

SACRED HEART COLLEGE (AUTONOMOUS)

Department of Mathematics

BACHELOR OF SCIENCE

[MATHEMATICS]

Course plan

Academic Year 2018-19

Semester 1

PROGRAMME OUTCOMES

PO 1	Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.
PO 2	Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the word by connecting people, ideas, books, media and technology.
PO 3	Effective Citizenship: Demonstrate empathetic social concern and equity centered national development, and the ability to act an informed awareness of issues and participate in civic life through volunteering.
PO 4	Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.
PO5	Ethics: Recognise different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.
PO 6	Global Perspective: Understand the economic, social and ecological connections that link the world's nations and people.

PROGRAM SPECIFIC OUTCOMES

PSO 1	Understand the basic concepts and tools of mathematical logic, Set theory, Theory of Equations and Number Theory
PSO 2	Understand the concepts of Geometry, Trigonometry, Calculus and Analysis, Abstract structures, Algebra, Methods of proofs and Differential Equations
PSO 3	Translate real world problems into mathematical problems and find its solutions
PSO 4	Understand the application of mathematics in other science, engineering and discuss Human rights and mathematics for environmental studies

COURSE PLAN

PROGRAMME	UG COMMON COURSE 1	SEMESTER	1
COURSE CODE AND TITLE	15U1CCENG 1: Communication Skills in English	CREDIT	4
HOURS/WEEK	5	HOURS/SEM	90
FACULTY NAME	Dr. Joseph Varghese		

	COURSE OUTCOMES	PSO	PO
CO 1	Understand the mechanics of English language and comprehend the meaning of simple narrations, announcements and instructions.	1	1, 2
CO 2	Make inferences about the implications of statements from stress and tone recognize the various registers of speech.	1	1, 2
CO 3	Listen to formal presentations and prepare lecture notes in the appropriate format.	1,3	1, 2, 3
CO 4	Use English for a variety of speaking contexts including conversations, presentations, speeches, discussions and negotiations.	1,3	1,2,3,4,5
CO 5	Critically evaluate presentations, narrations, speeches and analyse and evaluate their content and respond to them appropriately.	1,3	1,2,5
CO 6	Creatively respond to one's surroundings in the form of drama, poetry, narrations, and songs, and perform them before an audience.	1,3	1,2,3,4,5,6

CO - PO/PSO Mapping										
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4
CO 1	3	2	0	0	0	0	3	2	1	0
CO 2	3	2	0	0	0	0	3	0	0	2
CO 3	1	3	1	0	0	0	3	2	2	1
CO 4	1	3	1	0	1	0	3	0	2	0
CO 5	1	3	1	1	2	1	3	1	0	2
CO 6	1	3	1	1	1	1	3	0	2	2

Indicators: 0- No Mapping strength, 1. Low, 2. Medium, 3. High

SESSI ON	TOPIC	Learning Resources	Activity	Course Outcome
MODULE I				
MODULE – I : Speech Sounds				
1	Introduction to Communication Skills	Course book	Lecture	CO 1
2	Phonemic symbols	Audio	Q & A	CO 1
3	Vowels	Audio	Q & A	CO 1
4	Consonants	Audio	Q & A	CO 1
5	Vowels	Audio	Q & A	CO 1
6	Consonants	Audio	Q & A	CO 1
7	Syllables	Course book	Exercises	CO 1
8	Syllables	Audio	Q & A	CO 1
9	Syllables	Audio	Q & A	CO 1
10	Word stress	Audio	Q & A	CO 1
11	Word stress	Course book	Exercises	CO 1,2
12	Word stress	Course book	Exercises	CO 1,2

13	Word stress	Audio	Q & A	CO 1
14	Stress in polysyllabic words	Audio	Q & A	CO 1
15	Stress in polysyllabic words	Course book	Exercises	CO 1, 2
16	Stress in polysyllabic words	Course book	Exercises	CO 1, 2
17	Stress in words used as different parts of speech	Audio	Q & A	CO 1
18	Stress in words used as different parts of speech	Audio	Q & A	CO 1
19	Stress in words used as different parts of speech	Lecture		CO 1, 2
MODULE II : Listening				
20	Sentence stress	Course Book	Lecture	CO 2
21	Sentence stress	Audio	Q& A	CO 2
22	Sentence stress	Audio	Q& A	CO 2
23	Sentence stress	Lecture	Exercises	CO 2
24	Weak forms and strong forms	Audio	Q & A	CO 2
25	Weak forms and strong forms	Audio & Lecture	Exercises	CO 2
26	Weak forms and strong forms	Lecture	Exercises	CO 2
27	Intonation	Lecture	Exercises	CO 2
28	Intonation	Audio	Q & A	CO2
Internal Assessment Test 1				
30	Awareness of different accents	Video	Q & A	CO 2
31	Awareness of different accents	Audio/Video	Q & A	
32	Awareness of different accents	Audio/Video	Q & A	CO 2
MODULE- III: Speaking				
33	American English	Course Book	Lecture	CO 2,3
34	American English	Audio	Discussion	CO 2,3
35	American English	Audio	Discussion	CO 2,3

36	American English	Audio	Exercises	CO 2,3
37	British and Indian English	Course Book	Discussion	CO 2,3
38	British and Indian English	Audio	Discussion	CO 2,3
39	British and Indian English	Audio	Discussion	CO 2,3
40	British and Indian English	Audio	Discussion	CO 2,3
Unit II: Academic Listening & Note-taking				
41	Influence of the mother tongue	Course Book	Lecture	CO 3
42	Influence of the mother tongue	Course book	Exercises	CO 3
43	Influence of the mother tongue	Audio	Exercises	CO 3
44	Influence of the mother tongue	Audio	Exercises	CO 2,3
45	Active listening	Audio	Exercises	CO 2,3
46	Active listening	Audio	Exercises	CO 2,3
47	Barriers to listening	Audio	Exercises	CO 2,3
48	Barriers to listening	Audio	Exercises	CO 2,3
MODULE III				
Unit 1 – Art of Small Talk				
49	Seminar Presentation	Course book	Lecture	CO 1,2,4
50	Listening and note taking	Course book	Exercises	CO 1,2,4
51	Listening and note taking	Audio	Q & A	CO 1,2,4
52	Listening and note taking	Course book	Q & A	CO 4
53	Listening and note taking	Course book	Exercises	CO 4
54	Listening to announcements	Audio	Exercises	CO 4
55	Listening to announcements	Course book	Exercises	CO 4
56	Listening to announcements	Course book	Exercises	CO 1,2,4
57	Listening to announcements	Course book	Exercises	CO 4
Unit II: Transactional Conversation				

59	Listening to news on the radio and television	Course book	Exercises	CO 1,2,4
60	Listening to news on the radio and television	Course book	Exercises	CO 1,2,4
61	Listening to news on the radio and television	Course book	Exercises	CO 1,2,4
62	Word stress and rhythm	Course book	Exercises	CO 1,2,4
63	Word stress and rhythm	Course book	Exercises	CO 1,2,4
64	Pauses and sense groups	Course book	Exercises	CO 1,2,4
65	Pauses and sense groups	Course book	Exercises	CO 1,2,4
66	Pauses and sense groups	Course book	Exercises	CO 1,2,4
67	Falling and rising tones	Course book	Exercises	CO 1,2,4
68	Falling and rising tones	Course book	Exercises	CO 1,2,4
69	Falling and rising tones	Course book	Exercises	CO 1,2,4
Unit III: Telephone Conversation				
70	Fluency and pace of delivery	Course book	Lecture	CO 4
71	Internal Examination	Course book	Exercises	CO 4
72	Art of small talk	Course book	Exercises	CO 1,2,4
Internal Assessment 2				
MODULE IV				
Unit 1: Presentation				
73	Participating in conversations	Course book	Lecture	CO 4 & 6
74	Participating in conversations	Discussion	Exercises	CO 4 & 6
75	Participating in conversations	Course book	Lecture	CO 4 & 6
76	Making a short formal speech	Course book	Discussion	CO 4 & 6
77	Participating in conversations	Course book	Discussion	CO 4 & 6
78	Describing people	Course book	Discussion	CO 4 & 6
79	Describing people	Course book	Discussion	CO 4 & 6
80	Place, events and things	Course book	Lecture	CO 4 & 6

81	Group discussion skills and telephone skills	Course book	Discussion	CO 4 & 6
82	Reading: theory and Practice -----	Course book	Discussion	CO 4 & 6
83	Scanning - Surveying a textbook using an index	Course book	Discussion	CO 4 & 6
84	Reading with a purpose – making predictions	Course book	Discussion	CO 4 & 6
MODULE – IV: Reading				
85	Understanding text structure	Course book	Lecture	CO 4 & 6
86	Locating main points – Making inferences	Course book	performance	CO 4 & 6
87	Reading graphics	Course book	performance	CO 4 & 6
88	Reading critically	Course book	performance	CO 4 & 6
89	Reading for research	Course book	performance	CO 4 & 6
90	Reading for research			

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc.)	Course Outcome
1	4/8/2018	Presentations	CO 2
2	28/8/2018	Role plays	CO 3

GROUP ASSIGNMENTS/ACTIVITIES – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)	Course Outcome
1	12/9/2018	Group Discussions	CO 1,2,4,5
2	20/9/2018	Performances	CO 1,2,,4,5

References

V.Sasikumar, P Kiranmai Dutt and Geetha Rajeevan, . Communication Skills in English. Cambridge University Press and Mahatma Gandhi University.

COURSE PLAN

PROGRAMME	BSc. MATHEMATICS	SEMESTER	1
COURSE CODE AND TITLE	15U1CCENG02: Reading Literature in English	CREDIT	3
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	Sabu Thomas		

COURSE OUTCOMES

	COURSE OUTCOMES	PO/ PSO	CL
CO1:	Explain the nuances of English Language through literature.	PO2, PSO 3	A
CO2:	Compare the Varied parameters of English language.	PO1, PO2 PSO 3	An
CO3:	Discover comprehensive ability.	PO1 PSO 3	U
CO4:	Connect the efficiency of the students with realities of life.	PO1	A
CO5:	Evaluate the beauty of literary expression.	PO2	E

CL* Cognitive Level

R-Remember

U- Understand

A- Apply

An- Analyze

E- Evaluate

Cr- Create

CO -PO/PSO Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4
CO 1		3					0	0	1	0
CO 2	3	2					0	0	1	0
CO 3	3						0	0	1	0
CO 4	2						0	0	0	0
CO 5		2					0	0	0	0

Mapping Strength

- 0. No Mapping strength
- 1- Low
- 2- Medium
- 3- High

COURSE PLAN

Session	Topic	Learning Resources	Value Additions	Course Outcome
MODULE I				
ESSAYS				
1	Introducing the text book	Text	PPT	CO3
2	Bores: E V Lucas	Text		CO3
3	Bores: E V Lucas	Text		CO2
4	Bores: E V Lucas	Text		CO1
5	A Glory has Departed- Jawaharlal Nehru	Text	Group Discussion	CO2
6	A Glory has Departed- Jawaharlal Nehru	Text		CO4
7	A Glory has Departed- Jawaharlal Nehru	Text		CO3
8	A Glory has Departed- Jawaharlal Nehru	Text		CO1
9	Tryst with Destiny- Amartya Sen	Text		CO3
10	Tryst with Destiny- Amartya Sen	Text		CO5

11	Tryst with Destiny- Amartya Sen	Text		CO3
12	Tryst with Destiny- Amartya Sen	Text		CO1
13	How to Escape from Intellectual Rubbish-Bertrand Russel	Text	Group Discussion	CO3
14	How to Escape from Intellectual Rubbish-Bertrand Russel	Text		CO5
15	How to Escape from Intellectual Rubbish-Bertrand Russel	Text		CO3
16	How to Escape from Intellectual Rubbish-Bertrand Russel	Text		CO4
17	Discussion			CO6
18	Discussion		Quiz	CO3
MODULE II- Poetry				
19	Sonnet XXX-William Shakespeare	Text	Lecture/PPT	CO3
20	Sonnet XXX-William Shakespeare	Text		CO2
21	Sonnet XXX-William Shakespeare	Text	Poetry Recitation	CO1
22	Ode to a Nightingale-John Keats	Text	Poetry Recitation	CO4
23	Ode to a Nightingale-John Keats	Text		CO5
24	Mending Wall- Robert Frost		Interaction	CO6
First Internal Examination				
25	Mending Wall- Robert Frost	Text	Poetry Recitation	CO3
26	Mending Wall- Robert Frost	Text	Role Play	CO1
27	The Bicycle- David Malouf	Text	Role play	CO4
28	The Bicycle- David Malouf	Text		CO 5
29	The Bicycle- David Malouf	Text		CO5
30	The Refuge	Text		CO 4
Unit 3: The Boy Comes Home				

30	Poor Girl- Maya Angelou	Text	Lecture/PPT	CO3
31	Poor Girl- Maya Angelou	Text		CO2
32	The Mask- Kamala Suraiya	Text		CO1
33	The Mask- Kamala Suraiya	Text		CO2
34	Goodbye party for Miss Pushpa T S- Nissim Ezekiel	Text	Poetry Recitation	CO4
35	Goodbye party for Miss Pushpa T S- Nissim Ezekiel	Text		CO5
36	Once Upon a Time-Gabriel Okara	text	Quiz	CO5
MODULE III: Short Story				
37	The Lottery Ticket- Anton Pavlovich Chekhov	Text		CO 3
38	The Lottery Ticket- Anton Pavlovich Chekhov	Text		CO 3
39	The Lottery Ticket- Anton Pavlovich Chekhov	Text		CO 4
40	The Lottery Ticket- Anton Pavlovich Chekhov	Text	Quiz	CO 5
41	The Lottery Ticket- Anton Pavlovich Chekhov	Text	Video/ e-content	CO 3
42	Retrieved Reformation- O. Henry	Text		CO 4
43	Retrieved Reformation- O. Henry	Text		CO 5
44	Retrieved Reformation- O. Henry	Text		CO 2
MODULE III: Short Story				
45	Retrieved Reformation- O. Henry	Text	PPT	CO 3
46	Retrieved Reformation- O. Henry	Text		CO1
47	A Shadow- R K Narayan	Text		CO 2
48	A Shadow- R K Narayan	Text		CO 5
49	A Shadow- R K Narayan	Text		CO 5

50	A Shadow- R K Narayan	Text	PPT	CO3
51	A Devoted Son- Anita Deasi	Text		CO 5
52	A Devoted Son- Anita Deasi	Text		CO2
53	A Devoted Son- Anita Deasi	Text		CO4
54	A Devoted Son- Anita Deasi	Text	Discussion/Quiz	CO6
55	Two Gentlemen of Verona- A J Cronin	Text		CO3
56	Two Gentlemen of Verona- A J Cronin	Text		CO 5
57	Two Gentlemen of Verona- A J Cronin	Text		CO3
58	Two Gentlemen of Verona- A J Cronin	Text	Quiz	CO 5
59	Two Gentlemen of Verona- A J Cronin	Text	Role Play	CO3
60	Two Gentlemen of Verona- A J Cronin	Text		CO 5
Unit 4: DRAMA				
61	Refund- Fritz Karinthy	Text		CO3
62	Refund- Fritz Karinthy	Text		CO 5
63	Refund- Fritz Karinthy	Text		CO3
64	Refund- Fritz Karinthy	Text	Enacting the Drama	CO 5
65	Lord Byron's Love Letter-Tennessee Williams	Text		CO3
66	Lord Byron's Love Letter-Tennessee Williams	Text	Quiz	CO 5
Second Internal Examination				
67	Lord Byron's Love Letter-Tennessee Williams	Text		CO3
68	Lord Byron's Love Letter-Tennessee Williams	Text	Enacting the Drama	CO 5
69	The Monkey's Paw- W.W Jacob	Text Recital/ lecture		CO3

70	The Monkey's Paw- W.W Jacob	Text		CO 5
71	The Monkey's Paw- W.W Jacob	Text		CO 3
72	The Monkey's Paw- W.W Jacob	Text	Enacting the Drama	CO 5

References

Reading Literature in English: MG University

COURSE PLAN

PROGRAMME	BACHELOR OF SCIENCE – MATHEMATICS	SEMESTER	1
COURSE CODE AND TITLE	15U1CCHIN1A – PROSE AND DRAMA	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	Dr. MINIPRIYA R, SYAMLAL M. S		

	COURSE OUTCOMES	PO/ PSO	CL
CO 1	Understand and explain the different prose forms written in Hindi language.	PO1, PO2, PO6, PSO 4	U
CO 2	Understand various trends in Hindi Drama and its presentation.	PO1, PO2, PO5	A
CO 3	Understand the ancient Indian culture	PO1, PO2, PO5, PO6	An
CO 4	Understand the socio - cultural change in literature	PO1, PO3, PO6, PSO 4	U
CO 5	Understand the development of literature and aesthetics	PO1, PO3, PO4, PO5, PO6	An

CL* Cognitive Level

R- Remember

U- Understand

A- Apply

An- Analyze

E- Evaluate

Cr- Create

CO - PO/PSO Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4
CO 1	2	2				2				1
CO 2	2	2			2					
CO 3	2	2			2	1				
CO 4	2		2			2				1
CO 5	2		2	2	2	2				

Mapping Strength

- 0- No Mapping strength
- 1- Low
- 2- Medium
- 3- High

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	COURSE OUTCOME
MODULE I				
1	General information about literature	Lecture/Discussion		CO 4, CO 5
2	Development of Drama	Lecture/Discussion		CO 1, CO 2
3	Madhavi – Introduction of Author Bhishma Sahni	Lecture/PPT		CO 2, CO 5
4	Madhavi Act – 1, Scene -1	Lecture	Video	CO 2
5	Essay - Jeevan Mein Sahitya Ka Sthan Introduction of Author Premchand	Lecture/Discussion		CO 1, CO 4
6	Premchand and his literary works	Lecture/PPT		CO 5
7	Madhavi Act – 1, Scene -1	Lecture	Narration of stories related to 'Mahabharat'	CO 2
8	Revision	Interaction	Video	CO1, CO 4
9	Madhavi Act – 1, Scene -1	Lecture		CO 2
10	Madhavi Act – 1, Scene -2	Lecture/Discussion		CO 2
11	Essay - Jeevan Mein Sahitya Ka Sthan	Lecture	Seminar	CO 1, CO 4
12	Revision	Interaction	Presentation by students	CO 1, CO4
13	Madhavi Act – 1, Scene -2	Lecture		CO 2
14	Madhavi Act – 1, Scene -2	Lecture		CO 2
15	Madhavi Act – 1, Scene -3	Lecture	Presentation by students	CO 2
16	Essay - Jeevan Mein Sahitya Ka Sthan	Interaction	Acting	CO 1, CO 4
17	Analyzing the characters of 'Madhavi'	Interaction	Conversation	CO 2, CO 3, CO 4

18	Essay - Jeevan Mein Sahitya Ka Sthan	Lecture		CO 1, CO 4
19	Madhavi Act – 1, Scene -3	Lecture/Discussion	Video	CO 2
20	Essay - Jeevan Mein Sahitya Ka Sthan	Lecture		CO 1, CO 4
21	Essay - Jeevan Mein Sahitya Ka Sthan	Interaction	Seminar	CO 1, CO 4
22	Essay - Jeevan Mein Sahitya Ka Sthan	Lecture/Discussion		CO 1, CO 4
23	Essay - Sahitya Ki Mahatta Introduction of Author Mahaveer Prasad Dwivedi	Lecture/PPT		CO 1, CO 5
24	CIA – I (1Hour Exam)			
MODULE II				
25	Essay - Sahitya Ki Mahatta	Lecture	Seminar	CO 1, CO 4
26	Essay - Sahitya Ki Mahatta	Lecture		CO 1, CO 4
27	Essay - Sahitya Ki Mahatta	Lecture		CO 1, CO 4
28	Essay - Sahitya Ki Mahatta	Lecture/Discussion		CO 1, CO 4
29	Revision	Interaction	Seminar	CO 1, CO 4
30	Madhavi Act – 2, Scene -1	Lecture		CO 2
31	Madhavi Act – 2, Scene -1	Lecture	Presentation by students	CO 2, CO 4
32	Madhavi Act – 2, Scene -1	Lecture/Discussion		CO 2
33	Madhavi Act – 2, Scene -2	Lecture		CO 2
34	Madhavi Act – 2, Scene -2	Lecture		CO 2
35	Madhavi Act – 2, Scene -2	Lecture	Presentation by students	CO 2, CO 4
36	Revision	Interaction	Video	CO 2, CO 4
37	Madhavi Act – 2, Scene -3	Lecture		CO 2, CO 4
38	Madhavi Act – 2, Scene -3	Lecture/Discussion		CO 2
39	Essay - Lalit Kalayen Introduction of the Author Dr. Syamsundar Das	Lecture/PPT		CO 1, CO 4
40	Essay - Lalit Kalayen	Lecture	Seminar	CO 1, CO 4
41	Essay - Lalit Kalayen	Lecture		CO 1, CO 3
42	Essay - Lalit Kalayen	Lecture/Discussion		CO 1, CO 3 CO 4
43	Essay - Lalit Kalayen	Lecture/Discussion		CO 1, CO 4
44	Madhavi Act – 2, Scene -3	Lecture	Video	CO 3
45	Madhavi Act – 2, Scene -3	Lecture	Video	CO4
46	Interactive session	Discussion	Debate	CO1, CO4 , CO 5
47	CIA – II (2 Hours Exam)			
MODULE III				
48	Essay - Rashtra Ka Swaroop Introduction of the Author Vasudev	Lecture/PPT		CO 1 , CO 5

	Saran Agraval			
49	Essay - Rashtra Ka Swaroop	Lecture	Seminar	CO 1, CO 4
50	Essay - Rashtra Ka Swaroop	Lecture		CO 1, CO 4
51	Essay - Rashtra Ka Swaroop	Discussion	Presentation by students	CO 1, CO 4
52	Madhavi Act – 2, Scene -4	Lecture		CO 2
53	Madhavi Act – 2, Scene -4	Lecture		CO 2
54	Madhavi Act – 3, Scene -1	Lecture		CO 2, CO 4
55	Madhavi Act – 3, Scene -1	Lecture/Discussion		CO 2, CO 4
56	Revision	Discussion	Video	CO 2, CO 4
57	Essay - Tum Ghar Kab Aoge Kavi Introduction of the Author Ramdhari Sinh Dinakar	Lecture/PPT		CO 1, CO 5
58	Essay - Tum Ghar Kab Aoge Kavi	Lecture	Seminar	CO 1
59	Essay - Tum Ghar Kab Aoge Kavi	Lecture		CO 1
60	Essay - Tum Ghar Kab Aoge Kavi	Lecture		CO 1
61	Essay - Tum Ghar Kab Aoge Kavi	Lecture/Discussion		CO 1, CO 4
62	Essay - Tum Ghar Kab Aoge Kavi	Discussion	Presentation by students	CO 1, CO 4
63	Madhavi Act – 3, Scene -2	Lecture		CO 2, CO 4 CO 5
64	Madhavi Act – 3, Scene -2	Lecture		CO 2
65	Madhavi Act – 3, Scene -2	Lecture/Discussion	Video	CO 2, CO 5
66	Madhavi Act – 3, Scene -3	Lecture	Video	CO 2
67	Madhavi Act – 3, Scene -3	Lecture/Discussion	Presentation by students	CO 2, CO 4
68	Madhavi Act – 3, Scene -3			CO2, CO 4
69	Madhavi Conclusion	Interaction	Criticising the drama	CO 2, CO 3
70	Seminar			CO 1, CO 5
71	Seminar			CO 1, CO 5
72	Evaluation of the course			CO 1, CO 2, CO 3, CO4, CO 5

GROUP ASSIGNMENTS/ACTIVITIES – Details & Guidelines

SL NO	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)	Course Outcome
1	September	Literary Analysis of drama and its video (Group Discussion)	CO 2
2	September	Presentation of any scene from drama Madhavi.(Group Activity)	CO 2

References

- **Hindi Natak Ka Ithihas : Somanath Gupt Hindi Bhavan, Allahabad**
- **Yug- Chaya , Editor: Shivdan Singh Chouhan, Rajkamal Prakashan, New Delhi.**

Web resource references:

- epustakalay.com
- www.hindikunj.com

COURSE PLAN

PROGRAMME	Mathematics	SEMESTER	1
COURSE CODE AND TITLE	15U1CCFRN1A - FRENCH LANGUAGE AND COMMUNICATION SKILLS I	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72

	COURSE OUTCOMES	PO/ PSO	CL
CO 1	Understand the basic concepts of French language including grammar, vocabulary and sentence structure	PO1,PO2, PO6, PSO5	U
CO 2	Understand the basic communication skills necessary for living in France and French speaking countries.	PO1, PO5,PO6, PO2,PSO5	U
CO 3	Describe oneself and ones surroundings using a repertory of words and expressions in a simple and structured grammatical manner.	PO1, PO4, PO6,PSO5	A
CO 4	Develop business communication skills	PO2, PO4,PO5, PO6,PSO5	A
CO 5	Express an issue of concern including topics like environmental, social or health issues, enumerate its causes and consequences and suggest solutions	PO1,PO2,PO3,PO5,PO6,PSO5	A
CO 6	Understand the mannerisms, culture and tradition of France and Francophone countries and compare it to one's own country and develop co-cultural feeling	PO6,PO2,PSO5	U
CO 7	Understand and appreciate the history of France and Francophone countries and compare it to one's own country	PO2,PO6,PSO5	U
CO 8	Understand the special features of France including gastronomy, social institutions, policis, the present French scenario and compare it to one's own country	PO1,PO2,PO5,PO6,PSO5	U

CL* Cognitive Level

R- Remember

U- Understand

B- Apply

An- Analyze

E- Evaluate

Cr- Create

CO - PO/PSO Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO 1	2	2				2					1
CO 2	2	2			2	2					1
CO 3	2			2		2					1
CO 4		2		2	2	2					1
CO 5	2	2	2		2	2					1
CO6		2				2					1
CO7		2				2					1
CO8	2	2			2	2					1

Mapping Strength

0. No Mapping strength
1. Low
2. Medium
3. High

Session	Topic	Method of Teaching	Value Additions	CO
MODULE I				
1	Introducing French Basics	role play, Discussion	french basic communication	1,2,3
2	French basics -alphabets	chalk n talk, audio	Lecture	1,2,3
3	french basics	audio ppt, discussion	Lecture	1,2,3
4	french basics	chalk n talk	Lecture	1,2,3
5	numbers 1-20	role play,audio ppt	Lecture	1,2,3
6	verbs introduction	chalk n talk	Lecture	1,2,3
7	conjugation introduction	chalk n talk,ppt audio	audio	1,2,5
8	Greetings	role play,audio ppt	Know a new culture	1,2,6
9	Basic useful sentences in French	role play, audio ppt	Q and A	1,2,3
10	spell in French	role play,audio ppt	presentation	1,2,
11	Indefinite articles	chalk n talk,audio ppt	Lecture	1,2
12	pronociation of vowels	role play,audio ppt	Lecture	1,2
13	French culture	Discussion, audio,ICT	Lecture,q nd A	6,7,8
14	Revision			
MODULE II				
15	introducing a third person	game,audio ppt	Q nd A	2,3
16	Asking personal information in french	role play,audio ppt	Lecture	2,3
17	Giving personal information in french	role play,audio ppt	Interaction	2,3
18	verbs etre ,avoir	chalk n talk	Lecture	2,3
19	ER verbs	chalk n talk, audio ppt	Lecture	2,3
20	adjectives of nationalities	role play, conversation	Lecture	2,3
21	grammar articles	role play, listening	Ppt	2,3
22	CIA 1			2,3
23	Profession	cross words,chalk n talk	Lecture	2,3

24	interests and tastes	role play,audio	Lecture	2,3,4
25	Masculine,feminine of adjectives	exercices ,chalk n talk,audio	Lecture	1,2,4,5
26	French culture- french names and profession	roleplay,audio	knowing culture	5,6,7,8
27	explaining the objective of learning French	Discussion, ICT,audio	Lecture,q and A	5,6,7,8
28	Revision			
		MODULE III		
29	describe a locality	oral, description	Q and A	2,3,
30	Express in quatity	role play,chalk n talk	Lecture	2,3
31	"vivre" verb conjugation	audio,chalk n talk	Lecture	2,3
32	places vocabulary	games,music,audio	Video	2,3,5
33	Il y a,	audio,	daily needed vocabs	2,3
	il n'y a pas	chalk n talk		
34	definite articles	chalk n talk,audio ppt	Lecture	2,3
35	Adjectives	role play,audio ppt	Lecture	2,3
36	Prepositions	role play ,audio ppt	Lecture	2,3,4
37	Negation	chalk n talk/roleplay	Lecture	2,3
38	Qualificative adjectives	chalk n talk ,audio ppt	Q and A	2,3
39	Describing ur ideal locality	role play/presentation	Lecture	2,3
40	intonations	audio ppt	Lecture	1,2,3
41	French culture-express preference for city or village	Discussion	knowing culture	5,6,7,8
42	revision			
43	CIA 2			
44	Correspondig with a friend expressing one's likings	chalk n talk/Role plays	Q and A	2,3
45	speak about a persons character	role play ,GD	know each other	5,6,7
46	adjectif possessif part 1	chalk n talk,audio ppt	Lecture	1,2,3
47	adjectif possessif part 2	chalk n talk, audio ppt	Lecture	2,4,5
48	speak about the surroundings	discussion	Lecture	2,3
49	introduce and describe someone	role play	Lecture	2,3,4
50	activities - vocabulary	lecture,audio	Lecture	1,2,5
51	sports vocabulary	speaking/role play	general knowledge	1,2,3

52	Vocabulary - relations	chalk n talk,audio ppt	Lecture	2,5,6
53	famous french personality	discussion/comprehension	Lecture	5,6,7,8
54	lexique des liens de parente	chalk n talk,audio ppt	Lecture	2,3,4
	Express ones likings	Audio ppt,discussion	Q and A	2,3
55	lexiques des loisirs	Audio ppt,discussion	Video	2,3
56	forme negation	Audio ppt,discussion	Q and A	2,3
57	pronunciation of verbs	Audio ppt,discussion	Q and A	2,3
58	form filling	Audio ppt,discussion	Q and A	2,3
59	french artists	Audio ppt,discussion	GK	2,3
60	french music	Audio ppt,discussion	Video	2,3
61	one's own musical preferences	Audio ppt,discussion	Q and A	
62	french music and comparison to one's own musical preference	discussion	knowing the culture	5,6,7,8
63	module 1 -revision			
64	module 1 -revision			
65	module 2- revision			
66	module 2-revision			
67	module 3-revision			
68	module 3-revision			
69	module 4-revision			
70	module 4-revision			
71	PYQs discussion			
72	PYQs discussion			

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)	Course Outcome
1		Basic vocabulary on communication skills in Malayalam and French	CO 2,3,6,8
2		roleplays	CO 123456

References

Version Originale, site web

COURSE PLAN

PROGRAMME	BACHELOR OF SCIENCE, MATHEMATICS	SEMESTER	1
COURSE CODE AND TITLE	15U1CCSAN1A: DRAMA, POETRY AND ALANKARA	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	Dr. VIJAYARAJAN K.U		

	COURSE OUTCOMES	PO/ PSO	CL
CO 1	Students can understand the poetic style with special reference to classical literature	PO1, PO2, PO6, PSO2	U
CO 2	Students get an awareness about Indian classical poetic tradition	PO1, PO5, PO6, PO2, PSO2	U
CO 3	Students familiarize the figures of speech and their usage	PO1, PO4, PO6, PSO2	A
CO 4	Students get an awareness about aesthetic values	PO2, PO4, PO5, PO6, PSO2	A
CO 5	Express an issue of concern including topics like environmental, social or health issues, enumerate its causes and consequences and suggest solutions	PO1, PO2, PO3, PO5, PO6, PSO2	A
CO 6	Understand moral values through Drama	PO6, PO2, PSO2	U
CO 7	Understand the tools to beautify the literature through Alankara	PO2, PO6, PSO2	U
CO 8	Students identify the richness of Indian Literature	PO1, PO2, PO5, PO6, PSO2	U

CL* Cognitive Level

R- Remember

U- Understand

A- Apply

An- Analyze

E- Evaluate

Cr- Create

CO -PO/PSO Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4
CO 1	2	2				2		1		
CO 2	2	2			2	2		1		
CO 3	2			2		2		1		
CO 4		2		2	2	2		1		
CO 5	2	2	2		2	2		1		
CO6		2				2		1		
CO7		2				2		1		
CO8	2	2			2	2		1		

Mapping Strength

- 0. No Mapping strength
- 1- Low
- 2- Medium
- 3- High

SESSI ON	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	COURSE OUTCOME
MODULE I				
1	Introducing Sanskrit Basics	Lecture		CO 1
2	About Mahakavya	Lecture		CO 1
3	About Kumarasambava	Lecture		CO 1
4	Fifth sarga of Kumarasambava	Lecture	e-resource	CO 1
5	Brahmacharipravesha	Lecture		CO 1
6	Parvathi's penance	PPT/Lecture		CO 1
7	Inviting Brahmachari	Lecture		CO 1
8	Purushartha	Lecture		CO 1
9	Himalaya	Lecture		CO 1

10	Conversation to Parvathy	Lecture		CO 1
11	Critisisation	Lecture		CO 1
12	Questioning	PPT/Lecture		CO 1
13	Upamas	PPT/Lecture		CO 1
14	Revision			
MODULE II				
15	Sanskrit Drama - Introduction	PPT/Lecture		CO 6,7
16	Mahakavi Bhasa's Dramas	Lecture		CO 6,7
17	Bhasa's Karnabharam	Lecture		CO 2,6,7
18	Mahabharatha	Lecture		CO 2,6,7
19	Mangalasloka	Lecture		CO 2,6,7
20	Entry of Karna	PPT/Lecture		CO 3,6,7
21	Request to Karna	PPT/Lecture		CO 3,6,7
22	Duryodhana's order	PPT/Lecture		CO 3,6,7
23	Karna's sadness	PPT/Lecture		CO 3,6,7
24	Revenge	Lecture		CO 3,6,7
25	Karna's birth	Lecture		CO 3,6,7
26	CIA-1			
27	Kunthi's request	Lecture		CO 3,5,6,7
28	Karna's study	Lecture		CO 3,5,6,7
29	ParaShurama's teaching	PPT/Lecture		CO 3,5,6,7
30	Parashrama's curse	PPT/Lecture		CO3,5,6,7
31	Greatness of Kshathriyas	PPT/Lecture		CO 3,5,6,7
32	Bravery of Karna	Lecture		CO 6,7

33	Indra's request to karna	Lecture		CO 6,7
34	Brahmana's blessing	PPT/Lecture		CO 6,7
35	Karna offering Horses	PPT/Lecture		CO 6,7
36	Karna offering elephants	PPT/Lecture		CO 3,6,7
37	Karna offering gold	Lecture		CO 3,6,7
38	Karna offering his kavacha	Lecture		CO 3,6,7
39	Indra accepting kavacha and kundala	PPT/Lecture		CO 3,6,7
40	Indra's blessing	PPT/Lecture		CO 3,6,7
41	The greatness of giving	PPT/Lecture		CO 3,6,7
42	Revision			
43	Revision			
44	Revision			
45	Revision			
	MODULE III			
46	Alankara introduction			
47	Kuvalayananda	Lecture		CO 4,7
48	Upama alankara	Lecture		CO 4,7
49	Upamana ,Upameya ,sadharana dharma	Lecture		CO 4,7
50	Ullekha Alankara	Lecture		CO 4,7
51	Dipika Alankara	Lecture		CO 4,7
52	Dipika example	Lecture		CO 4,7
53	Vyathireka Alankara	Lecture		CO 4,7
54	Aprastutaprasamsa	Lecture		CO 4,7
55	Revision			
56	Svabhavokthi Alankara	Lecture		CO 4,7
57	Rupaka Alankara	Lecture		CO 4,7

58	Drishtantha Alankara	Lecture		CO 4,7
59	Dristantha -example	Lecture		CO 4,7
60	Arthantharanyasa	Lecture		CO 4,7
61	Prathama Ullekha	Lecture		CO 4,7
62	Dvitheeya Ullekha	Lecture		CO 4,7
CIA - II				
MODULE IV				
63	Characteristic of Karna	Lecture		CO 5,8
64	Characteristics of Shalya	Lecture	Group discussion	CO 5,8
65	Characteristics of Indra	Lecture		CO 5,8
66	Characteristics of Parvathi	PPT/Lecture		CO 5,8
67	Characteristics of Brahmachari	PPT/Lecture		CO 5,8
68	Himalaya	PPT/Lecture		CO 5,8
69	Revision			
70	Revision			
71	Revision			
72	Revision			

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)	Course Outcome
1	13/08/2019	The role of Karna in Mahabharatha	CO 6,8
2	17/09/2019	Upama kalidasasya	CO 3

GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

	Date of	Topic of Assignment & Nature of	Course
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	completion	assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)	Outcome
1	22/9/2019	The moral values in Kumarasambava	CO 8
2	30/9/2019	Purushartha –the means of life	CO 8

References

1. Bhasanatakacakram O.R.I& Manuscript Library Trivandrum
2. Bhasanatakamanjari, Dr. V.S. Idakidath, Saparya Books, Kollam
3. Kumarasambhavam by Kuttikrishna Marar
4. Bhasanatakasarvasvam Sudhamsu Chathurvedi
5. Kalidasa Hridayam, V. Unnikrishnan Nair
6. The Problems of Bhasa Plays, Dr. N.P. Unni
7. Abhijnana Sakunthalam, M.R.Kale
8. Kalidasarvasvam, Sudhamsucathurvedi
9. Kuvalayanandam , Appayyadikshitha

COURSE PLAN

PROGRAMME	B.Sc MATHS	SEMESTER	1
COURSE CODE & TITLE	15U1CCMAL1A കഥ നോവൽ	CREDITS	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	VISHNU RAJ P, Dr. JUSTINA K AUGUSTINE		

CO No	COURSE OUTCOMES	CL	PSO	PO
1	കഥ, നോവൽ എന്നിവയെക്കുറിച്ച് മെച്ചപ്പെട്ട ധാരണ ഉണ്ടാക്കുക	Un	3	1,3
2	ഭാഷാപഠനം സാഹിത്യാനുഭവത്തിലൂടെ ആവിഷ്കരിക്കുക	Re	3	2,3
3	വായനാഭിരുചി വർദ്ധിപ്പിക്കുക	Ap	3	3,2,4
4	സാഹിത്യ പരിചയം ഉണ്ടാക്കുക	Un	3	2,3
5	വ്യാവഹാരിക തലത്തിൽ മാതൃഭാഷാപ്രയോഗിക്കുവാനുള്ള കഴിവ് നേടുക	Ap	3	1,3,5
6	ഭാഷാപഠനത്തിലൂടെ ആശയവിനിമയശേഷി വർദ്ധിപ്പിക്കുക	Cr	3	3,4,6

CO - PO/PSO Mapping												
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	1	0	2	0	0	0	0	0	2	0	0	0
CO 2	2	3	0	0	0	0	0	0	2	0	0	0
CO 3	0	2	2	1	0	0	0	0	2	0	0	0
CO 4	0	1	2	0	0	0	0	0	2	0	0	0
CO5	3	0	2	0	1	0	0	0	2	0	0	0
CO6	0	0	2	2	0	2	0	0	2	0	0	0

Mapping Strength: 0-No Mapping strength, 1- Low, 2-Medium, 3-High

COURSE PLAN

Session	Topic	Learning Resources	Teaching Method	Course Outcome
Module I				
1	മലയാളസാഹിത്യം സാമാന്യാവലോകനം	സാഹിത്യചരിത്രങ്ങൾ	Lecturing	1,2,3,4
2	ചെറുകഥയുടെ ചരിത്രം -1	സാഹിത്യചരിത്രങ്ങൾ	Lecturing	1,2,3,4
3	ചെറുകഥയുടെ ചരിത്രം-2	സാഹിത്യചരിത്രങ്ങൾ	Discussion	1,2,3,4,6
4	തകഴിയുടെ രചനാലോകം	നോവൽ-ചെറുകഥാപഠനങ്ങൾ	Lecturing	2,3,4
5	വെളുത്തകുഞ്ഞ്	Text	Reading	1,2,3,4,5,6
6	വെളുത്തകുഞ്ഞ്	Text	Group Discussion	1,2,3,4,5,6
7	സന്തോഷ് ഏച്ചിക്കാനത്തിന്റെ കഥകൾ	ചെറുകഥാപഠനങ്ങൾ	Lecturing	2,3,4
8	അഭിനയമൂഹൂർത്തങ്ങൾ കഥ	Text	Reading	1,2,3,4,5,6
9	അഭിനയമൂഹൂർത്തങ്ങൾ കഥ	Text	Group Discussion	1,2,3,4,5,6
10	ഒ വി വിജയനെ പരിചയപ്പെടുത്തുന്നു	നോവൽ-ചെറുകഥാപഠനങ്ങൾ	Lecturing	2,3,4
11	കടൽത്തീരത്ത്	Text	Reading	1,2,3,4,5,6
12	കടൽത്തീരത്ത്	Text	Group Discussion	1,2,3,4,5,6
13	എൻ എസ് മാധവന്റെ കൃതികളുടെ രാഷ്ട്രീയം	നോവൽ-ചെറുകഥാപഠനങ്ങൾ	Lecturing	2,3,4
14	നാലാലോകം കഥ	Text	Reading	1,2,3,4,5,6
15	നാലാലോകം കഥ	Text	Group Discussion	1,2,3,4,5,6
16	നാലാലോകം കഥ	Text	Group Discussion	1,2,3,4,5,6
17	ചെറുകഥ - അവലോകനം	Text	Group Discussion	1,2,3,4
Module II				
18	എം ടി വാസുദേവൻ നായരുടെ കൃതികൾ	നോവൽ-ചെറുകഥാപഠനങ്ങൾ	Lecturing	2,3,4
19	ഷെർലക്ക്	Text	Reading	1,2,3,4,5,6
20	ഷെർലക്ക്	Text	Group Discussion	1,2,3,4,5,6
21	ഉണ്ണി ആറിനെ പരിചയപ്പെടുത്തുന്നു	നോവൽ-ചെറുകഥാപഠനങ്ങൾ	Lecturing	2,3,4
22	ഒറ്റപ്പെട്ടവൻ-	Text	Reading	1,2,3,4,5,6
23	ഒറ്റപ്പെട്ടവൻ-	Text	Group Discussion	1,2,3,4,5,6

24	ജോൺ എബ്രഹാം: സാഹിത്യവും സിനിമയും	നോവൽ- ചെറുകഥാ പഠനങ്ങൾ	Lecturing	2,3,4
25	നേർച്ചക്കോഴി	Text	Reading	1,2,3,4,5,6
26	നേർച്ചക്കോഴി	Text	Group Discussion	1,2,3,4,5,6
27	സാനാ ജോസഫ്, പുരാണ പുനർവായന	നോവൽ- ചെറുകഥാ പഠനങ്ങൾ	Lecturing	2,3,4
28	തായ്കുലം	Text	Reading	1,2,3,4,5,6
29	തായ്കുലം	Text	Group Discussion	1,2,3,4,5,6
30	ചെറുകഥ - അവലോകനം	Text	Group Discussion	1,2,3,4
31	Internal Assessment 1	Text		
32	Question paper discussion	Text	Group Discussion	1,2,3,4,5,6
Module III				
33	മാധവിക്കുട്ടിയുടെ കഥകളുടെ പ്രത്യേകതകൾ	നോവൽ- ചെറുകഥാ പഠനങ്ങൾ	Lecturing	2,3,4
34	പക്ഷിയുടെ മണം	Text	Reading	1,2,3,4,5,6
35	പക്ഷിയുടെ മണം	Text	Group Discussion	1,2,3,4,5,6
36	വൈക്കം മുഹമ്മദ് ബഷീറിന്റെ ലോകം	നോവൽ- ചെറുകഥാ പഠനങ്ങൾ	Lecturing	2,3,4
37	ശികിടിമുക്കൻ	Text	Reading	1,2,3,4,5,6
38	ശികിടിമുക്കൻ	Text	Group Discussion	1,2,3,4,5,6
39	സേതുവിന്റെ കൃതികൾ		Lecturing	2,3,4
40	ദൂത്	Text	Reading	1,2,3,4,5,6
41	ദൂത്	Text	Group Discussion	1,2,3,4,5,6
42	കെ ആർ മീരയുടെ എഴുത്തുകൾ	നോവൽ- ചെറുകഥാ പഠനങ്ങൾ	Lecturing	2,3,4
43	മോഹമഞ്ഞ	Text	Reading	1,2,3,4,5,6
44	മോഹമഞ്ഞ	Text	Group Discussion	1,2,3,4,5,6
45	ചെറുകഥ - അവലോകനം	Text	Group Discussion	1,2,3,4
Module - IV				
46	മലയാളനോവൽ ചരിത്രം	സാഹിത്യച രിത്രങ്ങൾ	Lecturing	1,2,3,4
47	മലയാളനോവൽ ചരിത്രം	സാഹിത്യച രിത്രങ്ങൾ	Group Discussion	1,2,3,4
48	മലയാളനോവൽ - നൂതന പ്രവണതകൾ	സാഹിത്യച രിത്രങ്ങൾ	Lecturing	1,2,3,4
49	മലയാളനോവൽ - നൂതന പ്രവണതകൾ	സാഹിത്യച രിത്രങ്ങൾ	Group Discussion	1,2,3,4
50	വിനോയ് തോമസ്- ആമുഖം	നോവൽ പഠനങ്ങൾ	Lecturing	1,2,3,4
51	കരിക്കോട്ടക്കരി- നോവൽ ആമുഖം	നോവൽ പഠനങ്ങൾ	Lecturing	1,2,3,4

52	കരിക്കോട്ടക്കരി അധ്യായം 1	Text	Group Discussion	1,2,3,4,6
53	കരിക്കോട്ടക്കരി അധ്യായം 2	Text	Group Discussion	1,2,3,4,6
54	കരിക്കോട്ടക്കരി അധ്യായം 3	Text	Group Discussion	1,2,3,4,6
55	കരിക്കോട്ടക്കരി അധ്യായം 4	Text	Group Discussion	1,2,3,4,6
56	കരിക്കോട്ടക്കരി അധ്യായം 5	Text	Group Discussion	1,2,3,4,6
57	കരിക്കോട്ടക്കരി അധ്യായം 6	Text	Group Discussion	1,2,3,4,6
58	കരിക്കോട്ടക്കരി അധ്യായം 7	Text	Group Discussion	1,2,3,4,6
59	കരിക്കോട്ടക്കരി അധ്യായം 8	Text	Group Discussion	1,2,3,4,6
60	കരിക്കോട്ടക്കരി അധ്യായം 9	Text	Group Discussion	1,2,3,4,6
61	കരിക്കോട്ടക്കരി അധ്യായം 10	Text	Group Discussion	1,2,3,4,6
62	കരിക്കോട്ടക്കരി അധ്യായം 11	Text	Group Discussion	1,2,3,4,6
	Internal Assessment 2			
63	കരിക്കോട്ടക്കരി അധ്യായം 12	Text	Group Discussion	1,2,3,4,6
64	കരിക്കോട്ടക്കരി അധ്യായം 13	Text	Group Discussion	1,2,3,4,6
65	കരിക്കോട്ടക്കരി അവലോകനം	Text	Group Discussion	1,2,3,4,6
66	സംവാദം- വിനോയ് തോമസ്	Text	Group Discussion	1,2,3,4,6
67	സെമിനാർ	Text	Presentation	1,2,3,4,6
68	സെമിനാർ	Text	Presentation	1,2,3,4,6
69	സെമിനാർ	Text	Presentation	1,2,3,4,6
70	സെമിനാർ	Text	Presentation	1,2,3,4,6
71	സെമിനാർ	Text	Presentation	1,2,3,4,6
72	Revision	Text	Group Discussion	1,2,3,4,5,6

ASSIGNMENTS

Sl no	Date of submission/completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	By October	മലയാളത്തിലെ തെരഞ്ഞെടുത്ത കഥാകൃത്തുക്കളുടെ വിവരങ്ങൾ
2		സിലബസിൽ പഠിക്കാൻ ഇല്ലാത്ത ഒരു നോവലിന്റെ ആസ്വാദനം

SEMINAR

	Date of submission/completion	Topic of semiar & Nature of seminar (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	By October	പാഠഭാഗങ്ങളുടെ അവതരണം
2		പാഠഭാഗങ്ങളുടെ അവതരണം

Referance :

1. സമ്പൂർണ്ണ മലയാള സാഹിത്യചരിത്രം - എഡിറ്റർ :പന്മന രാമചന്ദ്രൻ നായർ
- 2.ചെറുകഥ ഇന്നലെ ഇന്ന് - എം അച്യുതൻ
- 3.മലയാള നോവൽ സാഹിത്യചരിത്രം - കെ എം തരകൻ

COURSE PLAN - FOUNDATIONS OF MATHEMATICS

PROGRAMME	BSC MATHEMATICS	SEMESTER	1
COURSE CODE AND TITLE	15U1CRMAT01-FOUNDATIONS OF MATHEMATICS	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	SANIL JOSE, JINESH P JOSEPH		

COURSE OUTCOMES

	COURSE OUTCOMES	PO/ PSO	CL
CO 1	To explain the fundamental ideas of sets and function	PO1, PSO1	U
CO 2	To analyze basic logic and prove statements about sets and functions	PO1, PSO1	U
CO 3	To introduce basic number theory	PO1, PSO1	U
CO 4	Comprehend various theorems in number theory	PO1, PSO1	U

CO -PO/PSO Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO 1	2						3				
CO 2	2						3				
CO 3	2						3				
CO 4	1						3				

0. No mapping strength, 1. Low, 2. Medium, 3. High

Sessions	Topic	Method	co	Remarks/R eference
1	Introductory Session			
2	Introduction of sets- definition examples	Interactive session	CO1	
3	Properties of sets1	Lecturing	CO1	
4	Properties of sets2		CO1	

5	Problems		CO1	
6	Set operations	Lecturing and interaction with students	CO1	
7	Problems		CO1	
8	Functions introduction examples	Group discussion	CO1	
9	Functions Operations	Group discussion	CO1	
10	Problems		CO1	
11	Tutorial		CO1	
12	Sequence & Summation Definition examples	Lecturing	CO1	
13	Problems		CO1	
14	Revision		CO1	
15	Relations Introduction	Interactive session	CO1	
16	Examples of relation		CO1	
17	Properties of relations	Lecturing	CO1	
18	Problems		CO1	
19	Tutorial		CO1	
20	n-array relations	Group discussion	CO1	
21	Examples		CO1	
22	Applications		CO1	
23	Problems		CO1	
24	Tutorial			
25	Representation of Relations	Group discussion	CO2	
26	Examples and problems		CO2	
27	Equivalence relation	Lecturing and interaction	CO2	

28	Examples		CO2	
29	Problems		CO2	
30	Partial ordering Introduction		CO2	
31	Examples		CO2	
32	Tutorial and revision		CO2	
33	Propositional logic	Interactive session	CO2	
34	Logical Operators	Lecturing	CO2	
35	Conditional Statements	Lecturing	CO2	
36	Truth tables	Lecturing	CO2	
37	Propositional Equivalences	Lecturing	CO2	
38	Predicates and Quantifiers	Lecturing	CO2	
39	Nested Quantifiers	Lecturing	CO2	
40	Rules of inference	Lecturing	CO2	
41	Introduction to Proofs	Lecturing	CO2	
42	Proof methods and strategy	Lecturing	CO2	
43	Exercise Problems		CO2	
44	Test Paper			
45	Divisibility theory in the integers	Lecturing	CO3	
46	The greatest common divisor	Problem solving	CO3	
47	The Euclidean algorithm (division algorithm)	Lecturing	CO3	
48	The Euclidean algorithm (division algorithm)	Lecturing	CO3	
49	Tutorial		CO3	
50	Primes and famous numbers	Lecturing	CO3	

51	The fundamental theorem of arithmetic	Lecturing	CO3	
52	The theory of congruence	Lecturing	CO3	
53	Basic properties of congruence	Lecturing	CO3	
54	Theorems	Lecturing	CO4	
55	Fermat's little theorem	Lecturing	CO4	
56	Wilson's theorem	Lecturing	CO4	
57	Euler's phi function	Lecturing	CO4	
58	Euler's generalization of Fermat's theorem	Lecturing	CO4	
59	Revision			
60	Test Paper			

ASSIGNMENTS

	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	n-array relations and applications
2	Introduction to functions and function operations

Textbook

1. K.H. Rosen: Discrete Mathematics and its application, Tata McGraw Hill Publishing Company, New Delhi
2. S. Bernard and J.M Child: Higher Algebra, AITBS Publishers, India, 2009

REFERENCES :

- 1, Lipschutz: Set Theory and related topics (Second Edition), Schaum Outline Series, Tata McGraw-Hill Publishing Company, New Delhi. (Reprint 2009).
2. P.R. Halmos : Naive Set Theory, Springer.
3. Richard Johnsonbaugh – Discrete Mathematics (Pearsons)

COURSE PLAN- PROPERTIES OF MATTER, MECHANICS AND FOURIER ANALYSIS

PROGRAMME	BSC MATHEMATICS	SEMESTER	1
COURSE CODE AND TITLE	15U1CPPHY1: PROPERTIES OF MATTER, MECHANICS AND FOURIER ANALYSIS	CREDIT	2
THEORY HOURS/WEEK	2	HOURS/SEM	36
FACULTY NAME	DR. ROBY CHERIAN &MALINI ABRAHAM		

	COURSE OUTCOMES	PO/ PSO	CL
CO 1	Understanding the concepts of Elastic moduli- Poisson's ratio- twisting couple- determination of rigidity modulus	PO1, PSO1	U/An
CO 2	Understanding the basic concepts of Rotational dynamics of rigid bodies	PO1, PSO1	U/An
CO 3	Understanding the role of oscillations in Physics life	PO1, PSO1	U/An
CO 4	Role of Fourier analysis in Physics – Basic Introduction	PO1, PSO1	U/An

CL* Cognitive Level

CO -PO/PSO Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	2	0	0	0	0	0	2	0	0	0	0
CO 2	2	0	0	0	0	0	2	0	0	0	0
CO 3	2	0	0	0	0	0	2	0	0	0	0
CO 4	2	0	0	0	0	0	2	0	0	0	0

Mapping Strength

- 0- No Mapping strength
- 1- Low
- 2- Medium
- 3- High

SESSION	TOPIC	LEARNING RESOURCES	COURSE OUTCOME
MODULE I			
1	Introduction – to Elasticity	Lect	CO 1
2	Elastic moduli	Lect	CO 1
3	Poissons ratio and class activity	Class Activity in Groups	CO 1
4	Twisting couple	Lect+PPT	CO 1
5	Determination of rigidity modulus	Lect	CO 1
6	Determination of rigidity modulus Contd	Lect	CO 1
7	Problems	Lect	CO 1
8	Static torsion	Lect	CO 1
9	Torsion pendulum	Lect	CO 1
10	Bending of beams and Cantilever	Lect	CO 1
11	Problems	Class Activity in Groups	CO 1
12	Uniform Bending	Lect	CO 1
13	Non-Uniform bending	Lect+Video	CO 1
MODULE II			
14	Angular velocity- angular momentum	Lect	CO 2
15	torque- conservation of angular momentum	Lect	CO 2
16	angular acceleration	Lect	CO 2
17	moment of inertia- parallel axes theorems	Lect	CO 2
18	moment of inertia - perpendicular axes theorems	Lect	CO 2
19	moment of inertia of rod, ring, disc, cylinder	Lect	CO 2
20	moment of inertia of sphere and Problem solving session	Lect + Group Activity	CO 2
21	Problem Solving Sessions	Group Activity	CO 2
22	Understanding flywheel	Lect	CO 2
MODULE III			
23	Periodic and oscillatory motion- simple harmonic motion	Lect	CO 3
24	differential equation- expression for displacement and its graphical representation	Lect	CO 3
25	differential equation- expression for velocity and its graphical representation	Lect	CO 3
26	differential equation- expression for acceleration and its graphical representation	Lect+PPT	CO 3
27	energy of a particle executing simple harmonic motion damped oscillation – part 1	Lect+Video	CO 4
28	energy of a particle executing simple harmonic motion damped oscillation – part 2	Lect+Video	CO 3

29	energy of a particle executing simple harmonic motion forced oscillation – part 1	Lect+Video	CO 3
30	energy of a particle executing simple harmonic motion forced oscillation – part 2	Lect+Video	CO 3
31	Understanding Resonance	Lect+ Video	CO 3
32	Problems	Group Activity	CO 3
33	Fourier Series Introduction	PPT	CO 4
34	Group Assignment to analyze various wave forms	Group Activity	CO 4
35	Group Assignment to analyze various wave forms	Group Activity	CO 4
36	Group Assignment to analyze various wave forms	Group Activity	CO 4

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)	Course Outcome
1	15/7/2018	Designing of flyovers – Role of elasticity	CO 1
2	20/8/2019	Understanding Oscillations in various daily life problems	CO2

GROUP ASSIGNMENTS– Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)	Course Outcome
1	3 days Class Assignment	Fourier Analysis of various functions and its applications (Group Discussion)	CO 4

REFERENCES

1. Mechanics- H.S.Hans and S.P.Puri. (Tata McGraw-Hill)
2. Properties of Matter- Brijlal and N. Subrahmanyam (S. Chand and Co.)

COURSE PLAN- DESCRIPTIVE STATISTICS

PROGRAMME	BACHELOR OF MATHEMATICS	SEMESTER	1
COURSE CODE AND TITLE	15U1CRSTA01 : DESCRIPTIVE STATISTICS	CREDIT	
HOURS/WEEK	5	HOURS/SEM	60
FACULTY NAME	MS. DEEPTHI K DASAN		

	COURSE OUTCOMES	PO/ PSO	CL
CO 1	Understand different measures of central tendency, their properties and different measures of positional averages.	PO1,PO2, PO6, PSO2	U
CO 2	Understand different measures of dispersions – absolute and relative measures of dispersion.	PO1, PSO2	A
CO 3	Understand the concepts of Box plots and Lorenz curve.	PO1, PO2, PSO1	U
CO 4	Understand moments – raw and central moments – inter relations.	PO1, PO2, PSO1, PSO	An
CO 5	Understand the concepts of skewness and kurtosis, scatter diagram, curve fitting – method of least squares.	PO1, PO2, PO3, PO4, PO5, PSO2	U
CO6	Understand and apply the concepts of fitting of straight line, second degree curve, exponential curve, power curve.	PO2, PSO1, PSO2,	
CO7	Understand different types of index numbers, tests to be satisfied by the index numbers, cost of living index numbers and their constructions.	PO3, PSO2	
CO8	Understand the concepts of time series data, determination of trend, computation of seasonal indices.	PO4, PSO2	

CL* Cognitive Level

CO -PO/PSO Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO 1	2	2				2		3			
CO 2	2							2			
CO 3	2	2					3				
CO 4	1	2					3				
CO 5	2	2	2	2	1			2			
CO 6		2					2	2			
CO 7			3					2			
CO 8				2				2			

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	COURSE OUTCOME
1	Bridge course	PPT	video	CO 1
2	Bridge course	PPT/Lecture		CO 1
3	Measures of central tendency	PPT/Lecture		CO 1
4	Mean	PPT/Lecture	e-resource	CO 1
5	median	PPT/Lecture		CO 1
6	Mode	PPT/Lecture		CO 1
7	Geometric mean and Harmonic mean, problems	Lecture		CO 1
8	Absolute and relative measures of dispersion	Lecture		CO 1
9	Range, Quartile Deviation	Lecture		CO 1
10	Mean Deviation	Lecture		CO 1
11	Standard Deviation	PPT/Lecture		CO 1
12	Standard Deviation	PPT/Lecture		CO 1
13	Properties, Problems	PPT/Lecture		CO 1
14	deciles, percentiles			
15	deciles, percentiles	PPT/Lecture		CO 2
16	Coefficient of Variation	Lecture		CO 2
17	Problems graphical method	Lecture		CO 2
18	Box plots	Lecture		CO 2
19	Box plots	Lecture		CO 2
20	Quantiles –quintiles	PPT/Lecture		CO 2
21	Lorenz Curve	PPT/Lecture		CO 2
22	Revision			

23	CIA – I			
24	Index numbers	Lecture		CO 2
25	Simple and Weighted index numbers	Lecture		CO 2
26	Laspeyre's			
27	Paasche's	Lecture		CO 2
28	Bowley's	Lecture		CO 2
29	Fisher's index numbers	PPT/Lecture		CO 2
30	Test for index numbers	PPT/Lecture		CO2
31	Test for index numbers	PPT/Lecture		CO 2
32	Cost of living index numbers			
	Constructions of Cost of living index numbers			
33	Time series- Components of a time series data	PPT/Lecture		CO 3
34	Determination of trend- Moving average	PPT/Lecture		CO 3
35	curve fitting methods	PPT/Lecture		CO 3
36	Computation of and seasonal indices	Lecture	Quiz	CO 3
37	Method of simple averages	Lecture	Q & Ans Session	CO 4
38	Moments – Raw moments	PPT/Lecture		CO 4
39	Central moments	PPT/Lecture		CO 4
40	Absolute moments- Inter Relations	PPT/Lecture		CO 4
41	Skewness	PPT/Lecture		CO 4
42	Pearson, Bowley and Moment measure	Lecture		CO 4
43	Revision			
44	CIA II	PPT/Lecture		CO 4
45	Kurtosis – Moment measure of kurtosis	PPT/Lecture		CO 4
46	Kurtosis – Moment measure of kurtosis	PPT/Lecture		CO 4
47	Scatter diagram	PPT/Lecture		CO 4
48	Curve fitting	PPT/Lecture		CO 4
49	Method of least squares	PPT/Lecture		CO 4
50	fitting of a straight line	PPT/Lecture		CO 4
51	second degree curve	PPT/Lecture		CO 4
52	exponential curve	PPT/Lecture	Video	CO 4
53	power curve	PPT/Lecture		CO 4
54	exponential curve	PPT/Lecture		CO 4
55	power curve			
56	Revision			
57 - 60	Question paper detecting			

ASSIGNMENTS

	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	Introduction, Application of statistics in different fields – In Economics, Medical Field, Industries, In Business ...
2	Practical Sheet -1- Measures of Central tendency and Measures of Dispersion
3	Practical Sheet -2- Skewness and Kurtosis
4	Practical Sheet -3 – Using Excel Sheet

ASSIGNMENTS/EXERCISES – Details & Guidelines

1. Collection of data from medias such as Newspaper.
2. Perusal of various books available in library etc.
3. Preparation of powerpoint presentation on various topics by the students
4. Personal discussion interacting with each student about the topic