aryans: Original home and settlement in Punjab.

Section C

5. Social, Religious and Economic life during later *Rig* Vedic Age.
6. Social, Religious and Economic life during later Vedic Age.

Section D

7. Teaching and impact of Buddhism
8. Jainism in the Punjab

Suggested Readings

1. L. Joshi (ed): *History and Culture of the Punjab*, Art-I, Patiala, 1989 (3rd edition)
2. L.M. Joshi and Fauja Singh (ed); *History of Punjab* , Vol.I, Patiala 1977.
3. Budha Parkash : *Glimpses of Ancient Punjab*, Patiala, 1983.
4. B.N. Sharma: *Life in Northern India*, Delhi. 1966.

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code: BECL-1212

English (Compulsory)

Time: 3 Hours

Max. Marks: 50
Theory: 40
CA: 10

Texts Prescribed:

1. *Tales of Life* (Guru Nanak Dev University, Amritsar) Stories at Sr.No.1, 2, 3, 5 and 6
2. *Prose for Young Learners* (Guru Nanak Dev University, Amritsar) Essays at Sr. No. 1, 2, 3, 5, and 6
3. *English Grammar in Use* (Fourth Edition) by Raymond Murphy, CUP

The syllabus is divided in four sections as mentioned below.

Section-A: English Grammar in Use, 4th Edition by Raymond Murphy, CUP (Units: 1-37)
Section -B: Paragraph Writing and English Grammar in Use (Units: 38-48)
Section -C: Tales of Life (Guru Nanak Dev University, Amritsar): Stories at Sr. No. 1, 2, 3, 5 and 6
Section -D: Prose for Young Learners: Essays at Sr. No. 1, 2, 3, 5 and 6

Instructions for the Paper-Setter and Distribution of Marks:

The question paper will consist of four sections and distribution of marks will be as under:
The question paper will be divided into four sections.

Section-A: The question will be set from Section-A of the syllabus. Fourteen sentences would be set and the students would be required to attempt any ten. Each sentence would carry one mark. (1x10=10 marks)

Section-B: Two questions will be set from Section-B of the syllabus. The students would be required to attempt one paragraph out of the given two topics. It would carry five marks. The second question will be based on grammar. The students will be required to attempt any five sentences out of eight and each sentence will carry one mark. (2x5=10 marks)

Section-C: Two questions will be set from Section-C of the syllabus. One essay type question with internal choice would be set, which carries six marks. The students would be required to attempt any one. The second question would carry three questions. The students would be required to attempt any two. Each question would carry two marks. (6+2x2=10 marks)

Section-D: Two questions will be set from Section-D of the syllabus. One essay type question with internal choice would be set, which carries six marks. The students would be required to attempt any one. The second question would carry three questions. The students would be required to attempt any two. Each question would carry two marks. (6+2x2=10 marks)

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code: BECM -1333
Algebra

Time: 3 hrs. **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setter:
Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.
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Unit–I

Linear independence of row and column vectors. Row rank, Column rank of a matrix, Equivalence of column and row ranks, Nullity of matrix, Applications of matrices to a system of linear (both homogeneous and non–homogeneous) equations. Theorems on consistency of a system of linear equations.

Unit-II

Eigen values, Eigen vectors, minimal and the characteristic equation of a matrix. Cayley Hamilton theorem and its use in finding inverse of a matrix. Quadratic Forms, quadratic form as a product of matrices. The set of quadratic forms over a field.

Unit–III

Congruence of quadratic forms and matrices. Congruent transformations of matrices. Elementary congruent transformations. Congruent reduction of a symmetric matrix. Matrix Congruence of skew–symmetric matrices. Reduction in the real field. Classification of real quadratic forms in variables. Definite, semi–definite and indefinite real quadratic forms. Characteristic properties of definite, semi–definite and indefinite forms.

Unit-IV

Relations between the roots and coefficients of general polynomial equation in one variable. Transformation of equations and symmetric function of roots, Descarte's rule of signs, Newton's Method of divisors, Solution of cubic equations by Cardon method, Solution of biquadratic equations by Descarte's and Ferrari's Methods.

Books Recommended:

1. K.B. Dutta: Matrix and Linear Algebra, Prentice Hall of India Pvt. Ltd., New Delhi (2002).
2. H.S. Hall and S.R. Knight: Higher Algebra, H.M. Publications, 1994.
3. Chandrika Parsad: Text book on Algebra and Theory of Equations, Pothishala Pvt. Ltd., Allahabad.
4. S.L. Loney: Plane Trigonometry Part–II, Macmillan and Company, London.
5. Shanti Narayan and P.K. Mittal : Text Book of Matrices.

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code: BECM -1333
Calculus And Trigonometry

Time : 3 hrs. **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setter:
Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

Unit–I

Real number system and its properties, lub, glb of sets of real numbers, limit of a function, Basic properties of limits, Continuous functions and classification of discontinuities, Uniform continuities.

Unit-II

Differentiation of hyperbolic functions, Successive differentiation, Leibnitz theorem, Taylor's and Maclaurin's theorem with various forms of remainders, Indeterminate forms.

Unit-III

De–Moivre's Theorem and its applications, circular and hyperbolic functions and their inverses.

Unit-IV

Exponential and Logarithmic function of a complex numbers, Expansion of trigonometric functions, Gregory's series, Summation of series.

Books Recommended:

1. N. Piskunov: Differential and Integral Calculus, Peace Publishers, Moscow.

2. Gorakh Prasad: Differential Calculus, Pothishala Pvt. Ltd., Allahabad.

3. Erwin Kreyszig: Advanced Engineering Mathematics, John Wiley and Sons, 1999.

B. Sc. (Eco.) (Semester –I)
Session 2018-19
Course Code: BECL-1453
Quantitative Techniques–I

Time: 3 Hours **Max. Marks: 100**
Theory: 80
CA: 20

Note: Instructions for the Paper–Setters:
Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

UNIT–I

Solution of Linear Equations: Solution of Simultaneous Linear Equations (upto two variable case), Application of Linear Equation in Economics; Solution of Quadratic Equations.Series: Arithmetic Progression Series, Geometric Progression Series and their applications in economics.

UNIT–II

Elements of Analytical Geometry: Straight line; Basic concepts of trigonometry(with formulae); Concepts of combination and permutation, Elements of set theory, union, intersection, difference, symmetric difference, complementation, Venn diagrams.

UNIT–III

Difference between a constant and a variable, concept of functions, classifications of functions, graph of linear and quadratic functions (Economic applications).
Limits and continuity of a function. Concept of differentiation .

UNIT–IV

Derivatives of elementary functions excluding inverse trigonometric functions,,Rules of derivatives; functions of functions rule; derivatives of implicit functions, parametric functions, logarithmic differentiation (Application in Economics)

Books Recommended:

1. Monga, G.S.: Mathematics and Statistics for Economics.
2. Yamane, Taro: Mathematics for Economists.
3. Allen, R.G.D.: Mathematical Analysis for Economists.
4. Edward T Dowling: Introduction to Mathematical Economics.
5. Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code: BECM-1134
Computer Fundamental & Pc Software
(Theory)

Time: 3+3 Hrs

Max Marks : 100
Theory : 50
Practical : 30
CA : 20

Instructions for Paper Setter -
Eight questions of equal marks are to set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

UNIT–I

1. Introduction to computer and its uses: milestones in hardware and software. Batch oriented/Online/real time application.
2. Computer as a system: basic concepts: stored programs, functional units and their inter–relation: communication with the computer.
3. Data storage devices and media: primary storage: storage addressed, and capacity, type of memory: secondary storage; magnetic tape – data representation and R/W: magnetic disc, fixed & removable, data representation and R/W, floppy disc drives, Winchester disc drive, conventional disc drives, Data organization, Compact Disc.

UNIT -II

1. Input/Output devices: Key–tape/diskette devices, light pen mouse and joystick, source data automation (MICR, OMR, and OCR), screen assisted data entry; portable/hand held terminals for data collection, vision input system.
2. Printed output: Serial, line, page, printers; plotters, visual output; voice response units.

UNIT–III

Introduction to Windows based operating system and Desktop icons

UNIT–IV

Word Processing:

Introduction to Word Processing, Introduction to Parts of Word Window (Title Bar, Menu Bar, Tool Bar, The Ruler, Status Area), Page Setup, Creating New Documents, Saving Documents, Opening an Existing documents, insert a second document into an open document, Editing and

formatting in document, Headers and Footers, Spell Checking, Printing document, Creating a Table Using the Table Menu and table formatting, Borders and Shading, Templates and Wizards, Mail Merge

Presentation :

Introduction to Presentation software, elements, Templates, Wizards, Views, Exploring Menu, Working with Dialog Boxes, Adding Text, Adding Title, Moving Text Area, Resizing Text Boxes, Adding Art, Starting a New Slide, Starting Slide Show, Saving presentation; Printing Slides, Views (View slide sorter view, notes view, outlines view) Formatting and enhancing text formatting, Creating Graphs (displaying slide show and adding multi–media).

References:

1. R.K. Taxali: Introduction to Software Packages, Galgotia Publications.
2. MS–Office Compiled by SYBIX
3. MS–Office BPB Publications.
4. Introduction to Computers by P.K. Sinha
5. Windows Based Computer Courses by Gurvinder Singh & Rachpal Singh, Kalyani Publishers.

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code: BECM-1134
Computer Fundamental & Pc Software
(Practical)

Practical based on Computer Fundamentals & PC Software

Windows, Word Processing and Presentation Software.

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code: BECM-1124
Computer Applications (Vocational)

Computer Fundamentals & Pc Software
(Theory)

Time: 3+3 Hrs

Max. Marks:100
Theory : 50
Practical : 30
CA : 20

Instructions for Paper Setter -
Eight questions of equal marks are to set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

UNIT-I

1. Elements of a Computer System:

1.1 What is a Computer?
1.2 Evolution of Computers, their classification and limitations, Computer organization.
1.3 Uses of Computers in modern society (e.g. Weather forecasting, Census, Oil Exploration, Speech Recognition, Banking, Publishing, Accounting, Research, etc.)
1.4 Characteristics of Desktop
1.5 Characteristics of Portables/Laptops
1.6 Introduction to Hardware, Software, Operating System, Translators.

2. Input Output Devices:

2.1 Input Devices and Functions
* Keyboard and teletypewriter terminals
* Joystick
* Mouse
* Light Pen
* Magnetic Tapes and cassettes
* Magnetic Disks
* Floppy and Winchester Disks
* Optical Marks Reader (OMR)
* Optical Character Reader (OCR)
* Magnetic Ink Character Reader (MICR)
* Punched Cards

2.2 **Output Devices and Functions:**
a) Visual Display UNIT (Monitor), Pixel & resolution, Monitors Size, Monochrome & Color, VGA & SVGA
b) Plotters
c) Printers
d) CTD

3. H/W Organization of a Desktop Computer:

3.1 Introduction to hardware components
3.2 C.P.U. Control units, ALU, Registers
3.3 Instruction Characteristic and Instruction Cycle
3.4 Memory
   a) RAM – Dynamic RAM, Static RAM
   b) ROM–PROM, EPROM, EEPROM
   c) Cache, Virtual, Extended and Expanded Memories
3.5 Secondary Memory (Storage devices)
   a) Floppy Disk
   b) Hard Disk
   c) DAT
   d) Video or Optical Disk (CD ROM)
   e) CTD
3.6 Moderns and its Types

UNIT -II

4. Basics of Windows OS:

a) The Desktop, the Taskbar
b) Start Menu
c) Program, Document, Settings, Find, Help, Run, Shutdown
d) About the My Computer Icon
e) About the networking neighborhood Icon
f) Recycle bin
g) Folders–Creation and Definition
h) New Rules for File Names
i) Windows Explorer (Definition)
j) Shortcut Icons with creation and definition

UNIT-III

MS–Word:

Introduction to Word, Introduction to Parts of Word Window (Title Bar, Menu Bar, Tool Bar, The Ruler, Status Area), Page Setup, Creating New Documents, Saving Documents, Opening an Existing documents, insert a second document into an open document, Editing and formatting in document, Headers and Footers, Spell Checking, Printing document, Creating a Table Using the Table Menu and table formatting, Borders and Shading, Templates and Wizards, Mail Merge Drawing Objects, Using Frames to position Objects.

UNIT-IV

MS Power Point:

Introduction to MS Power point, Power point elements, Templates, Wizards, Views, Exploring Power Point Menu, Working with Dialog Boxes, Adding Text, Adding Title, Moving Text Area, Resizing Text Boxes, Adding Art, Starting a New Slide, Starting Slide Show, Saving presentation; Printing Slides, Views (View slide sorter view, notes view, outlines view) Formatting and enhancing text formatting, Creating Graphs (Displaying slide show and adding multi–media)

Text Books:

1. MS–Office Compiled by SYBIX
2. MS–Office BPB Publications.
3. Introduction to Computer by P.K. Sinha
4. Introduction to Information Technology by Anshuman Sharma

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code : BECM-1124
Computer Applications (Vocational)

Computer Fundamentals & Pc Software

(Practical)

Lab Based on Computer Fundamentals

B. Sc. (Eco.) (Semester–I)
Session 2018-19
Course Code: BECL-1175
MICROECONOMICS

Time: 3 Hours **Max. Marks: 100**
Theory: 80
CA: 20

Note: Instructions for the Paper–Setters:
Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

UNIT–I
Introductory: Definition of Economics, Nature and Scope of Microeconomics. Basic Concepts: Human wants, Utility and Satisifaction, Basic Economic Problems.
Demand Function; Supply Function, Price Determination, Elasticity of Demand – Price, Income and Cross, elasticity and their Measurement.
Utility Analysis: law of diminishing marginal utility and law of equi-marginal utility, Indifference Curve Analysis and Revealed Preference Analysis (Meaning and Equilibrium).

UNIT–II
Theory of Production and Costs: Concept of Production Function. Laws of Returns to Scale and Returns to Factor.
Cost: Traditional and modern cost Theory, Concepts and Costs curves in the short and in the long run. Revenue Curves and their relationship with elasticity of demand.

UNIT–III
Market forms: Perfect Competition; Assumptions, Price and output determination of firm and Industry in Short run and Long run; Monopoly: Assumptions and Equilibrium.
Monopolistic Competition: Assumptions and Equilibrium(except Group Equilibrium)..

UNIT–IV
Marginal Productivity Theory; Factor Pricing (with reference to labour) under Perfect Competition and Imperfect Competition, Modern Theory of Distribution.
Rent: Concept, Ricardian Theory and Modern Theory of Rent.
Interest: Concept of interest; classical theory, lonable funds theory.
Profit: Concept of profit; Risk and uncertainity theories.

Books Recommended:
1. R.G. Lipsey: Introduction to positive economics, EL BS, London, 1969.
2. Stonier & Hague: A Text book of Economics Theory, 9th ed., ELBS, London, 1973.
3. Paul Samuelson: Economics, Mcgraw Hill, Kogakushad, Tokyo, 1973.
4. N.C. Ray: Microeconomic Theory, Macmillan, Delhi, 1975.
5. D. Salvatore: Microeconomics.
6. Koutsoyiannis: Modern microeconomics.

B. Sc. (Eco.) with Banking as an Additional Optional Subject (Semester-I)
Session 2018-19
Course Code: BECL-1026
BANKING (Banking & Basic operations)

Time: 3 Hours **Max. Marks: 100**
Theory: 80
CA: 20

Note: Instructions for the Paper–Setters:

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

Unit I

Types of money
Credit Creation and Its Implications for Monetary policy
Theories of Term and Structure of Interest Rates
Monetary policy- Objectives, Instruments and Challenges.

Unit II

Money Supply in India
Commercial banks in India: Functions and Structure
Reserve Bank of India: Functions and Working
Interest Rates in India

Unit III

Banking operations: Types of Account, How to open account, Deposit money, Withdrawal by cash and Cheque, Drafts, RTGS, MSF and NEFT
Credit Rating Agencies
Introduction to Basel norms, Anti Money Laundering
e-banking.

Unit IV

Saving Bank Schemes and Post Office Saving Schemes
Credit Policy of Banks and Processing of Loans (Personal , Agricultural and Industrial Loans).
Insurance: General and Life Insurance Policies by Banks and its Terms And Conditions and Advantages.

Books Recommended :

1. Gupta, S.B.: "*Monetary Planning in India*", Oxford Univ. Press, Delhi, 1976.
2. Laidler, D.E.W.: "*The Demand for money Theories and Evidence*", Dum – Downelly
3.,Lucket, D.C.: *"Money and Banking*", McGraw Hill, New York, 1976.
4. Reserve Bank of India (1991), Report of the Committee on the Financial System (Narasimha Committee Report).
5. Ritter, L.S. and Sibler, W.L., (1977), Principles of Money, Banking and Markets, Basic Books, New York, 3rd ed.
6. Thorn, R.S.: "*Introduction to Money and Banking*", Harper and Raw New York, 1976.

B. Sc. (Eco.) Semester – I
Session 2018-19
Course Code: AECD-1161
Drug Abuse: Problem, Management and Prevention (COMPULSORY PAPER)
PROBLEM OF DRUG ABUSE

Time:3 Hrs **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setter

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

UNIT-I

1) Meaning of Drug Abuse: Meaning, Nature and Extent of Drug Abuse in India and Punjab.

UNIT-II

2) Consequences of Drug Abuse for:
Individual : Education, Employment, Income.
Family : Violence.
Society : Crime
Nation : Law and Order problem.

UNIT-III

3) Management of Drug Abuse
Medical management : medication for treatment and to withdrawal effects.

UNIT-IV

4) Psychiatric Management: Counselling, Behavioural and Cognitive therapy.
Social Management: Family, Group therapy and Environmental Intervention.

References:

1. Ahuja, Ram (2003), *Social Problems in India*, Rawat Publication, Jaipur.
2. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.
3. Inciardi, J.A. 1981. *The Drug Crime Connection.* Beverly Hills: Sage Publications.
4. Kapoor. T. (1985) *Drug epidemic among Indian Youth*, New Delhi: Mittal Pub.
5. Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.
6. National Household Survey of Alcohol and Drug abuse. (2003) New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences, 2004.
7. Sain, Bhim 1991, *Drug Addiction Alcoholism,* Smoking obscenity New Delhi: Mittal Publications.
8. Sandhu, Ranvinder Singh, 2009, *Drug Addiction in Punjab*: A Sociological Study. Amritsar: Guru Nanak Dev University.
9. Singh, Chandra Paul 2000. *Alcohol and Dependence among Industrial Workers*: Delhi: Shipra.
10. Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation,* Cambridge University Press.

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code : BECL-2421
Punjabi (Compulsory)
ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਸਮਾਂ : 3 ਘੰਟੇ

Max. Marks: 50
Theory: 40
CA: 10

ਅੰਕ ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

1. ਪ੍ਰਸ਼ਨ ਪਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 8 ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅਗੋਂ ਵਧ ਤੋਂ ਵਧ ਚਾਰ ਉਪ੍ ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

<u>ਪਾਠ੍ ਕ੍ਰਮ ਅਤੇ ਪਾਠ੍ ਪੁਸਤਕਾਂ</u>

ਸੈਕਸ਼ਨ - ਏ

ਦੋ ਰੰਗ (ਕਹਾਣੀ ਭਾਗ) (ਸੰਪਾ. ਹਰਜਿੰਦਰ ਸਿੰਘ ਢਿਲੋਂ ਅਤੇ ਪ੍ਰੀਤਮ ਸਿੰਘ ਸਰਗੋਧੀਆ),ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।

(ਵਿਸ਼ਾ-ਵਸਤੂ/ਸਾਰ/ਲੇਖਕ ਦਾ ਜੀਵਨ ਤੇ ਰਚਨਾ)

ਸੈਕਸ਼ਨ - ਬੀ

ਸੰਸਾਰ ਦੀਆਂ ਪ੍ਰਸਿਧ ਹਸਤੀਆਂ (ਜੀਵਨੀ ਨੰ: 10 ਤੋਂ18 ਤਕ)(ਸੰਪਾ. ਪ੍ਰਿੰ. ਤੇਜਾ ਸਿੰਘ, ਹਰਨਾਮ ਸਿੰਘ ਸ਼ਾਮ),
ਪੰਜਾਬੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।

(ਵਿਸ਼ਾ/ਸਾਰ/ਨਾਇਕ ਬਿੰਬ)

ਸੈਕਸ਼ਨ - ਸੀ

(ੳ) **ਸ਼ਬਦ ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ** : ਪਰਿਭਾਸ਼ਾ, ਮੁਢਲੇ ਸੰਕਲਪ।
(ਅ) ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ

ਸੈਕਸ਼ਨ - ਡੀ

(ੳ) ਦਫ਼ਤਰੀ ਚਿਠੀ ਪਤਰ
(ਅ) ਮੁਹਾਵਰੇ ਅਤੇ ਅਖਾਣ

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: BECL-2031
ਮੁੱਢਲੀ ਪੰਜਾਬੀ
(In lieu of Compulsory Punjabi)

ਸਮਾਂ: 3 ਘੰਟੇ

Max. Marks: 50
Theory: 40
CA: 10

ਅੰਕ ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

1. ਪ੍ਰਸ਼ਨ ਪਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੋ੍ਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ।ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 08 ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅਗੋਂ ਵਧ ਤੋਂ ਵਧ ਚਾਰ ਉਪ੍ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

<u>ਪਾਠ ਕ੍ਰਮ</u>

ਸੈਕਸ਼ਨ ਏ

ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ (ਨਾਂਵ, ਪੜਨਾਂਵ, ਕਿਰਿਆ, ਵਿਸ਼ੇਸ਼ਣ, ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ, ਸਬੰਧਕ, ਯੋਜਕ ਅਤੇ ਵਿਸਮਿਕ) 08 ਅੰਕ

ਸੈਕਸ਼ਨ ਬੀ

ਪੰਜਾਬੀ ਵਾਕ ਬਣਤਰ : ਮੁਢਲੀ ਜਾਣ ਪਛਾਣ
(ੳ) ਸਾਧਾਰਨ ਵਾਕ, ਸੰਯੁਕਤ ਵਾਕ ਅਤੇ ਮਿਸ਼ਰਤ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ)
(ਅ) ਬਿਆਨੀਆ ਵਾਕ, ਪ੍ਰਸ਼ਨਵਾਚਕ ਵਾਕ ਅਤੇ ਹੁਕਮੀ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ) 08 ਅੰਕ

ਸੈਕਸ਼ਨ ਸੀ

ਪੈਰ੍ਹਾ ਰਚਨਾ
ਸੰਖੇਪ ਰਚਨਾ 08 ਅੰਕ

ਸੈਕਸ਼ਨ ਡੀ

ਚਿਠੀ ਪਤਰ (ਘਰੇਲੂ ਅਤੇ ਦਫ਼ਤਰੀ)
ਅਖਾਣ ਅਤੇ ਮੁਹਾਵਰੇ 08 ਅੰਕ

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: BECL-2431

Punjab History & Culture (C 321 to 1000 A.D.)
(Special Paper in lieu of Punjabi compulsory)

Time: 3 Hours **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setters
Question paper shall consist of four Units. Candidates shall attempt 5 questions in all, by at least selecting One Question from each unit and the 5th question may be attempted from any of the four sections. Each question will carry 8 marks.

Unit-I

1. Punjab under Chandragupta Maurya and Ashoka.
2. The Kushans and their Contribution to the Punjab.

Unit -II

3. The Panjab under the Gupta Emperor.
4. The Punjab under the Vardhana Emperors

Unit-III

5. Political Developments 17th Century to 1000 A.D. (Survey of Political)
6. Socio-cultural History of Punjab from 7th to 1000 A.D.

Unit -IV

7. Development of languages and Literature.
8. Development of art & Architecture

Suggested Readings

1. L. Joshi (ed): *History and Culture of the Punjab*, Art-I, Patiala, 1989 (3rd edition)
2. L.M. Joshi and Fauja Singh (ed); *History of Punjab* , Vol.I, Patiala 1977.
3. Budha Parkash : *Glimpses of Ancient Punjab*, Patiala, 1983.
4. B.N. Sharma: *Life in Northern India*, Delhi. 1966.

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: BECL-2212

English (Compulsory)

Time: 3 Hours **Max. Marks: 50**
Theory: 40
CA: 10

Texts Prescribed:

1. ***Tales of Life*** (Guru Nanak Dev University, Amritsar) Stories at Sr. No. 7, 9, 10, 11, 12
2. ***Prose for Young Learners*** (Guru Nanak Dev University, Amritsar) Essays at Sr. No. 7, 8, 9, 10, 11
3. ***English Grammar in Use*** (Fourth Edition) by Raymond Murphy, CUP (Units: 49-97)

The syllabus is divided in four sections as mentioned below.
Section-A: English Grammar in Use, 4th Edition by Raymond Murphy, CUP (Units: 49-81)
Section-B: Personal letter Writing and English Grammar in Use (Units: 82-97)
Section-C: Tales of Life (Guru Nanak Dev University, Amritsar) 7, 9, 10, 11, 12
Section-D: Prose for Young Learners (Fourth Edition) by Raymond Murphy, CUP 7, 8, 9, 10 and 11

Instructions for the Paper-Setter and Distribution of Marks:
The question paper will consist of four sections and distribution of marks will be as under:
The question paper will be divided into four sections.
Section-A: The question will be set from Section-A of the syllabus. Fourteen sentences would be set and the students would be required to attempt any ten. Each sentence would carry one mark. (1x10=10 marks)
Section-B: Two questions will be set from Section-B of the syllabus. The students would be required to attempt one personal letter out of the given two. It would carry five marks. The second question will be based on grammar. The students will be required to attempt any five sentences out of eight and each sentence will carry one mark. (2x5=10 marks)
Section-C: Two questions will be set from Section-C of the syllabus. One essay type question with internal choice would be set, which carries six marks. The students would be required to attempt any one. The second question would carry three questions. The students would be required to attempt any two. Each question would carry two marks. (6+2x2=10 marks)
Section-D: Two questions will be set from Section-D of the syllabus. One essay type question with internal choice would be set, which carries six marks. The students would be required to attempt any one. The second question would carry three questions. The students would be required to attempt any two. Each question would carry two marks. (6+2x2=10 marks)

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: BECM -2333

Calculus and Differential Equations

Time: 3 hrs. **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setter: Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

Unit–I

Asymptotes, Tests for concavity and convexity, Points of inflexion, Multiple Points, Curvature, Tracing of Curves (Cartesian and Parametric coordinates only).

Unit-II

Integration of hyperbolic functions. Reduction formulae. Definite integrals. Fundamental theorem of integral calculus. Quadrature, rectification.

Unit– III

Exact differential equations. First order and higher degree equations solvable for x,y,p. Clairaut's form and singular solutions. Geometrical meaning of a differential equation. Orthogonal trajectories.

Unit-IV

Linear differential equations with constant and variable coefficients. Variation of Parameters method, reduction method, series solutions of differential equations. Power series method, Bessel and Legendre equations (only series solution).

Books Recommended:

1. D.A. Murray: Introductory Course in Differential Equations. Orient Longman (India), 1967.
2. G.F. Simmons: Differential Equations, Tata McGraw Hill, 1972.
3. E.A. Codington: An Introduction to Ordinary Differential Equations, Prentice Hall of India, 1961.
4. Gorakh Prasad: Integral Calculus, Pothishala Pvt. Ltd., Allahabad.
5. Erwin Kreyszig: Advanced Engineering Mathematics, John Wiley and Sons, 1999. 52

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: BECM -2333

Calculus

Time : 3 hrs. **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setter: Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

Unit–I

Limit and Continuity of functions of two variables, Partial differentiation, Change of variables, Partial derivatives and differentiability of real–valued functions of two variables, Schwartz's and Young's Theorem, Statements of Inverse and implicit function theorems and applications.

Unit-II

Euler's theorem on homogeneous functions, Taylor's theorem for functions of two variables, Jacobians, Envelopes. Evolutes, Maxima, Minima and saddle points of functions of two variables.

Unit-III

Lagrange's undetermined multiplier method, Double and Triple Integrals, Change of variables., Applications to evaluation of areas, Volumes, Surfaces of solid of revolution, Change of order of integration in double integrals.

Unit-IV

Application to evaluation of area, volume, surface of solids of revolutions.

Books Recommended:

1. Narayan, S. and P.K. Mittal: Integral Calculus. Sultan Chand & Sons.
2. Kreyszig, E.: Advanced Engineering Mathematics.
3. Narayan S. and P.K. Mittal : Differential Calculus, Sultan Chand & Sons.

QUANTITATIVE TECHNIQUES–II

Time: 3 Hours **Max. Marks: 100**
Theory: 80
CA: 20

Note: Instructions for the Paper–Setters/Examiners:

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section
.

UNIT–I

Statistics: Definition, Scope in Economics, Significance, Limitations. Tabulation, Classification and Graphical representation of data (Pie Chart, Bar Diagram, Histogram, Frequency Polygon, Ogive Curve, etc.).

UNIT–II

Concepts and Measures of Central Tendency: Mean, Median and Mode; Concepts and Measures of Relative Dispersion; Concepts and Measures of Skewness and Kurtosis (Stress on numerical examples).

UNIT–III

Correlation Analysis: Introduction, Importance, Karl-Pearson's Coefficient of Correlation, Spearman's Rank Correlation Coefficient, Simple Regression Analysis; Difference between Correlation and Regression, Lines of Regression, Properties of Correlation and Regression Cofficients (Stress on numerical examples).

UNIT–IV

Index Numbers: Concept of Index Number, Purpose Construction & Problems, Laspeyre, Paasche and Fisher's Formulae, Tests of Consistency.
Analysis of Time Series: Definition, Components of Time Series, Measurement of Trend by different methods, Measurement of Seasonal Variations (through ratio to move average method); stress on examples.

Books Recommended:

1. Gupta, S.P.: Statistical Methods (1981).
2. Croxton, Cowden & Klein: Applied General Statistics (1973).
3. Ya-lun-chou: Statistical Analysis (1975)
4. Kapur and Sexena: Mathematical Statistics (1970)
5. Murry, R. Speigal: Theory and Problems of Statistics (1972).

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: BECM-2134

Programming In C
(Theory)

Time: 3+3 Hrs **Max. Marks : 100**

Theory : 50

Practical : 30

CA : 20

Instructions for Paper Setter -
Eight questions of equal marks are to set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

UNIT–I

Data Representation, Introduction to Number Systems and Character Codes, Flow Charts, Problem Analysis, decision tables, pseudo codes and, algorithms.

UNIT–II

Programming Languages C:
Basics of C: Introduction to C, Applications and Advantages of C, Tokens, Types of Errors **Data Types:** Basic & Derived Data Types, User Defined Data Types, Declaring and initializing variables.

Operators and Expressions: Types of operators (Unary, Binary, Ternary), Precedence and Associativity
Data I/O Functions: Types of I/O function, Formatted & Unformatted console I/O Functions

UNIT–III

Control Statements: Jumping, Branching and Looping–Entry controlled and exit controlled, Advantages/Disadvantages of loops, difference between for, while and do–while.
Arrays: Types of Arrays, One Dimensional and Two Dimensional Arrays.
Strings: Introduction to Strings and String functions, array of strings.

UNIT-IV

Functions: User Defined & Library Function, Function (Prototype, Declaration, Definition), Methods of passing arguments, local and global functions, Recursion.
Storage Classes: Introduction to various storage classes, scope and lifetime of a variable,
Storage class specifiers (auto, register, static, extern), advantages and disadvantages.
Structure and Union: Introduction to structure and union, pointers with structure.

Books Suggested:

(i) Programming with C Languages C. Schaum Series.
(ii) Yashwant Kanitkar – Let Us C
(iii) C Programming by Stephen G Kochan
(iv) Balaguruswamy: "Programming in ANSI C".

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: BECM-2134

PROGRAMMING IN C
(PRACTICAL)

Practical based on Programming in C.

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: **BECM-2124**

Computer Applications (Vocational)
Programming Using C

Time: 3+3 Hrs **Max. Marks : 100**
Theory : 50
Practical : 30
CA : 20

Instructions for Paper Setter -
Eight questions of equal marks are to set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

UNIT-I

Data Representation, Flow Charts, Problem Analysis, Decision tables, Pseudo codes and Algorithms.
Programming Using C:
Basics of C: Introduction to C, Applications and Advantages of C, Tokens, Types of Errors
Data Types: Basic & Derived Data Types, User Defined Data Types, Declaring and initializing variables.

UNIT-II

Operators and expressions: Types of operators **(**Unary, Binary, Ternary), Precedence and Associativity
Data I/O Functions: Types of I/O function, Formatted & Unformatted console I/O Functions.
Control Statements: Jumping, Branching and Looping–Entry controlled and exit controlled, Advantages/Disadvantages of loops, difference between for, while and do–while.

UNIT-III

Arrays: Types of Arrays, Advantages/Disadvantages of arrays. Insertion, Deletion, Searching and sorting operations on arrays
Strings: Introduction to Strings and String functions, array of strings.

Functions: User Defined & Library Function, Function (Prototype, Declaration, Definition), Methods of passing arguments, local and global functions, Recursion.

UNIT-IV

Storage classes: Introduction to various storage classes, scope and lifetime of a variable, Storage class specifiers (auto, register, static, extern), advantages and disadvantages.
Pointers: Introduction, Advantages/Uses of pointers, Limitations of pointers, Difference between void pointer and Null pointer, Pointer arithmetic, operators not allowed on pointers, Types of Pointer**,** Passing Pointers to function, concept of pointer to pointer.
Structure and Union: Introduction to structure and union, pointers with structure**.**

References:

1. Programming in C by Schaum Outlines Series.
2. C Programming by Stephen G. Kochan.
3. Let Us C by Yashwant Kanitkar
4. Programming in ANSI C by Balaguruswamy

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: **BECM-2124**

Computer Applications (Vocational)

LAB – I (PROGRAMMING USING C)
(PRACTICAL)

Lab based on **PROGRAMMING USING C**

B. Sc. (Eco.) (Semester –II)
Session 2018-19
Course Code: BECL-2175

INDIAN ECONOMY

Time: 3 Hours **Max. Marks: 100**
Theory: 80
CA: 20

Note: Instructions for the Paper–Setters:

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

UNIT–I

Nature of Indian Economy, Agriculture in India: Nature and Importance of Agriculture, Causes of Decline in Productivity, Sustainable Agricultural Growth. Green Revolution and New Agricultural Strategy, WTO and Indian Agriculture (Introductory).

UNIT–II

Industry: Performance and Problems of Industrial Development, Public Sector versus Private Sector, Role of Privatization, Role of MSME, Latest Industrial Policy.

UNIT–III

Foreign Trade: Direction and Composition of Exports and Imports Since 1991, Recent Foreign Trade Policy, Balance of Payment Problem. Foreign Capital and Multinational Corporations in India.

UNIT–IV

Features of Population Growth in India, Major Problems of the Economy – Inflation, Unemployment, Poverty and Inequality, Current Indian Tax Structure.

Planning- Objectives, Strategy, Evaluation of Planning in India. A Brief Idea of Objectives, Targets, Resources of the Latest Five Year Plan (Twelfth Five Year Plan).

Books Recommended:

1. Mishra and Puri: Indian Economy (Latest), Himalaya Publication House, Mumbai.
2. Rudder Dutt and Sundharam: Indian Economy (Latest), S. Sundharam Chand & Co. Ltd., New Delhi.
3. Uma Kapila: Indian Economy Performance And Policies (18th edition), Academic Foundation..
4. A. N. Aggarwal : Indian Economy , Vikas Publications, Delhi, !975.
5. C.D. Wadhwa: Indian Economic Policy(1980), Tata McGraw Hill, Bombay, !973.

B. Sc. (Eco.) with banking as an additional optional subject (Semester-II)

Session 2018-19

Course Code: BECL-2026

BANKING (Reasoning and Mental Ability)

Time: 1:30 hrs **Max. Marks: 100**
Marks: 80
CA: 20

Note: Instructions for the Paper–Setters:
(i) All questions are compulsory.
(ii) There will be 80 multiple choice questions (MCQ) based upon entire syllabus.

Unit I

Verbal reasoning :

Analogy: Number Analogy, Letter Analogy and Word Analogy
Classification Test: Alphabet classification and Number Classification
Series Completion: Prime Number, Difference, Multiplication, Division, Even and Odd Series
Letter Series, Alpha Numeric Series
Logical Sequence of Words

Unit II

Verbal reasoning

Coding and Decoding
Order and Ranking , Blood relations , Direction Sense Test,
Seating Arrangements (Linear, Circular, Square, Floor based)
Mathematical operations-BODMAS

Unit III

Non- Verbal reasoning :

Figures and Images -Odd figures, Mirror image, Water image
Paper cutting, Folding & Punching
Completion of Figural Series , Embedded fig , Cubes and Dice
Logical Venn Diagram

Unit IV

Logical reasoning :

Statement and Course of Action
Statement and Assumptions & Statement and Conclusion
Clock and Calendar

Books recommended :

1. Aggarwal, R.S ., "*Modern Approach to Verbal and Non –Verbal Reasoning*", Revised Edition (2012), S Chand Publications.
2. Aggarwal, R.S., " *A Modern Approach to Logical Reasoning* " Revised edition (2017) , S.Chand Publications.
3. Jha ,R.K., "*General Intelligence and Reasoning Test* ",Latest edition (2016), Arihant Publications.
4. Pandey, M K., " *Analytical Reasoning* ", New Revised Edition (2012), BSC Publication.
5. Kundan ,K ,. "*Advanced Verbal Reasoning"*, Latest Edition (2016) , BSC Magical Book Series.

B. Sc. (Eco.) Semester – II
Session 2018-19
Course Code: AECD-2161

Drug Abuse: Problem, Management and Prevention (COMPULSORY PAPER)
PROBLEM OF DRUG ABUSE

Time: 3 Hrs **Max. Marks: 50**
Theory: 40
CA: 10

Instructions for the Paper Setter

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

UNIT-I

Prevention of Drug abuse: Role of family: Parent child relationship, Family support, Supervision, Shaping values, Active Scrutiny.

UNIT-II

School: Counselling, Teacher as role-model. Parent-teacher-Health Professional Coordination, Random testing on students.

UNIT-III

Controlling Drug Abuse: Media: Restraint on advertisements of drugs, advertisements on bad effects of drugs, Publicity and media, Campaigns against drug abuse, Educational and awareness program

UNIT-IV

Legislation: NDPs act, Statutory warnings, Policing of Borders, Checking Supply/Smuggling of Drugs, Strict enforcement of laws, Time bound trials.

References:

1. Ahuja, Ram (2003), *Social Problems in India*, Rawat Publication, Jaipur.
2. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.
3. Inciardi, J.A. 1981. *The Drug Crime Connection.* Beverly Hills: Sage Publications.
4. Kapoor. T. (1985) *Drug epidemic among Indian Youth*, New Delhi: Mittal Pub.
5. Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.
6. National Household Survey of Alcohol and Drug abuse. (2003) New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences, 2004.
7. Sain, Bhim 1991, *Drug Addiction Alcoholism*, Smoking obscenity New Delhi: Mittal Publications.
8. Sandhu, Ranvinder Singh, 2009, *Drug Addiction in Punjab*: A Sociological Study. Amritsar: Guru Nanak Dev University.
9. Singh, Chandra Paul 2000. *Alcohol and Dependence among Industrial Workers*: Delhi: Shipra.
10. Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation,* Cambridge University Press.