

2015-
16

Multani Mal Modi College, Patiala

Unit Planning C.S.M.- I

Department of Mathematics



C.S.M.-I(SEMESTER-Ist)

CSM-111 ALGEBRA

(2015-16)

Subject: ALGEBRA

Max Marks: 45

Maximum Time: 3 Hrs.

TILLMST-I
Relations between the roots and coefficients of general polynomial equation in one variable .Transformation of equations. Descarte's rule of signs. Solution of cubic equations (Cardon method). Biquadratic equations.Mappings, Equivalence relations and partitions .Congruence modulo n.Symmetric, Skew symmetric, Hermitian and Skew Hermitian matrices . Elementary operations on matrices. Inverse of a matrix.
TILLMST-II
Linear independence of row and column vectors. Row rank ,column rank and rank of a matrix . Equivalence of column and row ranks. Eigen values, eigen vectors and the characteristic equation of a matrix. Cayley Hamilton theorem and its use in finding inverse of a matrix. Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations.
TILLFINAL EXAM
Theorems on consistency of a system of linear equations

Mode of Assessment

Mode of Assessment		
Sr. No.	Component	Weightage
1	Mid Semester Test (MST)	40% (Average of 2 MST)
2	Written Assignments	40%
3	Attendance	20%

MULTANI MAL MODI COLLEGE, PATIALA
UNIT PLAN
Class – C.S.M.-I(SEMESTER-Ist)

CSM-112 : TRIGONOMETRY AND DIFFERENTIAL CALCULUS

Max Marks: 45

Maximum Time: 3 Hrs.

TILLMST-I
<p>Trigonometry: De Moivre's theorem and its applications . Direct and inverse circular and hyperbolic functions. Logarithm of a complex quantity. Expansion of trigonometrical functions. Gregory's series. Summation of series.Differential Calculus: ϵ-δ definition of the limit of a function . Basic properties of limits</p>
TILLMST-II
<p>Continuous functions and classification of discontinuities .Differentiability . Successive differentiation . Leibnitz theorem . Asymptotes . Curvature. Tests for concavity and convexity. Points of inflexion . Multiple points.</p>
TILLFINAL EXAM
<p>Tracing of curves (Cartesian and parametric coordinates only).</p>

Mode of Assessment

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UNIT PLANNING (SESSION 2015-16)
MULTANI MAL MODI COLLEGE, PATIALA

UNIT PLAN

Class – C.S.M.-I(SEMESTER-Ist)

CSM-113 : COMPUTER ORIENTED STATISTICAL METHODS - I

Max Marks: 30

Maximum Time: 3 Hrs.

TILLMST-I
Collection of data : Primary data – designing a questionnaire and a schedule. Secondary data - its major sources including some government publications. Concept of a Statistical population and samples from a population ;quantitative and qualitative data , discrete and continuous data ,nominal, ordinal , ratio & interval scales .Presentation of data: Diagrammatical representation of data.
TILLMST-II
frequency distribution, graphical representation , Histogram , Frequency polygon , Frequency curves and ogives . Analysis of quantitative data : univariate data concepts of central tendency , dispersion
TILLFINAL EXAM
skewness and kurtosis and their measures including those based on quartiles and moments. Sheppard's correction for moments (without derivation).

Mode of Assessment

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MULTANI MAL MODI COLLEGE, PATIALA
UNIT PLAN
Class – C.S.M.-I(SEMESTER-Ist)

CSM-114 : PROBABILITY THEORY – I

Max Marks: 30

Maximum Time: 3 Hrs.

TILLMST-I
Important concepts in probability :Random experiment, trial, sample point and sample space, definition of an event, mutually exclusive, exhaustive, independent and equally likely events. Definition of the probability-classical and relative frequency approach to probability, their demerits and axiomatic approach to probability. Properties of probability based on axiomatic approach, conditional probability, Bayes theorem and its applications. Random Variable : Definition of discrete random variables, probability mass function ,continuous random variable, probability density function illustrations of random variables and its properties.
TILLMST-II
expectation of a random variable and its properties-moments, measures of location and dispersion, moment generating function and probability generating function.
TILLFINAL EXAM
Two dimensional random variables –joint, marginal and conditional distributions (concepts & simple applications) .

Mode of Assessment

Mode of Assessment		
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UNIT PLAN**Class – C.S.M.-I(SEMESTER-Ist)****CSM - 116 : INTRODUCTION TO INFORMATION TECHNOLOGY****Max Marks: 50****Maximum Time: 3 Hrs.****TILL MST-I**

- Information Technology : Introduction, hardware and software, the information processing cycle.
- Information systems, software and data, IT Applications; Types of computers, Anatomy of a computer, Binary numbers, Binary arithmetic, digital revolution, computer as a digital device, Moore's Law, Bits and bytes, CPU,
- Memory : RAM and ROM, Registers, System buses, i/o Buses, communication with peripherals. Input and Output devices : Keyboards-virtual and ergonomic, OCR, handwriting recognition, bar code and speech recognition, scanners resolution, printers-Laser, dot matrix and inkjet.
- Secondary Storage : Storage devices and media, sequential and random storage, tracks and sectors, speed, storage capacity, Removable media.
- Storage Media : floppy and hard disks. RAID, Optical discs, Increasing storage capacity, backup and smart cards.

TILL MST-II

- Computer languages: Machine language, assembly language, higher level language, 4GL. Introduction to Compiler, Interpreter, Assembler, System Software Application Software. Number System: Non-positional and positional number systems, base-conversion, fractional numbers, various operations on numbers. Computer code: BCD, EBCDIC, ASCII.
- WWW and Internet: Introduction, home page, connecting to web, browsing, information search, multimedia. Computer Network and communication: Network types, network topologies, network communication devices, physical communication media.

TILL FINAL EXAM

- Introduction of E-Commerce: Meaning, its advantages and Limitations, Type of E-Commerce Applications.

UNIT PLAN**Class – C.S.M.-I(SEMESTER-Ist)****CSM - 117: COMPUTER PROGRAMMING USING “C”****Max Marks: 50****Maximum Time: 3 Hrs.****TILL MST-I**

- Problem Solving with Computer : Algorithms, Pseudocodes and Flowcharts. Data types, constants, variables, arithmetic and logical expressions, data input and output, assignment statements, conditional statements, iteration.
- Arrays, string processing, User-defined data types.

TILL MST-II

- Functions recursion, Parameter Passing by reference & by value. Structures, Multiple structures, Arrays of structures, Unions, Files: Reading , Writing text and binary files, Pointers, character pointers, pointers to arrays, Array of pointers, pointers to structures.
- Debugging, testing and documentation ; structured programming concepts, top down & Bottom-Up design approaches.

TILL FINAL EXAM

- (The programming language C is to be taught along with the course in detail)

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UNIT PLAN

Class – C.S.M.-I(SEMESTER-Ist)

ਪੰਜਾਬੀ ਲਾਜ਼ਮੀ

Max Marks: 30

Maximum Time: 3 Hrs.

TILLMST-I

ਪਹਿਲੇ MST ਤੋਂ ਪਹਿਲਾਂ

ੳ) ਕਥਾ-ਰੰਗ (ਕਹਾਣੀ ਸੰਗ੍ਰਹਿ)

1. 27 ਜਨਵਰੀ (ਗਿਆਨੀ ਗੁਰਮੁਖ ਸਿੰਘ ਮੁਸਾਫ਼ਿਰ)
2. ਮੁੜ ਵਿਧਵਾ (ਪ੍ਰਿੰਸੀਪਲ ਸੰਤ ਸਿੰਘ ਸੇਖੋਂ)
3. ਪਠਾਣ ਦੀ ਧੀ (ਸੁਜਾਨ ਸਿੰਘ)
4. ਤ੍ਰਿਸ਼ਨਾ (ਕਰਤਾਰ ਸਿੰਘ ਦੁੱਗਲ)
5. ਭੇਤ ਵਾਲੀ ਗੱਲ (ਸੰਤੋਖ ਸਿੰਘ ਧੀਰ)
6. ਧਰਤੀ ਹੇਠਲਾ ਬੋਲਦ (ਕੁਲਵੰਤ ਸਿੰਘ ਵਿਰਕ)

ਅ) ਸਮਾਜਕ, ਵਾਤਾਵਰਣ ਅਤੇ ਸਭਿਆਚਾਰ ਵਿਸ਼ਿਆਂ ਨਾਲ ਸੰਬੰਧਿਤ ਨਿਬੰਧ।

ੲ) ਵਿਆਕਰਨ:

ਪੰਜਾਬੀ ਧੁਨੀ-ਵਿਉਂਤ : ਸ੍ਰੀ, ਵਿਅੰਜਨ, ਉਚਾਰਨ ਅੰਗ, ਉਚਾਰਨ ਸਥਾਨ ਅਤੇ ਉਚਾਰਨ ਵਿਧੀਆਂ

TILLMST-II

ੳ) ਕਥਾ ਰੰਗ (ਕਹਾਣੀ ਸੰਗ੍ਰਹਿ)

7. ਇੱਕ ਬਾਲੜੀ ਦੇ ਪਤਾਸੇ (ਮਹਿੰਦਰ ਸਿੰਘ ਸਰਨਾ)
8. ਮੋਹੜੀ (ਪ੍ਰੇਮ ਪ੍ਰਕਾਸ਼)
9. ਸ਼ਹੀਦ (ਗੁਲਜ਼ਾਰ ਸਿੰਘ ਸੰਧੂ)

10.	ਜਿਉਣ ਜੋਗੇ	(ਸੁਖਵੰਤ ਕੋਰ ਮਾਨ)
11.	ਮੂਨ ਦੀ ਅੱਖ	(ਮੋਹਨ ਭੰਡਾਰੀ)
12.	ਇਕੀਵੀਂ ਸਦੀ	(ਗੁਰਬਚਨ ਸਿੰਘ ਭੁੱਲਰ)
	ਅ) ਸਮਾਜਕ, ਵਾਤਾਵਰਣ ਅਤੇ ਸਭਿਆਚਾਰ ਵਿਸ਼ਿਆਂ ਨਾਲ ਸੰਬੰਧਿਤ ਨਿਬੰਧ	
	ਏ) ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ: ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉੱਪ ਭਾਸ਼ਾ ਦਾ ਅੰਤਰ ਅਤੇ ਅੰਤਰ-ਸੰਬੰਧ, ਪੰਜਾਬੀ	
	ਉੱਪ-ਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ ਚਿੰਨ	

TILLFINAL EXAM

ਓ) ਕਥਾ-ਰੰਗ (ਕਹਾਣੀ ਸੰਗ੍ਰਹਿ)		
13.	ਬਠਲੂ ਚਮਿਆਰ	(ਅਤਰਜੀਤ)
14.	ਜਿੱਥੋਂ ਸੂਰਜ ਉੱਗਦਾ ਹੈ	(ਕਿਰਪਾਲ ਕਜ਼ਾਕ)
15.	ਭੁੰਮ	(ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ)
	ਅ) ਸਮਾਜਕ, ਵਾਤਾਵਰਣ, ਅਤੇ ਸਭਿਆਚਾਰ ਵਿਸ਼ਿਆਂ ਨਾਲ ਸੰਬੰਧਿਤ ਨਿਬੰਧ।	
	ਏ) ਧੁਨੀ-ਵਿਉਤ ਅਤੇ ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ ਅਧਿਆਇਆਂ ਦੀ ਦੁਹਰਾਈ ਅਤੇ ਇਹਨਾਂ ਨਾਲ ਸੰਬੰਧਿਤ ਵਿਹਾਰਕ	
	ਵਿਆਕਰਨ ਦਾ ਅਭਿਆਸ	
	ਸ) ਸਮੁੱਚੇ ਸਿਲੇਬਸ ਦੀ ਦੁਹਰਾਈ	

Mode of Assessment

Mode of Assessment		
Sr. No.	Component	Weightage
1	Mid Semester Test (MST)	40% (Average of 2 MST)
2	Written Assignments	40%
3	Attendance	20%

UNIT PLANNING (SESSION 2015-16)
MULTANI MAL MODI COLLEGE, PATIALA
UNIT PLAN
Class – C.S.M.-I(SEMESTER-1st)

ਕੁਆਲੀਟੀ ਪੰਜਾਬੀ

Maximum Time: 3 Hrs.

TILLMST-I

(ੳ) ਪੰਜਾਬੀ ਸਾਹਿਤ

(ਕਵਿਤਾ)

1. ਵਿੱਦਿਆ ਵੀਚਾਈ (ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਜੀ)
2. ਇਸ਼ਕ ਦੀ ਨਾਵਿਓਂ ਨਵੀਂ ਬਹਾਰ (ਬੁੱਲੇ ਸ਼ਾਹ)
3. ਹੀਰ (ਵਾਰਿਸ ਸ਼ਾਹ)
4. ਜੰਗਨਾਮਾ (ਸ਼ਾਹ ਮੁਹੰਮਦ)
5. ਵੈਰੀ ਨਾਗ ਦਾ ਪਹਿਲਾ ਝਲਕਾ (ਭਾਈ ਵੀਰ ਸਿੰਘ)

(ਕਹਾਣੀ)

1. ਪੇਸ਼ੀ ਦੇ ਨਿਆਏ (ਸੰਤ ਸਿੰਘ ਸੇਖੋਂ)

(ਨਾਟਕ)

1. ਮਾਂ ਦਾ ਡਿਪਟੀ (ਈਸ਼ਵਰ ਚੰਦਰ ਨੰਦਾ)

(ਅ) ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਅਤੇ ਲੇਕਧਾਰਾ

- i. ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਮੁਢਲੀ ਜਾਣਕਾਰੀ (ਡਾ. ਜਸਵਿੰਦਰ ਸਿੰਘ)
- ii. ਲੇਕ ਧਾਰਾ ਅਤੇ ਸਾਹਿਤ : ਸ.ਸ. ਵਣਜਾਰਾ ਬੇਦੀ

(ੲ) ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿੱਪੀ

- ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੀ ਬਣਤਰ : ਬਲਦੇਵ ਸਿੰਘ ਚੀਮਾ

TILLMST-II

(ੳ) ਪੰਜਾਬੀ ਸਾਹਿਤ

(ਕਵਿਤਾ)

1. ਮੇਲੇ ਵਿੱਚ ਜੱਟ (ਧਨੀ ਰਾਮ ਚਾਤ੍ਰਕ)
2. ਹਾਲ ਵਾਹੁਣ ਵਾਲੇ (ਪ੍ਰੋ. ਪੂਰਨ ਸਿੰਘ)
3. ਤਾਜ ਮਹੱਲ (ਮੋਹਨ ਸਿੰਘ)
4. ਅੱਜ ਆਖਾਂ ਵਾਰਿਸ ਸ਼ਾਹ ਨੂੰ (ਅਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ)
5. ਕਚ-ਸੂਤਕ (ਹਰਿਭਜਨ ਸਿੰਘ)

(ਕਹਾਣੀ)

1. ਕੁਲਫੀ (ਸੁਜਾਨ ਸਿੰਘ)
 - (ਅ) ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਅਤੇ ਲੋਕਧਾਰਾ
- i. ਤੀਆਂ (ਗਿਆਨੀ ਗੁਰਦਿੱਤ ਸਿੰਘ)
 - (ੳ) ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿੱਪੀ
- ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦਾ ਇਤਿਹਾਸ : ਡਾ. ਬਲਦੇਵ ਸਿੰਘ ਚੀਮਾ

TILLFINAL EXAM

(ੳ) ਪੰਜਾਬੀ ਸਾਹਿਤ

(ਕਵਿਤਾ)

- i. ਗਜ਼ਲ (ਜਗਤਾਰ)
- ii. ਗੀਤ (ਸ਼ਿਵ ਕੁਮਾਰ ਬਟਾਲਵੀ)
- iii. ਗਜ਼ਲ (ਸੁਰਜੀਤ ਪਾਤਰ)
- iv. ਅਸੀਂ ਲੜਾਂਗੇ ਸਾਥੀ (ਪਾਸ ਉਰਫ ਅਵਤਾਰ ਸਿੰਘ ਸੰਧੂ)

(ਕਹਾਣੀ)

- i. ਖੱਬਲ (ਕੁਲਵੰਤ ਸਿੰਘ ਵਿਰਕ)

(ਅ) ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਅਤੇ ਲੋਕਧਾਰਾ

i. ਉਹ ਕਵੀਸ਼ਰ ਜੋ ਹੁਣ ਨਹੀਂ ਮਿਲਦੇ : ਸ. ਸੂਬਾ ਸਿੰਘ

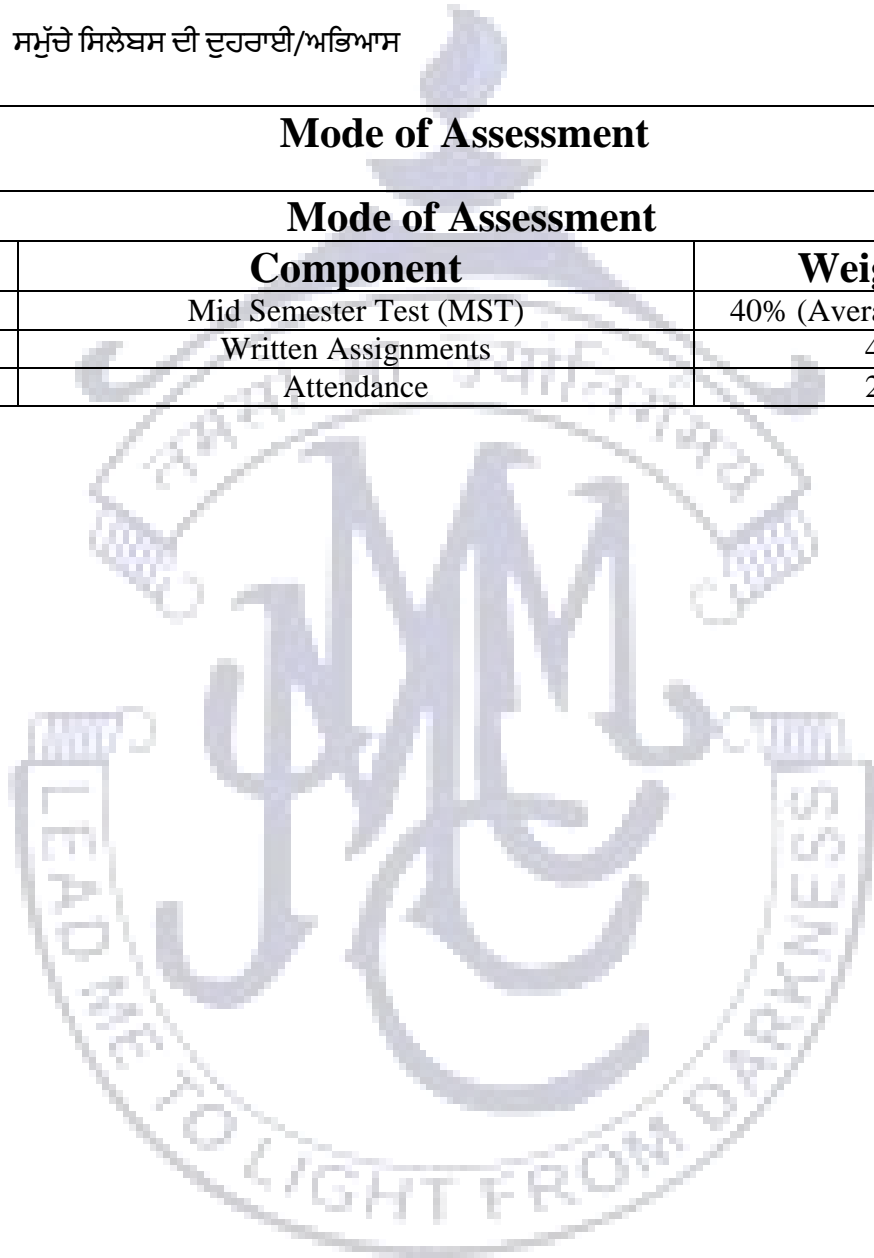
(ੲ) ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿੱਪੀ

‘ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੀ ਬਣਤਰ’ ਅਤੇ ‘ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦਾ ਇਤਿਹਾਸ’ ਦੋਵਾਂ ਅਧਿਆਇਆਂ ਦੀ ਦੁਹਰਾਈ

(ਸ) ਸਮੁੱਚੇ ਸਿਲੇਬਸ ਦੀ ਦੁਹਰਾਈ/ਅਭਿਆਸ

Mode of Assessment

Mode of Assessment		
Sr. No.	Component	Weightage
1	Mid Semester Test (MST)	40% (Average of 2 MST)
2	Written Assignments	40%
3	Attendance	20%



UNIT PLAN

Class – C.S.M.-I(SEMESTER-2nd)

CSM 121: INTEGRAL CALCULUS AND DIFFERENTIAL EQUATIONS

Max Marks: 45

Maximum Time: 3 Hrs.

TILLMST-I
Integration of irrational algebraic and transcendental functions . Reduction formulae. Definite integrals . Quadrature and rectification . Volumes and surfaces of solids of revolution .Degree and order of a differential equation . Equation of first order and first degree. Equations in which the variables are separable . Homogeneous equations . Linear equations and equations reducible to the linear form . Exact differential equations .First order higher degree equations solvable for x, y, p. Clairaut's form and singular solutions . Geometrical meaning of a differential equation.
TILLMST-II
Orthogonal trajectories .Linear differential equation with constant coefficients .Homogeneous linear ordinary differential equations.Linear differential equations of second order ..
TILLFINAL EXAM
Transformation of the equation by changing the dependent variable / the independent variable. Method of variation of parameters .

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MULTANI MAL MODI COLLEGE, PATIALA
UNIT PLAN
Class – C.S.M.-I(SEMESTER-2nd)

CSM 122- GEOMETRY

Max Marks: 45

Maximum Time: 3 Hrs.

TILLMST-I
Transformation of axes , shifting of origin, rotation of axes, reduction of the second degree equation into standard forms by transformation of co-ordinates. The invariants t , Δ and θ . Identification of curves represented by second degree equation. Pole and polar, pair of tangents from a point, chord of contact ,equation of the chord in terms of midpoint and diameter of conic . Conjugate diameters, Conjugate hyperbola .Asymptotes of a hyperbola, rectangular hyperbola . Special properties of parabola, ellipse and hyperbola.Polar equations of conics and equations of chords, tangents and normals only .
TILLMST-II
Sphere . Cone . Cylinder . Central conicoids. Paraboloids. Plane sections of conicoids.
TILLFINAL EXAM
Generating lines. Confocal conicoids . Reduction of second degree equation to standard forms.

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UNIT PLAN

Class – C.S.M.-I(SEMESTER-2nd)

CSM-123 : COMPUTER ORIENTED STATISTICAL METHODS -II

Max Marks: 30

Maximum Time: 3 Hrs.

TILLMST-I
Bivariate data :scatter diagram, product moment correlation coefficient and its properties, coefficient of determination. Spearman's rank correlation coefficient . Concept of errors in regression, principle of least square, fitting of linear regression and related results. Multivariate data: Concepts of Multiple regression.
TILLMST-II
(multiple and partial correlation coefficients (only results no derivations) and their applications. Analysis of categorical data: Contingency of categorical data
TILLFINAL EXAM
(independence & association of attributes, various measures of association for two way classified data.

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UNIT PLANNING (SESSION 2015-16)
MULTANI MAL MODI COLLEGE, PATIALA

UNIT PLAN

Class – C.S.M.-I(SEMESTER-2nd)

CSM-124: PROBABILITY THEORY– II

Max Marks: 30

Maximum Time: 3 Hrs.

TILLMST-I
Standard univariate discrete distributions and properties : Discrete uniform, Binomial, Poisson, Hyper Geometric, Geometric and Negative Binomial distributions. Continuous univariate distributions: Uniform , Normal , Exponential, Gamma, Beta and Chi-square distributions.The bivariate normal distribution, the marginal and conditional probability
TILLMST-II
distributions associated with the bivariate normal distribution (without derivation). Chebyshev's inequality and its applications, statements and applications of weak law of large numbers
TILLFINAL EXAM
central limit theorems (De-moivre's-Laplace and Lindeberg-Levy versions).

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UNIT PLAN

Class – B.Sc. (Computer Science, Statistics, Mathematics) Part – I

2nd Semester

CSM - 126: OBJECT ORIENTED PROGRAMMING USING C++

Max Marks: 50

Maximum Time: 3 Hrs.

TILL MST-I

- Evolution of OOP: Procedure Oriented Programming, OOP Paradigm, Advantages and disadvantages of OOP over its predecessor paradigms.
- Characteristics of Object Oriented Programming: Abstraction, Encapsulation, Data hiding, Inheritance, Polymorphism, Code Extensibility and Reusability, User defined Data Types.
- Introduction to C++: Identifier, Keywords, Constants, Operators: Arithmetic, relational, logical, conditional and assignment. Sizeof operator, Operator precedence and associativity.
- Type conversion, Variable declaration, expressions, statements, manipulators
- Input and output statements, stream I/O, Conditional and Iterative statements, breaking control statements.
- Storage Classes: Automatic, Static, Extern, Register. Arrays, Arrays as Character Strings, Structures, Unions, Bit fields, Enumerations and User defined types.
- Pointers: Pointer Operations, Pointer Arithmetic, Pointers and Arrays, Pointer to functions. Functions: Prototyping, Definition and Call, Scope Rules. Parameter Passing: by value, by address and by reference, Functions returning references, Const functions, recursion, function overloading, Default Arguments, Const arguments.

TILL MST-II

- Inheritance: Multiple, Multilevel, Hierarchical .
- Classes and Objects: Class Declaration and Class Definition, Defining member functions, making functions inline, Nesting of member functions, Members access control. this pointer. Union as space saving classes.
- Objects: Object as function arguments, array of objects, functions returning objects, Const member functions. Static data members and Static member functions.
- Friend functions and Friend classes.
- Constructors: properties, types of constructors (Default, parameterized and copy), Dynamic constructors, multiple constructors in classes. Destructors: Properties, Virtual destructors. Destroying objects. Rules for constructors and destructors.
- Array of objects. Dynamic memory allocation using new and delete operators, Nested and container classes. Scopes: Local, Global, Namespace and Class

TILL FINAL EXAM

- Inheritance: Defining derived classes, inheriting private members, single inheritance, types of derivation, function redefining, constructors in derived class.

Mode of Assessment

Sr. No.	Component	Weightage
1	Mid Semester Test (MST)	40% (Average of 2 MST)
2	Written Assignments	40%
3	Attendance	20%



UNIT PLAN

Class – B.Sc. (Computer Science, Statistics, Mathematics) Part – I

2nd Semester

CSM - 127: Management Information System

Max Marks: 50

Maximum Time: 3 Hrs.

TILL MST-I

- Framework of Management Information Systems: Importance's of MIS, Concepts of Management, information, system, Definition of MIS, information technology and MIS, nature and scope of MIS, MIS characteristics and functions.
- Structure and classification of MIS: structure of MIS, MIS classification, Brief introduction of functional information system, financial information system, marketing information system, production/ Manufacturing information system, human resources information system.
- Decision making and MIS: decision making, Simon's model of decision making, types of decisions, purpose of decision making, level of programmability, knowledge of outcomes, methods of choosing among alternatives, decision making and MIS.
- Information and system concepts: types of information: strategic information, Tactical information, Operational information. Information quality, dimensions of information, System: Kinds of Systems, System related concepts, elements of systems, Human as an information processing system.

TILL MST-II

- System development stages: System investigation, system analysis, system design, construction and testing, implementation, maintenance.
- System development approaches (a brief introduction) : waterfall model, prototyping, iterative enhancement model, spiral model.
- System analysis: introduction, requirement definition, , strategies for requirement definition, structured analysis tools: data flow diagram, data dictionary, decision trees , structured English, decision trees.
- System Design: objectives, conceptual design, design methods, detailed system design.
- Implementation and evaluation of MIS: implementation process, Hardware and software selection, Evaluation MIS, System maintenance.

TILL FINAL EXAM

- Information system Planning: Information system Planning, planning terminology, the Nolan stage model, selecting a methodology, information resources management.

- Information system (IS) as an Enabler: introduction, changing concepts of IS , IS as an enabler

Mode of Assessment

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1	Mid Semester Test (MST)	40% (Average of 2 MST)
2	Written Assignments	40%
3	Attendance	20%



UNIT PLANNING (SESSION 2015-16)
MULTANI MAL MODI COLLEGE, PATIALA
UNIT PLAN
Class – C.S.M.-I(SEMESTER-2nd)

ਪੰਜਾਬੀ ਲਾਜ਼ਮੀ

Max Marks: 45

Maximum Time: 3 Hrs.

TILLMST-I

(ੳ) ਵਾਰਤਕ ਵਿਵੇਕ

- i. ਵਿਗਿਆਨ ਅਤੇ ਸੱਭਿਆਚਾਰ (ਸੁਰਜੀਤ ਸਿੰਘ ਢਿੱਲੋਂ)
- ii. ਗੁਰੂ ਮਹਿਲਾਂ ਦੀ ਨਿਵੇਕਲੀ ਦੇਣ (ਜਸਪਾਲ ਸਿੰਘ)
- iii. ਨਿਰਾਸ਼ ਹੋਣਾ ਮਨੁੱਗਾਂ ਹੈ (ਨਰਿੰਦਰ ਸਿੰਘ ਕਪੂਰ)
- iv. ਮੇਰੀ ਪੜ੍ਹਾਈ (ਜਸਵੰਤ ਸਿੰਘ ਜਫਰ)

(ਅ) ਚਿੱਠੀ ਪੱਤਰ

(ੲ) ਵਿਆਕਰਨ : ਸ਼ਬਦ ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ:ਪਰਿਭਾਸ਼ਾ, ਮੁਢਲੇ ਸੰਕਲਪ, ਮੂਲ ਰੂਪ, ਅਗੇਤਰ, ਪਛੇਤਰ, ਵਿਉਂਤਪਤ ਰੂਪ ਅਤੇ ਰੂਪਾਂਤਰੀ ਰੂਪ |

TILLMST-II

(ੳ) ਵਾਰਤਕ ਵਿਵੇਕ

- i. ਉਹ ਸ਼ਹਿਰ ਜਿੱਥੇ ਮੈਂ ਬਿਰਖ ਬਣਿਆ (ਸੁਰਜੀਤ ਪਾਤਰ)
- ii. ਪੰਜਾਬੀਆਂ ਦੀ ਧੱਕੜ ਖੇਡ ਕਬੱਡੀ (ਸਰਵਣ ਸਿੰਘ)
- iii. ਬਾਲੀਵੁੱਡ ਵਿੱਚ ਬੱਲੇ ਬੱਲੇ (ਸਤੀਸ਼ ਕੁਮਾਰ ਵਰਮਾ)
- iv. ਪਾਲਦੀ (ਜਸਵੰਤ ਦੀਦ)

(ਅ) ਚਿੱਠੀ ਪੱਤਰ

(ੲ) ਵਿਆਕਰਨ : ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ: ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉੱਪ ਭਾਸ਼ਾ ਦਾ ਅੰਤਰ ਅਤੇ ਅੰਤਰ-ਸੰਬੰਧ, ਪੰਜਾਬੀ ਉੱਪ-ਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ ਚਿੰਨ੍ਹ|

TILLFINAL EXAM

(ੳ) ਵਾਰਤਕ ਵਿਵੇਕ

- i. ਪੰਜਾਬੀ ਲੋਕ ਗਾਇਕੀ ਦੇ ਚਾਰ ਥੰਮ (ਨਿੰਦਰ ਘੁਗਿਆਣਵੀ)
- ii. ਭਰੂਣ ਹੱਤਿਆ- ਇਤਿਹਾਸ, ਵਰਤਮਾਨ ਤੇ ਭਾਵਿੱਖ

(ਅ) ਸਮੁੱਚੇ ਸਿਲੇਬਸ ਦੀ ਦੁਹਰਾਈ

Mode of Assessment

Mode of Assessment		
Sr. No.	Component	Weightage
1	Mid Semester Test (MST)	40% (Average of 2 MST)
2	Written Assignments	40%
3	Attendance	20%

