

DON BOSCO ARTS & SCIENCE COLLEGE
ANGADIKADAVU

(Affiliated to Kannur University Approved by Government of Kerala)
ANGADIKADAVU P.O., IRITTY, KANNUR – 670706



COURSE PLAN

BSc MATHEMATICS

(2018 – 21)

SEMESTER - III

ACADEMIC YEAR - (2019-20)

III Semester BSc MATHEMATICS (2018 - 21)

SL. No.	Name of Subjects with Code	Name of the Teacher	Duty Hours per week
1.	3A05ENG Readings in Prose and Poetry	Anjana S. Kumar	5
2.	3A 09 MAL Malayalakavitha	Silvi Tharal	5
3.	3A 09 HIN GadyaKeVividhRoop	Priyanka P. Devasia	5
4.	3B03 MAT Elements of Mathematics I	Riya Baby	5
5.	3C03CSC Data Base Management System	Hebin Layola	3
6.	4C05CSC Lab-I C Programming,DBMS&Visual Basic	Hebin Layola	2
7.	3C03STA Standard ProbabilityDistributions	Arun Das V. P.	5
8.			
	Class Incharge	Riya Baby	

TIME TABLE

Day	09.50 Am - 10.45 Am	10.45 Am - 11.40 Am	11.55 Am -12.50 Pm	01.40 Pm - 02.35 Pm	02.35 Pm - 03.30 Pm
1	3B03 MAT Elements of Mathematics I	3C03STA Standard Probability Distributions	3C03CSC Data Base Management System	3A05ENG Readings in Prose and Poetry	3A 09 MAL Malayalakavitha/ 3A 09 HIN GadyaKeVividhRoop
2	3B03 MAT Elements of Mathematics I	3A 09 MAL Malayalakavitha/ 3A 09 HIN GadyaKeVividhRoop	3C03CSC Data Base Management System	3C03STA Standard Probability Distributions	3A05ENG Readings in Prose and Poetry
3	3A 09 MAL Malayalakavitha/ 3A 09 HIN GadyaKeVividhRoop	3A05ENG Readings in Prose and Poetry	3B03 MAT Elements of Mathematics I	3C03CSC Data Base Management System	3C03STA Standard Probability Distributions
4	3A05ENG Readings in Prose and Poetry	3C03CSC Data Base Management System	3C03STA Standard Probability Distributions	3A 09 MAL Malayalakavitha / 3A 09 HIN GadyaKeVividhRoop	3B03 MAT Elements of Mathematics I
5	3C03CSC Data Base Management System	3C03STA Standard Probability Distributions	3B03 MAT Elements of Mathematics I	3A05ENG Readings in Prose and Poetry	3A 09 MAL Malayalakavitha / 3A 09 HIN GadyaKeVividhRoop

Subject Code:	3A 05 ENG
Subject Name:	Readings in Prose and Poetry
No. of Credits:	4
No. of Contact Hours:	90
Hours per Week:	5
Name of Faculty:	Anjana S. Kumar

Objective:-

1. The student understands the timeless significance of good literature which transcends the limitations and peculiarities of the age it was written in.
2. The student will acquire an understanding that language and literature are primary means by which culture and human values are transmitted.
3. The student will understand the subtleties of literary devices and techniques in the comprehension and creation of communication.
4. The student will understand the use of images and sounds to elicit the reader's emotions in both non-fiction and poetry.
5. The student will learn to see writing as an act of communication which has a purpose, a context and an audience.

Module 1

Prose

1. Mystic Experience :Nataraja Guru
2. Sanskrit and World Literature : C Rajendran
3. I Have a Dream : Martin Luther King Jr
4. Excerpt from Biography of Ayyankali :Dasan M, Pratibha V
5. Dynamic Sport of the World : Davy A, Rocca
6. The Monster Lives :
7. The New Alexandrians :Tapscott and D. Williams

Module 2

Poetry

1. The World is Too Much With us : W. Wordsworth
2. Where the Mind is Without Fear : Rabindranath Tagore
3. Macavity: The Mystery Cat : T.S Eliot
4. My Grandmother's House : Kamala Das
5. The Negro Speaks of Rivers : Langston Hughes
6. We are Going : Kath Walker
7. Father Returning Home : Dilip Chitre

Text :

Resonances: An Anthology of Prose & Poetry New Delhi: Primus Books

TEACHING SCHEDULE

No of Weeks	Dates	Session	Topic
1	06-06-2019 To 07-06-2019	1	Mystic Experience :Nataraja Guru
		2	Mystic Experience :Nataraja Guru
		3	Mystic Experience :Nataraja Guru
2	10-06-2019 To 14-06-2019	4	Mystic Experience :Nataraja Guru
		5	Mystic Experience :Nataraja Guru
		6	Mystic Experience :Nataraja Guru
		7	Mystic Experience :Nataraja Guru
		8	Mystic Experience :Nataraja Guru
3	17-06-2019 To 21-06-2019	9	DISCUSSION
		10	Sanskrit and World Literature : C Rajendran
		11	Sanskrit and World Literature : C Rajendran
		12	Sanskrit and World Literature : C Rajendran
		13	Sanskrit and World Literature : C Rajendran
		14	Sanskrit and World Literature : C Rajendran
		15	Sanskrit and World Literature : C Rajendran
4	24-06-2019 To 28-06-2019	16	Sanskrit and World Literature : C Rajendran
		17	DISCUSSION
		18	CLASS TEST
		19	I Have a Dream : Martin Luther King Jr
		20	I Have a Dream : Martin Luther King Jr
		21	I Have a Dream : Martin Luther King Jr
5	01-07-2019 To 05-07-2019	22	I Have a Dream : Martin Luther King Jr
		23	I Have a Dream : Martin Luther King Jr
		24	DISCUSSION
		25	Excerpt from Biography of Ayyankali :Dasan M, Pratibha V
		26	Excerpt from Biography of Ayyankali :Dasan M, Pratibha V
6	08-07-2019 To 12-07-2019	27	Excerpt from Biography of Ayyankali :Dasan M, Pratibha V
		28	Excerpt from Biography of Ayyankali :Dasan M, Pratibha V
		29	Excerpt from Biography of Ayyankali :Dasan M, Pratibha V
		30	Excerpt from Biography of Ayyankali :Dasan M, Pratibha V
		31	DISCUSSION

No of Weeks	Dates	Session	Topic
		32	CLASS TEST
		33	Dynamic Sport of the World : Davy A, Rocca
		34	Dynamic Sport of the World : Davy A, Rocca
		35	Dynamic Sport of the World : Davy A, Rocca
7	15-07-2019 To 19-07-2019	36	Dynamic Sport of the World : Davy A, Rocca
		37	Dynamic Sport of the World : Davy A, Rocca
		38	DISCUSSION
		39	DISCUSSION
		40	REVISION
		41	REVISION
		42	CLASS TEST
8	22-07-2019 To 26-07-2019	23 July	First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
9	29-07-2019 To 02-08-2019	43	The Monster Lives :
		44	The Monster Lives :
		45	The Monster Lives :
		31 July	Karkadaka Vavu
		46	The Monster Lives :
		47	The Monster Lives :
		48	The Monster Lives :
10	05-08-2019 To 09-08-2019	49	The Monster Lives :
		50	The Monster Lives :
		51	The Monster Lives :
		52	The Monster Lives :
		53	The Monster Lives :
		54	The Monster Lives :
		55	The Monster Lives :
11	12-08-2019 To 16-08-2019	56	The Monster Lives :
		57	DISCUSSION
		15 Aug	Independence day
		58	The New Alexandrians :Tapscott and D. Williams
12	19-08-2019 To 23-08-2019	59	The New Alexandrians :Tapscott and D. Williams
		60	The New Alexandrians :Tapscott and D. Williams
		61	The New Alexandrians :Tapscott and D. Williams
		62	The New Alexandrians :Tapscott and D. Williams
		63	The New Alexandrians :Tapscott and D. Williams

No of Weeks	Dates	Session	Topic
		23 Aug	SreekrishnaJayanthi
13	26-08-2019 To 30-08-2019	64	DISCUSSION
		65	DISCUSSION
		66	CLASS TEST
		28 Aug	AyyankaliJayanthi
		67	The World is Too Much With us : W. Wordsworth
		68	The World is Too Much With us : W. Wordsworth
14	02-09-2019 To 06-09-2019	69	The World is Too Much With us : W. Wordsworth
		70	The World is Too Much With us : W. Wordsworth
		71	The World is Too Much With us : W. Wordsworth
		72	DISCUSSION
		73	Where the Mind is Without Fear : Rabindranath Tagore
		74	Where the Mind is Without Fear : Rabindranath Tagore
		75	Where the Mind is Without Fear : Rabindranath Tagore
	Onam Celebration		
15	09-09-2019 To 13-09-2019		Muharram
			First Onam
			Thiruvonam
			Third Onam
			Fourth Onam - SreeNarayana Guru Jayanthy
16	16-09-2019 To 20-09-2019	76	Macavity:The Mystery Cat : T.S Eliot
		77	Macavity:The Mystery Cat : T.S Eliot
		78	Macavity:The Mystery Cat : T.S Eliot
		79	My Grandmother's House : Kamala Das
		80	My Grandmother's House : Kamala Das
		81	CLASS TEST
17	23-09-2019 To 27-09-2019	82	The Negro Speaks of Rivers : Langston Hughes
		83	The Negro Speaks of Rivers : Langston Hughes
		84	We are Going : Kath Walker
		85	We are Going : Kath Walker
		86	Father Returning Home :DilipChitre
		87	Father Returning Home :DilipChitre
18	30-09-2019 To 04-10-2019	88	Father Returning Home :DilipChitre
		89	DISCUSSION
		90	REVISION
		2 Oct	Gandhi Jayanthy
		03 Oct	Second Internal
			Second Internal

No of Weeks	Dates	Session	Topic
			Second Internal
19	07-10-2019 To 11-10-2019	07 Oct	Mahanavami
		08 Oct	Vijayadashami
			Second Internal
			Second Internal
			Study Leave
			Study Leave
20	14-10-2019 To 18-10-2019		Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
21	21-10-2019 To 25-10-2019	21 Oct	University Exam Begin

Subject Code:	3B 03 MAT
Subject Name:	Elements of Mathematics I
No. of Credits:	4
No. of Contact Hours:	90
Hours per Week:	5
Name of Faculty:	Riya Baby

Module – I

Finite and Infinite sets, Countable and uncountable sets, Cantor's theorem, Logic and proofs (Section 1.3 and Appendix A of text 4) Arguments, Logical implications, Propositional functions, Quantifiers, Negation of quantified statements. (Sections 10.9 to 10.12 of Text 1)

Module – II

Basic concepts, Relation between roots and coefficients, Symmetric functions of roots, Sum of the powers of roots, Newton's theorem on sum of the powers of roots, Transformation of equations, Reciprocal equations, Transformation in general. (Chapters 6: Sec 1 to 16 and 21 of Text 2)

Module - III

Descartes rule of signs, Multiple roots, Sturm's theorem, Cardon's method, Solution of biquadratic equation (Chapters 6: Sec 24, 26, 27, 34.1 and 35 of Text 2). Fundamental theorem of algebra (without proof), Trigonometric series. (Relevant topics in Section III Chapter 1 and Section II- Chapter 2 of Text 3)

Module – IV

Divisibility theory in the integers – the division algorithm, the greatest common divisor, the Euclidean algorithm, the Diophantine equation $ax + by = c$. Primes and their distribution fundamental theorem of arithmetic, the sieve of Eratosthenes. The theory of congruence basic properties of congruence. (Sections 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 4.2 of Text 5)

Texts:

1. S. Lipschitz, Set Theory and Related Topics, 2nd Edition, Schaum's series.
2. T. K. Manicavachagom Pillai, T. Natarajan and K. S. Ganapathy, Algebra Vol-1, S Viswanathan Printers and Publishers, 2010.
3. K. Khurana and S. B. Malik, Elementary topics in Algebra, Vikas Publishing House pvt.Ltd., 2nd Edition.
4. R. G. Bartle & Donald R. Sherbert, Introduction to Real Analysis, 3rd Edition, Wiley.
5. D. M. Burton, Elementary Number Theory, 7th Edition, TMH

References:

1. C.Y. Hsiung, Elementary Theory of Numbers, Allied Publishers.
2. N. Robbins, Beginning Number Theory, Second Edition. Narosa.
3. G. E. Andrews, Number Theory, HPC.
4. M.D. Raisinghnia and R.S. Aggarwal, Algebra.

TEACHING SCHEDULE

No of Weeks	Dates	Session	Topic
1	06-06-2019 To 07-06-2019	1	Finite and Infinite sets,
		2	Finite and Infinite sets,
		3	Countable and uncountable sets
2	10-06-2019 To 14-06-2019	4	Countable and uncountable sets
		5	Cantor's theorem
		6	Logic and proofs
		7	Logic and proofs
		8	Arguments,
3	17-06-2019 To 21-06-2019	9	Arguments, Logical implications,
		10	Test Paper
		11	Propositional functions, Quantifiers,
		12	Negation of quantified statements
		13	Work shop
		14	Basic concepts
		15	Relation between roots and coefficients,
4	24-06-2019 To 28-06-2019	16	Relation between roots and coefficients,
		17	Symmetric functions of roots
		18	Symmetric functions of roots
		19	Symmetric functions of roots
		20	Sum of the powers of roots
		21	Sum of the powers of roots
5	01-07-2019 To 05-07-2019	22	Test Paper
		23	Newton's theorem on sum of the powers of roots, Transformation of equations
		24	Newton's theorem on sum of the powers of roots, Transformation of equations,
		25	Newton's theorem on sum of the powers of roots, Transformation of equations,
		26	Transformation of equations,
		27	Reciprocal equations,
		28	Test paper
6	08-07-2019 To 12-07-2019	29	Transformation in general
		30	Assignment
		31	Work shop
		32	Descartes rule of signs
		33	Descartes rule of signs
		34	Multiple roots, Sturm's theorem
		35	Multiple roots, Sturm's theorem

No of Weeks	Dates	Session	Topic
7	15-07-2019 To 19-07-2019	36	Multiple roots, Sturm's theorem
		37	Carton's method
		38	Carton's method,
		39	Solution of biquadratic equation
		40	Assignment
		41	Work shop
		42	Problem solving section
8	22-07-2019 To 26-07-2019	23 July	First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
9	29-07-2019 To 02-08-2019	43	Fundamental theorem of algebra
		44	Fundamental theorem of algebra
		45	Fundamental theorem of algebra
		31 July	KarkadakaVavu
		46	Trigonometric series
		47	Trigonometric series
		48	Trigonometric series
10	05-08-2019 To 09-08-2019	49	Trigonometric series
		50	Test paper
		51	Work shop
		52	Divisibility theory in the integers
		53	The division algorithm,
		54	The division algorithm,
		55	The division algorithm,
11	12-08-2019 To 16-08-2019	56	The greatest common divisor
		57	the greatest common divisor
		15 Aug	Independence day
		58	The Euclidean algorithm
		59	The Euclidean algorithm
12	19-08-2019 To 23-08-2019	60	The Euclidean algorithm
		61	Diophantine equation $ax + by = c$
		62	Diophantine equation $ax + by = c$
		63	Diophantine equation $ax + by = c$
	23 Aug	SreekrishnaJayanthi	
13	26-08-2019 To	64	Primes and their distribution
		65	fundamental theorem of arithmetic
		66	fundamental theorem of arithmetic

No of Weeks	Dates	Session	Topic
	30-08-2019	28 Aug	AyyankaliJayanthi
		67	Fundamental theorem of arithmetic
		68	the sieve of Eratosthenes
14	02-09-2019 To 06-09-2019	69	the sieve of Eratosthenes
		70	Test paper
		71	the sieve of Eratosthenes
		72	the sieve of Eratosthenes
		73	assignment
		74	The theory of congruence, basic properties of congruence.
		75	The theory of congruence basic properties of congruence.
			Onam Celebration
15	09-09-2019 To 13-09-2019		Muharram
			First Onam
			Thiruvonam
			Third Onam
			Fourth Onam - SreeNarayana Guru Jayanthi
16	16-09-2019 To 20-09-2019	76	The theory of congruence basic properties of congruence.
		77	The theory of congruence basic properties of congruence.
		78	The theory of congruence basic properties of congruence.
		79	The theory of congruence basic properties of congruence.
		80	The theory of congruence basic properties of congruence.
		81	The theory of congruence basic properties of congruence.
17	23-09-2019 To 27-09-2019	82	The theory of congruence basic properties of congruence.
		83	The theory of congruence basic properties of congruence.
		84	The theory of congruence basic properties of congruence.
		85	Work shop
		86	Assignment
		87	Test paper
18	30-09-2019 To 04-10-2019	88	Question paper solving
		89	Question paper solving
		90	Question paper solving
		2 Oct	Gandhi Jayanthi
		03 Oct	Second Internal
			Second Internal
19	07-10-2019 To 11-10-2019	07 Oct	Mahanavami
		08 Oct	Vijayadashami
			Second Internal
			Second Internal
			Study Leave

No of Weeks	Dates	Session	Topic
			Study Leave
20	14-10-2019 To 18-10-2019		Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
21	21-10-2019 To 25-10-2019	21 Oct	University Exam Begin

Subject Code:	3C 03 CSC
Subject Name:	Data Base Management System
No. of Credits:	2
No. of Contact Hours:	54
Hours per Week:	3
Name of Faculty:	Hebin Layola

Module I

Introduction – Advantages of Database systems. View of Data, data Models, database system architecture, Field, Record, Entity, Attribute, Relation, Domain,

Module II

Data Base Users and administrators, Constraints, Keys (Candidate, Primary, Super, Foreign), Relational Algebra – Fundamental operations, E-R Model, E-R diagrams.

Module III

Normalization (First, Second, Third, BCNF), SQL: Introduction to SQL Tables – DDL, DML, DCL, Data types.

Module IV

Visual Basic: What is Visual Basic, Structure of a VB Application, Steps in developing Application, drawing the user interface and setting properties, setting properties of objects at design time and at runtime variables.

Module V

VB data types , variable declaration, VB operators and functions, Branching statements – if then , go to, select-case, Looping statements, Do-While-Loop, Do-Loop-While, Do-Until-Loop, Do-Loop-Until, While-wend, for-next, Arrays and control arrays.

Text book .

1. Data Base Concept 3rd edition Abraham Silberschatz, Henry F. Korth McGraw Hill
2. A Guide to the SQL Standard, C. J. Date and Hugh Darwen, 1997, Addison-Wesley
3. Visual Basic 6, G Cornell, Tata McGraw Hill

Reference:

1. An Introduction to Database Systems, C. J. Date, 1994, Addison-Wesley
2. Understanding the New SQL, Jim Melton and Alan R. Simon, 1993, Morgan Kaufmann.
3. Principles of Database & Knowledge Jeffrey D. Ullman, Computer Science Press, 1988.
4. Visual Basic 6 Programming Black Book, Steven Holzner, Dreamtech Press

TEACHING SCHEDULE

No of Weeks	Dates	Session	Topic
1	06-06-2019 To 07-06-2019	1	Introduction – DBMS
		2	Advantages of Database systems
2	10-06-2019 To 14-06-2019	3	View of Data
		4	Class Test
		5	data Models
3	17-06-2019 To 21-06-2019	6	database system architecture
		7	Field
		8	Record
4	24-06-2019 To 28-06-2019	9	Entity
		10	Attribute
		11	Relation
5	01-07-2019 To 05-07-2019	12	Domain
		13	Revision-Module 1
		14	Class Test –Module 1
6	08-07-2019 To 12-07-2019	15	Data Base Users and administrators
		16	Constraints
		17	Keys
7	15-07-2019 To 19-07-2019	18	Candidate, Primary, Super, Foreign
		19	Relational Algebra
		20	Fundamental operations
8	22-07-2019 To 26-07-2019	23 July	First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
9	29-07-2019 To 02-08-2019	21	E-R Model, E-Diagrams.
		31 July	KarkadakaVavu
		22	Revision Module II.....Class Test Module II
		23	Normalization (First, Second,)
10	05-08-2019 To 09-08-2019	24	Normalization- Third, BCNF
		25	SQL: Introduction to SQL Tables
		26	DDL, DML
		27	DCL, Data types.

No of Weeks	Dates	Session	Topic
11	12-08-2019 To 16-08-2019	28	Revision module III-Class Test module III
		29	Visual Basic: What is Visual Basic
		15 Aug	Independence day
		30	Structure of a VB Application
		31	Steps in developing Application
12	19-08-2019 To 23-08-2019	32	drawing the user interface and setting properties
		33	Setting properties of objects at design time and at runtime variables.
		34	Revision module IV-Class Test Module IV
		35	VB data types
		23 Aug	SreekrishnaJayanthi
13	26-08-2019 To 30-08-2019	36	variable declaration
		37	VB operators and functions
		28 Aug	Ayyankali Jayanthy
		38	Branching statements
		39	if then , go to
14	02-09-2019 To 06-09-2019	40	select-case
		41	Looping statements
		42	Do-While-Loop
		43	Do-Loop
		44	While, Do-Until-Loop
			Onam Celebration
15	09-09-2019 To 13-09-2019		Muharram
			First Onam
			Thiruvonam
			Third Onam
			Fourth Onam - SreeNarayana Guru Jayanthy
16	16-09-2019 To 20-09-2019	45	Do-Loop-Until
		46	While-wend, for-next
		47	Arrays and control arrays.
		48	Revision-Module v-Class Test
17	23-09-2019 To 27-09-2019	49	Module I-Revision-Class Test
		50	Module II-Revision-Class Test
		51	Module III-Revision-Class Test
		52	Module IV-Revision-Class Test
18	30-09-2019 To	53	Module V-Revision-Class Test
		54	Question Paper Discussions
		2 Oct	Gandhi Jayanthy

No of Weeks	Dates	Session	Topic
	04-10-2019	03 Oct	Second Internal
			Second Internal
			Second Internal
19	07-10-2019 To 11-10-2019	07 Oct	Mahanavami
		08 Oct	Vijayadashami
			Second Internal
			Second Internal
			Study Leave
			Study Leave
20	14-10-2019 To 18-10-2019		Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
21	21-10-2019 To 25-10-2019	21 Oct	University Exam Begin

Subject Code:	4C 05 CSC Lab-I
Subject Name:	C Programming,DBMS & Visual Basic
No. of Credits:	2
No. of Contact Hours:	36
Hours per Week:	2
Name of Faculty:	Hebin Layola

DBMS.

SQL -1

Create table students with fields sno, sname, sex, mark with sno as primary key and assign suitable constraints for each attribute. Insert five records into the table.

- Alter the table by adding one more field rank.
- Display all boy students with their name.
- Find the Average mark
- Create a query to display the sno and sname for all students who got More than the average mark. Sorts the results in descending order of mark.
- Create a sequence named 'star' to be used with student tables primary key
- column-sno. The sequence should start with 10 & max value 99
- Display girl student name for those who have marks greater than 40 and less than 20.

SQL -2 Create a table department with fields ename, salary, dno, dname, place with dno

as primary key. Insert five records into the table.

- Rename the field 'place' with 'city'
- Display the employees who got salary more than Rs.6000 and less than 10000 /-
- Display total salary of the organization
- Display ename for those who are getting salary in between 5000 and 10000.
- Create a view named 'Star' with field ename, salary & place
- display ename and salary, salary rounded with 10 digits '**'

SQL -3 Create table loan with fields loano, cname, cid, bname assigning suitable constraints. Insert 5 Records in to the table.

- Calculate Rs 150 extra for all customers having loan. The added loan amount will display in a new column.
- Add one more field amount to loan table. Display cname for cid=2.
- Create table depositor with fields cid and accno.
- Insert five records into the table.
- Display loano and cname of a customer who is residing in Kannur city.
- Display all information from loan table for loano 2,8,10.

TEACHING SCHEDULE

No of Weeks	Dates	Session	Topic
1	06-06-2019 To 07-06-2019	1	SQL -1 Create table students with fields sno, sname, sex, mark with sno as primary key and assign suitable constraints for each attribute. Insert five records into the table.
		2	Alter the table by adding one more field rank.
2	10-06-2019 To 14-06-2019	3	Display all boy students with their name
		4	Find the Average mark
3	17-06-2019 To 21-06-2019	5	Create a query to display the sno and sname for all students who got More than the average mark. Sorts the results in descending order of mark.
		6	Create a sequence named 'star' to be used with student tables primary key
4	24-06-2019 To 28-06-2019	7	coloumn-sno.The sequence should start with 10 & max value 99
		8	Display girl student name for those who have marks greater than 40 and less than 20.
5	01-07-2019 To 05-07-2019	9	SQL -2 Create a table department with fields ename, salary, dno, dname, place with dno
		10	Rename the field 'place' with 'city'
6	08-07-2019 To 12-07-2019	11	Display the employees who got salary more than Rs.6000 and less than 10000 /-
		12	Display total salary of the organization
7	15-07-2019 To 19-07-2019	13	Display ename for those who are getting salary in between 5000 and 10000
		14	Create a view named 'Star' with field ename, salary & place
8	22-07-2019 To 26-07-2019	23 July	First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
9	29-07-2019	15	Display ename and salary, salary rounded with 10 digits '**'

No of Weeks	Dates	Session	Topic
	To 02-08-2019	31 July	KarkadakaVavu
		16	SQL -3 Create table loan with fields loanno, cname, cid, bname assigning suitable constraints. Insert 5 Records in to the table.
10	05-08-2019 To 09-08-2019	17	Calculate Rs 150 extra for all customers having loan. The added loan amount will display in a new coloumn.
		18	Create table depositor with fields cid and accno.
	12-08-2019 To 16-08-2019	19	Insert five records into the table.
11		15 Aug	Independence day
		20	Display loanno and cname of a customer who is residing in Kannur city
12	19-08-2019 To 23-08-2019	21	Display all information from loan table for loanno 2,8,10.
		22	Revision SQL 1
		23	Revision Sql 1
		23 Aug	SreekrishnaJayanthi
	26-08-2019 To 30-08-2019	24	Revision SQL 2
13		28 Aug	AyyankaliJayanthi
		25	Revision SQL 2
		26	Revision SQL 3
	02-09-2019 To 06-09-2019	27	Revision SQL 3
14		28	Practical Exam –SQL1
		29	Practical Exam –SQL2
			Onam Celebration
	09-09-2019 To 13-09-2019		Muharram
15			First Onam
			Thiruvonam
			Third Onam
			Fourth Onam - SreeNarayana Guru Jayanthy
	16-09-2019 To 20-09-2019	30	Practical Exam –SQL3
16		31	University Model Exam
		32	University Model Exam
17	23-09-2019 To 27-09-2019	33	University Model Exam
		34	University Model Exam
		35	University Model Exam
18	30-09-2019 To	36	University Model Exam
		2 Oct	Gandhi Jayanthy
		03 Oct	Second Internal

No of Weeks	Dates	Session	Topic
	04-10-2019		Second Internal
			Second Internal
19	07-10-2019 To 11-10-2019	07 Oct	Mahanavami
		08 Oct	Vijayadashami
			Second Internal
			Second Internal
			Study Leave
			Study Leave
20	14-10-2019 To 18-10-2019		Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
21	21-10-2019 To 25-10-2019	21 Oct	University Exam Begin

Subject Code:	3C 03 STA
Subject Name:	Standard Probability Distributions
No. of Credits:	3
No. of Contact Hours:	90
Hours per Week:	5
Name of Faculty:	Arundas V.P.

Module I:

Mathematical Expectation –

Definition and properties of mathematical expectation, addition and multiplication theorem on expectation and expectation of functions of random variables; Moments – Definition of raw and central moments, relation between raw and central moments, Expectation of bivariate random variables, conditional mean and variance, correlation coefficient between random variables; Generating functions – Moment generating function, definition and properties, cumulant generating function and characteristic function.

Module II:

Discrete Distributions :

Definition, moments, mgf, cgf, properties and different characteristics of Discrete Uniform distribution, Bernoulli distribution, Binomial distribution, Poisson distribution and Geometric distribution

Module III:

Continuous Distributions –

Definition, moments, mgf, cgf, properties and different characteristics of Uniform distribution, Normal distribution, Standard normal distribution, Exponential distribution, Gamma distribution with one and two parameters and Beta distributions I and II kind

Module IV:

Tchebycheff's inequality and Law of large numbers –

Tchebycheff's inequality and its applications, convergence in probability, Weak law of large numbers, Bernoulli's law of large numbers, central limit theorem (Statement only) for iid random variables

Book for Study

S.C.Gupta & V.K.Kapoor : Fundamentals of Mathematical Statistics, Sulthan Chand & Sons

Book for Reference

Sheldon.M.Ross : Introductory Statistics, Elsevier Academic Press

TEACHING SCHEDULE

No of Weeks	Dates	Session	Topic
1	06-06-2019 To 07-06-2019	1	Definition of mathematical expectation, discrete case
		2	Definition of mathematical expectation, continuous case
		3	Properties of expectation
2	10-06-2019 To 14-06-2019	4	Addition theorem
		5	Multiplication theorem
		6	Class test
		7	Expectation of functions of random variable discrete case
		8	Expectation of functions of random variable continuous case
3	17-06-2019 To 21-06-2019	9	Moments; definition of raw moments
		10	definition of central moments
		11	seminar
		12	Relationship between raw and central moment
		13	Relationship between raw and central moment
		14	Expectation of bivariate random variable
		15	Expectation of bivariate random variable continuous case
4	24-06-2019 To 28-06-2019	16	Class test
		17	Seminar
		18	Conditional mean
		19	Conditional variance
		20	Covariance of random variables
		21	Correlation coefficient between random variables
5	01-07-2019 To 05-07-2019	22	Moment generating functions definition
		23	Moment generating functions properties
		24	Moment generating functions properties
		25	Characteristic function definition
		26	Characteristic function properties
		27	Characteristic function properties
6	08-07-2019 To 12-07-2019	28	Uniqueness theorem and its proof
		29	Cumulant generating function definition
		30	Cumulant generating function properties
		31	Discrete distribution definition
		32	Uniform distribution discrete case definition
		33	Derivation of mean and variance of uniform distribution
		34	Moment generating function and cumulant generating function of uniform distribution

No of Weeks	Dates	Session	Topic
		35	Bernouli distribution definition
7	15-07-2019 To 19-07-2019	36	Derivation of mean and variance of Bernouli distribution
		37	Moment generating function and cumulant generating function of bernouli distribution
		38	seminar
		39	Binomial distribution definition
		40	Derivation of mean and variance of Binomial distribution
		41	Moment generating function Binomial distribution
		42	Cumulant generating function Binomial distribution
8	22-07-2019 To 26-07-2019	23 July	First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
			First Internal Exam
9	29-07-2019 To 02-08-2019	43	Definition of Poisson distribution
		44	Mean and variance of Poisson distribution
		45	Moment generating function of Poisson distribution
		31 July	KarkadakaVavu
		46	Cumulant generating function of Poisson distribution
		47	seminar
		48	Geometric distribution definition
10	05-08-2019 To 09-08-2019	49	Derivation of mean and variance of Geometric distribution
		50	MGF and CGF of Geometric distribution
		51	Overview of continuous distribution
		52	Definition of continuous uniform distribution
		53	Mean and variance of continuous uniform distribution
		54	Moment generating function of continuous uniform distribution
		55	Cumulant generating function of continuous uniform distribution
11	12-08-2019 To 16-08-2019	56	Properties of continuous uniform distribution
		57	seminar
		15 Aug	Independence day
		58	Definition of normal distribution
		59	Mean and variance of normal distribution
12	19-08-2019 To 23-08-2019	60	Moment generating function of normal distribution
		61	Cumulant generating function of normal distribution
		62	Standard normal distribution definition and properties
		63	Exponential distribution definition

No of Weeks	Dates	Session	Topic
		23 Aug	SreekrishnaJayanthi
13	26-08-2019 To 30-08-2019	64	Mean and variance of Exponential distribution
		65	Moment generating function of Exponential distribution
		66	Cumulant generating function of Exponential distribution
		28 Aug	AyyankaliJayanthi
		67	Gamma distribution one parameter definition and properties
		68	Gamma distribution two parameter definition and properties
14	02-09-2019 To 06-09-2019	69	Beta distribution first kind definition and properties
		70	Beta distribution second kind definition and properties
		71	Seminar
		72	Tchebycheffs inequality definition and proof
		73	Tchebycheffs inequality definition and proof
		74	Applications of Tchebycheffs inequality
		75	Applications of Tchebycheffs inequality
			Onam Celebration
15	09-09-2019 To 13-09-2019		Muharram
			First Onam
			Thiruvonam
			Third Onam
			Fourth Onam - SreeNarayana Guru Jayanthi
16	16-09-2019 To 20-09-2019	76	Class test
		77	Convergence in probability
		78	Convergence in probability
		79	Convergence in probability
		80	Weak law of large numbers
		81	Weak law of large numbers
17	23-09-2019 To 27-09-2019	82	Weak law of large numbers
		83	Bernouli law of large numbers
		84	Bernouli law of large numbers
		85	Bernouli law of large numbers
		86	Central limit theorem for iid random variable
		87	Class test
18	30-09-2019 To 04-10-2019	88	Application of central limit theorem
		89	Application of central limit theorem
		90	Seminar
		2 Oct	Gandhi Jayanthi
		03 Oct	Second Internal

No of Weeks	Dates	Session	Topic
			Second Internal
			Second Internal
19	07-10-2019 To 11-10-2019	07 Oct	Mahanavami
		08 Oct	Vijayadashami
			Second Internal
			Second Internal
			Study Leave
			Study Leave
20	14-10-2019 To 18-10-2019		Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
			Study Leave
21	21-10-2019 To 25-10-2019	21 Oct	University Exam Begin