

B.Sc.; LL.B. (Hons.)								
Teaching & Examination Scheme								
BATCH 2021-26								
S.no	Course Code and Title	Teaching Scheme				Examination Scheme		
		Credits		Component Weightage		Internal		External
				Total		CA	PWE	SEE
Semester-II								
1	SLBSI-S2-P1 Legal Language and Writing	4	0	0	4	0.5	--	0.5
2	SLBSL-S2-P2 Law and Society	4	0	0	4	0.5	--	0.5
3	SLBSL-S2-P3 Jurisprudence	4	0	0	4	0.5	--	0.5
4	SLBSL-S2-P4 Object Oriented Programming Using C++	2	0	2	4	0.2	0.3	0.5
5	SLBSL-S2-P5 Relational Database Management System	2	0	2	4	0.2	0.3	0.5
6	SLBSL-S2-P6 Statistics	4	0	0	4	0.5	--	0.5
	Total	20	0	4	24			

L::: Lecture, **T:::** Tutorial , **P:::**Practical

CA::: Continuous Assessments

(CA includes Mid Semester Examination, Term Assignment, MCQ Examination, Seminar, Reflective notes etc.)

PWE::: Practical Work Examination

(PWE includes Laboratory practical work, project work, simulation exercise work etc.)

SEE::: Semester End Examination

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School of Law,
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(Decoding Forensics for Public Welfare)

Five Year Integrated B.Sc. LL.B. (Hons.) Programme
Annexure- XVI



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Sector-9, Gandhinagar-382007, Gujarat

SCHOOL OF LAW, FORENSIC JUSTICE AND POLICY STUDIES

Syllabus-2021
B.Sc.; LL.B. (Hons.) Semester-II
Five year Integrated Programme



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S. no	Course Code and Title	Teaching Scheme			Examination Scheme		
		Credits			Component Weightage		
		L	T	P	Total	Internal	External
					CA	PWE	SEE
Semester-II							
1	SLBSL-S2-P1 Legal Language and Writing	4	0	0	4	0.5	-- 0.5
2	SLBSL-S2-P2 Law and Society	4	0	0	4	0.5	-- 0.5
3	SLBSL-S2-P3 Jurisprudence	4	0	0	4	0.5	-- 0.5
4	SLBSL-S2-P4 Object Oriented Programming Using C++	2	0	2	4	0.2	0.3 0.5
5	SLBSL-S2-P5 Relational Database Management System	2	0	2	4	0.2	0.3 0.5
6	SLBSL-S2-P6 Statistics	4	0	0	4	0.5	-- 0.5
	Total	20	0	4	24		

L::: Lecture, T::: Tutorial , P:::Practical

CA::: Continuous Assessments

(CA includes Mid Semester Examination, Term Assignment, MCQ Examination, Seminar, Reflective notes etc.)

PWE:: Practical Work Examination

(PWE includes Laboratory practical work, project work, simulation exercise work etc.)

SEE:: Semester End Examination





Five Year Integrated B.Sc. LL.B. (Hons.) Programme

Subject: 1Legal Language and Writing

Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme			
Credits				Component Weightage			
L	T	p	Total	CA	LPW	SEE	
4	0	0	4	0.5	-	0.5	

Programme Name	B.Sc.; LL.B. (Hons.)(Five-year integrated programme)
Semester	II
Course Code	SLBSL-S2-P1
Course Title	Legal Language and Writing
Course Content Type (Th./Pr.)	Theory
Course Credit	4
Sessions+ Lab. Per Week	
Total Teaching/Lab. Hours	60 hours

* 2 Laboratory = 1 Session

Learning Objectives

- To analyse and classify the various types of errors and find out their source and cause.
- To engage students thinking about the origin of word; its meanings and function in language.
- To develop students' written expression by providing varied formats and forms of writing.
- To understand Legal Maxim and their usage in day today activity of court.

Prerequisites (if any)

Learning Outcomes

After successfully completion of the course, Students will be able to

- Recognize the various types of errors
- Compare and discover various word formations and its usage.
- Demonstrate the capacity to use various writing forms.
- Use Legal maxim in their day to day activity.





Five Year Integrated B.Sc. LL.B. (Hons.) Programme

UNIT	TOPIC/SUB-TOPIC	TEACHING HOURS
I	Common Errors in English <ul style="list-style-type: none"> • Errors in use of Tenses • Errors in use of Subject-verb agreement • Errors in use of Noun-pronoun agreement • Errors in use of Misplaced modifiers • Errors in use of Prepositions • General errors in Sentence Constructions 	15
II	Vocabulary building <ul style="list-style-type: none"> • Types of word formation processes: compounding, clipping, blending, derivation, creative respelling, coining and borrowing • Acquaintance with prefixes and suffixes • Synonyms, antonyms • use of appropriate words, Idioms & Phrases 	15
III	Drafting and Comprehending Skills: <ul style="list-style-type: none"> • Composition and Essay Writing on Legal Topics, • Job Applications: Essential Parts of a Cover Letter, Drafting a Resume and its functions • Writing Notice, Agenda and Minutes, Email Writing, Memorandum 	15
IV	Legal Language <p>a. Legal Terms- factum valet, fait accompli, fiat justicia, inter alia, in limine, ipso facto, intra vires, jus ad rem, jus in personem, locus standi, persona non grata, mutalis mutandis, pari passu, obiter dictum, modus operandi, mens rea, onus probandi, nudum pactum, prima facie, pro bono publico</p> <p>b. Legal Maxims: actus non facit reum nisi men sit rea, nemo dat quod non habet, ignorantia legis neminem excusat, pacta sunt servanda , ,</p>	15





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	execution juris non habet injurium, ex nudo pacto non oritur actio, executio juris non habet injurium, ubi jus ibi remedium, damnum sine injuria, injuria sine damno, aut punere aut dedere, bona fides non patitur ut bis idem ex igatur	
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Text Book(s)

Reference Books

1. Technical English, Dr. M. Hemamalini, Wiley. 2014
2. Practical English Usage, Michael Swan, OUP. 1995
3. On Writing Well, William Zinsser, Harper Resource Book. 2001
4. Study Writing, Liz Hamp-Lyons and Ben Heasly, Cambridge University Press. 2006

Web Resources

<https://citeseerx.ist.psu.edu/viewdrc/download?doi=10.1.1.739.5278&rep1&type=pdf>

Required Software(s) (if any)

List of Sample Practical





Five Year Integrated B.Sc. LL.B. (Hons.) Programme

Subject: 2Law and Society

Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme		
Credits				Component Weightage		
				Internal	External	SEE
L	T	p	Total	CA	LPW	SEE
4	0	0	4	0.5	-	0.5

Programme Name	B.Sc.; LL.B. (Hons.)(Five-year integrated programme)
Semester	II
Course Code	SLBSL-S2-P2
Course Title	Law and Society
Course Content Type (Th./Pr.)	Theory
Course Credit	4
Sessions+ Lab. Per Week	
Total Teaching/Lab. Hours	60 hours
* 2 Laboratory = 1 Session	

Learning Objectives

- To develop understanding about the principal schools of thought in sociology of law
- To analyse about the making of law and legal system

Prerequisites (if any)

Learning Outcomes

After successfully completion of the course, Students will be able to

- Recognize the conceptual and theoretical standpoints on law and society.
- Demonstrate the understanding on making of law and legal system.
- Compare and discover different perspectives of legal system.
- Evaluate the Policies, Programmes and Legal Issues Related to Indian Society

UNIT	TOPIC/SUB-TOPIC	TEACHING HOURS
I	I. Introduction to Sociology of the Law 1.1 Meanings & origins: Sociology, Law & Society and Sociology of Law 1.2 Different Legal Systems and corresponding societies 1.3 British Indian Legal System and Indian	13

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Five Year Integrated B.SC. LL.B. (Hons.) Programme

	<p>I Legal System</p> <p>II. Law in the Social Context</p> <p>2.1 Functional-Structural Theories of Law: Durkheim, Weber, Maine</p> <p>2.2 Development and evolution of the law, norms and customs as the basis of law</p> <p>2.3 Sources of Laws</p> <p>2.4 Perspectives on law</p> <ul style="list-style-type: none"> a. Law as Mirror of Society b. Law influences Social Order c. Law as Social Construct 	
II	<p>III. Who Makes the Law?</p> <p>3.1 Social Stratification (Age, Caste, Class, Gender)</p> <p>3.2 What laws do we want? Who Decides? Who makes? And for Whom?</p> <p>3.3 Conflict and Neo-Marxist Theories of law, how do we want the laws enforced?</p> <p>IV. Analysis of the Law as a Social System</p> <p>4.1 Applying legal theory to modern (Indian) society,</p> <p>4.2 Social Organization of law, limitation on the law</p> <p>4.3 Adversary nature of the law</p> <p>4.4 Law as a social interaction system</p>	15
III	<p>V. Continuity and Change in Indian Society</p> <p>5.1 Approaches to Social Change in India: Cultural, Structural and Dialectical-Historical</p> <p>5.2 Process of Social Change: Sanskritisation, Westernization and Modernization</p> <p>5.3 Law as an instrument of Social Change.</p> <p>VI. Comparative perspectives: legal systems and social change</p> <p>6.1 Correlation between law and social change</p> <p>6.2 Legal evolution and social complexity (Maine, Savigny, Durkheim)</p> <p>6.3 Legalism and Capitalism (Karl Marx and Max Weber)</p> <p>6.4 Relevance of Marxist and Weberian analysis to problems of planned economic development in Developing societies</p>	17
IV	<p>VII. Policies, Programmes and Legal Issues Related to Indian Society</p> <p>7.1 Reservation for SCs, STs, OBCs and women.</p>	15





Five Year Integrated B.S.C. LL.B. (Hons.) Programme

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| | 7.2 Social inclusion and exclusion
7.3 Labour: Child, women and unorganized
7.4 Atrocities and crime against women | |
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Text Book(s)

- Ahuja, Ram. 2010. Indian Social System. New Delhi: Rawat Publication
- Anleu, Roach. 2003. Law and social change (3rd print). New Delhi: Sage publications
- Baxi, Upendra. 1986. Towards a sociology of Indian law. New Delhi: Satyavahana Publications
- Betelle, Andre. 1971. Caste Class and Power: Changing patterns of social stratification in a Tanjore village. Berkely: University of California Press
- Bhat, Ishwar P. 2012. Law & social transformation. New Delhi: Eastern Book Company
- Rao, C.N. Shankar. 2008. Sociology: Principles of Sociology with an Introduction to Social Thoughts. New Delhi: S Chand & Co Ltd
- Singh, Yogender. 1986. Social stratification and change in India. New Delhi: Manohar Publication

Reference Books

- Baxi, Upendra. 1982. The crisis of India legal system. New Delhi: Vikas Publishing House
- Nelken, David. 2009. Beyond law in context. London and New York: The Routledge
- Haralambos, M., Robin Heald & Martin Holborn. 2008 (7th eds). Sociology: Themes & Perspectives. London: Harper Collins Publishers
- Cotterrell, Roger. 2007. The Sociology of Law: An Introduction. New Delhi: Oxford University Press
- Desai, A.R. 1960 (5th ed.). Social background of Indian nationalism. Bombay: Popular Prakashan Pvt. Ltd.
- Deva, Indra (ed.). 2005. Sociology of Law. New Delhi: Oxford University Press
- Gandhi, J.S. 2004. Law, State and Society: Indian Context. Jaipur: Rawat Publications
- Rao, C.N. Shankar. 2004. Sociology of Indian Society. New Delhi: S Chand & Co Ltd

Web Resources

Required Software(s) (if any)

List of Sample Practical



Five Year Integrated B.Sc. LL.B. (Hons.) Programme

Subject: 3 Jurisprudence

Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme		
Credits				Component Weightage		
L	T	P	Total	Internal	External	
4	0	0	4	0.5	-	0.5

Programme Name	B.Sc.;LL.B.(Hons)(Five year Integrated programme)
Semester	II
CourseCode	SLBSL-S2-P3
CourseTitle	Jurisprudence
CourseContentType (Th./Pr.)	Theory
CourseCredit	4
Sessions+Lab. Per Week	
Total Teaching/Lab. Hours	60

*2 Laboratory = 1 Session

Learning Objectives

1. To give an overview to the students about law, its meaning, and its evolution so as to form a base for advanced learning.
2. To learn the jurisprudential basis of various concepts under law.
3. To familiarize students with various schools of thoughts in jurisprudence and their relevance in the present context.
4. To familiarize students with legal theory and its linkages with other social sciences.

Prerequisites (if any)

NA

Learning Outcomes

At the end of the course, the student will be able to:

1. Demonstrate understanding of the basic ideas and fundamental of Law and Legal Theory.
2. Critically evaluate the predominant jurisprudential school of thought.
3. Identify juridical correlation and kinds of rights.
4. Appraise the individual concepts under Jurisprudence and examine with the help of case laws views of the judges on various concepts.





Five Year Integrated B.S.C. LL.B. (Hons.) Programme

Detailed Contents

UNIT	TOPIC/SUB-TOPIC	TEACHING HOURS
I	INTRODUCTION <ol style="list-style-type: none"> 1. Jurisprudence-Meaning, Definitions, Nature, Scope. 2. Jurisprudence and Legal Theory 3. Law-Meaning, Concept, Definition and Kind of Law. 4. Sources of Law- Constitution, Custom, Legislation, Precedent 	15
II	SCHOOLS OF JURISPRUDENCE <ol style="list-style-type: none"> 1. Natural School of Law- Ancient, Classical and Modern Theories; Revival of Natural Law; Indian Perspectives; Natural Law and the Indian Constitution. 2. Positive/Analytical School of Law- Austin's theory of Law, Bentham's Utilitarianism, Kelson's pure theory of Law, HLA Hart's concept of Law. 3. Historical School of Law-Savigny, Maine, 4. Sociological School of Law- Roscoe Pound's Social Engineering, Ihering's Interest theory, Duguit's Social Solidarity theory. 5. Realism-American and Scandinavian Realism 	15
III	CONCEPTS IN JURISPRUDENCE <ol style="list-style-type: none"> 1. Jurisprudence of Rights- Definitions, Scope, Interest and Will theories of Rights, Hohfeld's analysis of Rights. 2. Rights and Duty Correlation, Kind of rights. 3. Person- Definition, Natural and Juristic Person, Kind of Persons, Theories of Corporate Personality. 4. Status of Dead Persons, Unborn Child, Idol, Temple, and Mosques. 	15
IV	CONCEPTS IN JURISPRUDENCE <ol style="list-style-type: none"> 1. Possession- Definition, Concept, Essential Elements, Kind of Possession, Modes of Acquisition and Loss. 2. Ownership- Definition, Meaning, Kinds, Essentials, Modes of Acquisition and Loss; Gandhian concept of 	135





Five Year Integrated B.Sc. LL.B. (Hons.) Programme

	Public Ownership. 3. Property- Concept, Nature of Property Rights, Property Rights and the Indian Constitution. 4. Theories of Property - Locke, Hegel, Kant.	
Text Book(s)		
1. Mahajan, V.D., Jurisprudence and Legal Theory. Eastern Book Company. 201		
Reference Books		
1. Dias, R.W.M. Jurisprudence. LexisNexis Publication. 2013. 2. Palon, W. A text book of Jurisprudence, Clarendon Press, 1984. 3. Williams Glanville. Learning of the Law, 5th Indian reprint, Sweet & Maxwell, 1997. 4. Golding, Martin P.; Edmundson, William A. The Blackwell guide to the philosophy of law and legal theory. Blackwell Publication, 2005. 5. Hart, H.L.A. The Concept of Law. 3rd Edition. Oxford University Press. 2012. 6. Salmond, J.W. Salmond on Jurisprudence. 12th Edition. Sweet and Maxwell, 1966.		
Web Resources		
1. Marmor, A. The Nature of Law, Stanford Encyclopaedia of Philosophy, available at https://plato.stanford.edu/entries/lawphil-nature/ 2. Green, L. Legal Positivism, Stanford Encyclopaedia of Philosophy, available at https://plato.stanford.edu/entries/legal-positivism/ 3. Finnis, J. Natural Law Theories, Stanford Encyclopaedia of Philosophy, available at https://plato.stanford.edu/entries/natural-law-theories/ 4. Marmor, A. The Pure Theory of Law, Stanford Encyclopaedia of Philosophy, available at https://plato.stanford.edu/entries/lawphil-theory/ 5. EPG Pathshala, Classical Positivism – Bentham, Austin, Kelsen, available at https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=20 EPG Pathshala, Sociological Perceptions of Law, available at https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=20		
Required Software(s) (if any)		
Hein Online, Manupatra, Jstor, SCC Online, Lexis Nexis		
List of Sample Practical		
NA		



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Five Year Integrated B.Sc. LL.B. (Hons.) Programme

Subject: 4 Object Oriented Programming Using C++

Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme		
Credits				Component Weightage		
				Internal	External	
L	T	P	Total	CA	LPW	SEE
2	0	2	4	0.2	0.3	0.5

L-Lecture, T-Tutorial, P-Practical, CA-Continuous Assessment, LPW-Laboratory Practical Work, SEE-Semester End Examination

Programme Name	B.Sc.; LL.B. (Hons.)(Five-year integrated programme)
Semester	II
Course Code	SLBSL-S2-P4
Course Title	Object Oriented Programming Using C++
Course Content Type (Th./Pr.)	Theory + Practical
Course Credit	4
Sessions + Lab. Per Week	2 + 4*
Total Teaching / Lab. Hours	60

*2 Laboratory = 1 Session

Learning Objectives

- To develop programming skills using object-oriented programming concepts, principles and techniques

Prerequisites (if any)

Experience with C programming language

Learning Outcomes

On the completion of this course, students will be able to:

- Differentiate the procedural and object-oriented programming paradigm
- Describe function, classes and objects
- Classify various types of inheritance and implement concepts like operator overloading, virtual function and polymorphism
- Understand dynamic memory management techniques using pointers, constructors, destructors, file handling and usage of exception handling

Detailed Contents

UNIT	TOPIC/SUB-TOPIC	TEACHING
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		HOURS
I	<p>Introduction to Object Oriented Concepts Concept of Object-Oriented Programming, Characteristics of Object-Oriented Programming, Object oriented programming vs procedure programming, Difference Between C and C++</p> <p>Programming Basics Introduction to C++ programming, C++ basic structure, Using I/O Operators, Directives, endl Manipulator, setw manipulator, Library Functions, Keywords, Comments, Variables, Data Types, Reference Variables, decision making and control structures</p>	15
II	<p>Functions Function Overloading, Default Arguments, Inline Function, Scope Resolution Operator, Call and return by reference, Friend Function</p> <p>Classes and Objects Structure vs Class, Structures in C++, Access Specifiers, Classes, Objects, Member Functions and Data Members, Characteristics of Access Specifiers, Function outside a class, Arrow Operator, 'this' pointer, arrays within a class, array of object</p>	15
III	<p>Inheritance, Virtual Function and Polymorphism Introduction, Advantages of Inheritance, Inheritance using different access specifier, Different forms of Inheritance, Rules for Virtual Functions, Internals of Virtual Functions, Pure Virtual Function, Virtual Base class, Virtual destructor, Abstract class, Limitations of Virtual Function, types of polymorphism, Early binding vs Late binding</p> <p>Operator Overloading Operators that can be overloaded, Overloading Unary and Binary Operators</p>	15
IV	<p>Constructor-Destructor Invocation Introduction, types, Order of Invocation of Constructors and destructors</p> <p>File Management and Exception Handling Introduction, classes for file stream, file operations, file modes, introduction of exception handling</p>	15
Textbook(s)		
1. Object Oriented Programming with C++, By: E. Balagurusamy, Publication: McGraw Hill		1369
Reference Books		
1. Object Oriented Programming with C++, By: Subhash KU, Publication:		





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Five Year Integrated B.Sc. LL.B. (Hons.) Programme

Pearson

2. Object Oriented Programming using C++, By: Joyce Farrell, Publication: Cengage
3. Object Oriented Programming in Turbo C++, By: Robert Lafore, Publication: Galgotia
4. Let us C++, By: Yashwant Kanetkar, Publication: BPB

Web Resources

1. <https://www.tutorialspoint.com/cplusplus/>
2. <https://www.javatpoint.com/cpp-tutorial>
3. <https://www.programmingsimplified.com/c++-source-codes>
4. <https://www.geeksforgeeks.org/c-plus-plus/>
5. <https://www.programiz.com/cpp-programming>

Required Software(s) (if any)

Turbo C++/Visual C++

List of Sample Practical/Programs

Associated with theory concepts



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Five Year Integrated B.Sc. LL.B. (Hons.) Programme

Subject:5 Relational Database Management System

Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme		
Credits				Component Weightage		
				Internal	External	
L	T	p	Total	CA	PWE	SEE
2	0	2	4	0.2	0.3	0.5

Programme Name	B.Sc.; LL.B. (Hons.)(Five-year integrated programme)
Semester	II
Course Code	SLBSL-S2-P5
Course Title	Relational Database Management System
Course Content Type (Th./Pr.)	Theory/Practical
Course Credit	4
Sessions+ Lab. Per Week	2+2
Total Teaching/Lab. Hours	60 Hours

* 2 Laboratory = 1 Session

Learning Objectives

1. This course would make students familiar with database concept.
2. Evaluate problem and find the requirements of a problem in terms of data.
3. Students can develop skill for data analytics using DBMS and RDBMS

Prerequisites (if any)

Learning Outcomes

On the Completion of this course, students will able to:

1. Understand the uses the database and need for normalization.
2. Design the database schema with the use of appropriate data types for storage of data in database.





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3. Recognize the purpose of query processing, optimization and demonstrate the SQL query evaluation
4. Design various database object
5. Design oracle block with advance database object to solve the given problem using SQL and PL/SQL.

Detailed Contents

UNIT	TOPIC/SUB-TOPIC	TEACHING HOURS
I	DBMS Overview, SQL, SQL*Plus Basic Concepts: data, database, database systems, database management system, Purpose and advantages of Database management system (over file systems), Introduction to RDBMS, Dr.E.F.Codd Rules, Normalization. Introduction to SQL, SQL Commands and Datatypes , Introduction to SQL*Plus , SQL*Plus formatting commands , SQL v/s SQL*Plus.	10
II	Managing Tables and Data, Data Control and Transaction Control Command Creating , Altering & Dropping tables, Data Manipulation Command like - Insert, update, delete, Different type of constraints , SELECT statement with WHERE, GROUP BY and HAVING, ORDER BY, DISTINCT, Special operator like IN, ANY, ALL, BETWEEN, EXISTS, LIKE, Join (Inner join ,outer join, self-join) , subquery, minus, intersect, union, Creating user, Grant, Revoke command, Starting and Ending of Transaction Commit, Rollback, SavePoint	17
III	Other ORACLE Database Objects and built in functions View, Sequence, Synonyms, Database Links, Index Built in functions -> Numeric Function (abs, ceil, exp, floor, greatest, least, log, log10, max, min, round , sqrt, trunc) Character Function(concat, initcap, lower, lpad, ltrim, replace, rpad, rtrim, substr, trim, upper) Date Function(add_months, last_day, months_between, next_day, round (date), sysdate, trunc (date), to_date, to_char) Aggregate function(Sum, Count, AVG, MAX, MIN)	17





Five Year Integrated B.S.C. LL.B. (Hons.) Programme

IV

Introduction to PL/SQL

SQL v/s PL/SQL, PL/SQL Block Structure, Language construct of PL/SQL (Variables, Basic and Composite Data type, Conditions looping etc.) , %TYPE and %ROWTYPE , Using Cursor(Implicit, Explicit) ,Creating and Using Procedure, Functions, Package, Triggers

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Text Book(s)

1. SQL,PL/SQL The programming - Lang.Of Oracle Ivan Bayross – BPB

Reference Books

1. Database System Concepts- Silberschatz, Korth, Sudarshan, Fifth Edition, McGraw Hill
2. Fundamentals of Database Systems, Elmsasri ,Navathe, Pearson Education
3. Database Management Systems, Ramakrishnan, Gehrke, McGraw Hill
4. Database Systems: Concepts, Design and Applications, S. K. Singh, Pearson Education
5. Oracle Database 12c The Complete Reference (Oracle Press) by Bob Bryla , Kevin Loney – Oracle Press

Web Resources

1. <https://www.tutorialspoint.com/sql/index.htm>
2. <https://www.w3schools.com/sql/>
3. <https://www.javatpoint.com/sql-tutorial>
4. <https://www.tutorialspoint.com/plsql/index.htm>
5. <https://www.javatpoint.com/pl-sql-tutorial>

Required Software(s) (if any)

Oracle

Practical

Experiments to support the associated theory course



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Five Year Integrated B.Sc. LL.B. (Hons.) Programme

Subject: 6 Statistics

Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme		
Credits				Component Weightage		
				Internal	External	
L	T	P	Total	CA	PWE	SEE
4	0	0	4	0.5		0.5
Programme Name				B.Sc.; LL.B. (Hons.)(Five-year integrated programme)		
Semester				II		
Course Code				SLBSL-S2-P6		
Course Title				Statistics		
Course Content Type (Th./Pr.)				Theory		
Course Credit				4		
Sessions+ Lab Per Week				4		
Total Teaching/Lab. Hours				60 hours		

Learning Objectives

- To enable students to understand the use of statistical methods for collecting, organizing and analyzing data and drawing conclusions from there to make effective business decisions.
- To demonstrate knowledge of probability and the standard statistical distributions, hypothesis testing, sampling , correlation and regression analysis.

Prerequisites (if any)

Basic knowledge of mathematics

Learning Outcomes



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Five Year Integrated B.Sc. LL.B. (Hons.) Programme

This Course will enable students to:

1. Acquire knowledge of Statistics and its scope and importance in various areas.
2. Understand of various types of data in diagrammatic representation.
3. Analyze different types of data and tabulated.
4. Understand various types of data, their organization and evaluation of summary measures such as measures of central tendency and dispersion etc.
5. Find insights into preliminary exploration of different types of data.

Detailed Contents

UNIT	TOPIC/SUB-TOPIC	TEACHING HOURS
I	Introduction to Statistics : Introduction of Statistics-Sources of data-techniques of data collection-primary data and secondary data-methods of collecting primary data and secondary data-classification of data-frequency distribution. Diagrammatic and graphic representation :Bar diagrams-Pie charts-histogram-frequency polygon-ogive curves. Measures of Central Tendency: Introduction-features of good average-Arithmetic mean, merits and demerits-Arithmetic mean individual observation ,discrete series ,continuous series- Median, merits and demerits-Median individual observation ,discrete series ,continuous series- Mode, merits and demerits-Mode individual observation ,discrete series ,continuous series.	15



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	<p>Measures of Dispersion : Introduction-properties of a good measures of dispersion-methods of studying dispersion-Range, Quartile deviation, Mean deviation(MD), its merits and demerits, calculation for Individual observation, calculation on discrete and continuous Series.</p> <p>Variance - Standard Deviation : Variance, its merits and demerits, calculation for Individual observation, calculation on discrete and continuous Series. Standard Deviation, its merits and demerits, calculation for Individual observation, calculation on discrete and continuous Series. Coefficient of Variation.</p>	15
II	<p>Correlation and Regression: Meaning, Types of Correlation. Measures of Correlation: Scatter diagram, Karl Pearson's Coefficient of Correlation, Rank Correlation Coefficient, Bi-variate frequency distribution, correlation coefficient for bi-variate data and simple problems. Concept of multiple and partial correlation coefficients (three variables only) Linear Regression: Regression lines, Regression coefficients and it's properties, Regressions lines for bi-variate data and simple problems.</p> <p>Sampling Theory : Sampling, Population, Samples, Types of Sampling, Use of Random Numbers, Parameter and Statistics, Sampling Distribution of Mean, Sampling Distribution of Sample Variance, Sampling Distribution of Sample Proportion.</p>	15
III		

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Probability: Introduction to probability, Theories of probability – Classical, Relative frequency and subjective, Laws of probability – addition, multiplication. Inverse Probability, Revision of probability: BAYES' RULE	
IV	Hypothesis Testing Statistical Tests and Testing of Hypothesis Elementary theory and practice of sampling, standard error or means and variance, tests of significance, T test, F test, Z test and chi-square test along with their applications, Goodness of fit, testing of hypotheses and decision making, analysis of variance (ANOVA). 15
Text Book(s) 1. Gupta, S.P. (2005): Statistical Methods, Sultan Chand & Sons Pvt. Ltd. New Delhi. 2. Gupta, S.C and Kapoor, V.K. (2002): Fundamentals of Mathematical Statistics, Sultan Chand & Sons Pvt. Ltd. New Delhi	
Reference Book(s) 1. Goon, A.M., Gupta, M.K. and Dasgupta, B. (1991): Fundamentals of Statistics - Volume 1, World press, Calcutta. 2. Kapoor, J.N. and Saxena, H.C. (2002): Mathematical Statistics, S. Chand & Sons Pvt. Ltd., New Delhi. 3. Dutta, D.(2005): Statistics and Operation Research, Laxmi Publication Pvt. Ltd., New Delhi 4. William Feller: Introduction to Probability theory and its applications. Volume -I, Wiley 5. Goon AM, Gupta MK, Das Gupta B : Fundamentals of Statistics , Vol-I, the World Press Pvt.Ltd., Kolkata.	
Web Resource(s)	



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(Ministry of Home Affairs, Government of India)

School of Law,
Forensic Justice & Policy Studies
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1. TalkStats <http://www.talkstats.com/>
2. Math Help Forum <https://mathhelpforum.com/math/advanced-statistics-probability/>
3. Free Statistical Consulting Over the Internet <http://www.stat-help.com/spreadsheets.html>
4. Stats Make Me Cry online blog <http://www.statsmakemecry.com/>
5. HyperStat Online Statistics Textbook <https://davidmlane.com/hyperstat/>



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