

**SACRED HEART COLLEGE (AUTONOMOUS)**

**Department of Mathematics**

**BACHELOR OF SCIENCE**

**[MATHEMATICS]**

**Course plan**

**Academic Year 2016 - 17**

**Semester 1**

### 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	<b>Dr. Joseph Varghese</b>		

### COURSE OBJECTIVES

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

<b>SESSI ON</b>	<b>TOPIC</b>	<b>Learning Resources</b>	<b>Activity</b>	<b>Remarks</b>
<b>MODULE I</b>				
<b>MODULE – I : Speech Sounds</b>				
1	Introduction to Communication Skills	Course book	Lecture	
2	Phonemic symbols	Audio	Q & A	
3	Vowels	Audio	Q & A	
4	Consonants	Audio	Q & A	
5	Vowels	Audio	Q & A	
6	Consonants	Audio	Q & A	
7	Syllables	Course book	Exercises	
8	Syllables	Audio	Q & A	
9	Syllables	Audio	Q & A	
10	Word stress	Audio	Q & A	
11	Word stress	Course book	Exercises	
12	Word stress	Course book	Exercises	
13	Word stress	Audio	Q & A	
14	Stress in polysyllabic words	Audio	Q & A	
15	Stress in polysyllabic words	Course book	Exercises	
16	Stress in polysyllabic words	Course book	Exercises	
17	Stress in words used as different parts of speech	Audio	Q & A	
18	Stress in words used as different parts of speech	Audio	Q & A	
19	Stress in words used as different parts of speech	Lecture		
<b>MODULE II : Listening</b>				
20	Sentence stress	Course Book	Lecture	
21	Sentence stress	Audio	Q& A	

22	Sentence stress	Audio	Q& A	
23	Sentence stress	Lecture	Exercises	
24	Weak forms and strong forms	Audio	Q & A	
25	Weak forms and strong forms	Audio & Lecture	Exercises	
26	Weak forms and strong forms	Lecture	Exercises	
27	Intonation	Lecture	Exercises	
28	Intonation	Audio	Q & A	
<b>Internal Assessment Test 1</b>				
30	Awareness of different accents	Video	Q & A	
31	Awareness of different accents	Audio/Video	Q & A	
32	Awareness of different accents	Audio/Video	Q & A	
<b>MODULE- III: Speaking</b>				
33	American English	Course Book	Lecture	
34	American English	Audio	Discussion	
35	American English	Audio	Discussion	
36	American English	Audio	Exercises	
37	British and Indian English	Course Book	Discussion	
38	British and Indian English	Audio	Discussion	
39	British and Indian English	Audio	Discussion	
40	British and Indian English	Audio	Discussion	
<b>Unit II: Academic Listening &amp; Note-taking</b>				
41	Influence of the mother tongue	Course Book	Lecture	
42	Influence of the mother tongue	Course book	Exercises	
43	Influence of the mother tongue	Audio	Exercises	
44	Influence of the mother tongue	Audio	Exercises	

45	Active listening	Audio	Exercises	
46	Active listening	Audio	Exercises	
47	Barriers to listening	Audio	Exercises	
48	Barriers to listening	Audio	Exercises	
<b>MODULE III</b>				
<b>Unit 1 – Art of Small Talk</b>				
49	Seminar Presentation	Course book	Lecture	
50	Listening and note taking	Course book	Exercises	
51	Listening and note taking	Audio	Q & A	
52	Listening and note taking	Course book	Q & A	
53	Listening and note taking	Course book	Exercises	
54	Listening to announcements	Audio	Exercises	
55	Listening to announcements	Course book	Exercises	
56	Listening to announcements	Course book	Exercises	
57	Listening to announcements	Course book	Exercises	
<b>Unit II: Transactional Conversation</b>				
59	Listening to news on the radio and television	Course book	Exercises	
60	Listening to news on the radio and television	Course book	Exercises	
61	Listening to news on the radio and television	Course book	Exercises	
62	Word stress and rhythm	Course book	Exercises	
63	Word stress and rhythm	Course book	Exercises	
64	Pauses and sense groups	Course book	Exercises	
65	Pauses and sense groups	Course book	Exercises	
66	Pauses and sense groups	Course book	Exercises	
67	Falling and rising tones	Course book	Exercises	
68	Falling and rising tones	Course book	Exercises	

69	Falling and rising tones	Course book	Exercises	
<b>Unit III: Telephone Conversation</b>				
70	Fluency and pace of delivery	Course book	Lecture	
71	Internal Examination	Course book	Exercises	
72	Art of small talk	Course book	Exercises	
<b>Internal Assessment 2</b>				
<b>MODULE IV</b>				
<b>Unit 1: Presentation</b>				
73	Participating in conversations	Course book	Lecture	
74	Participating in conversations	Discussion	Exercises	
75	Participating in conversations	Course book	Lecture	
76	Making a short formal speech	Course book	Discussion	
77	Participating in conversations	Course book	Discussion	
78	Describing people	Course book	Discussion	
79	Describing people	Course book	Discussion	
80	Place, events and things	Course book	Lecture	
81	Group discussion skills and telephone skills	Course book	Discussion	
82	Reading: theory and Practice -----	Course book	Discussion	
83	Scanning - Surveying a textbook using an index	Course book	Discussion	
84	Reading with a purpose – making predictions	Course book	Discussion	
<b>MODULE – IV: Reading</b>				
85	To To understand text structure	Course book	Lecture	
86	Locating main points – Making inferences	Course book	performanc e	
87	Reading graphics	Course book	performanc e	

88	Reading critically	Course book	performance	
89	Reading for research	Course book	performance	
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.)
1	4/8/2016	Presentations
2	28/8/2016	Role plays

#### **GROUP ASSIGNMENTS/ACTIVITIES – Details & Guidelines**

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/ Presentation – Graded or Non-graded etc)
1	12/9/2016	Group Discussions
2	20/9/2016	Performances

#### **References**

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

### COURSE PLAN

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

COURSE OBJECTIVES
Explain the nuances of English Language through literature.
Compare the Varied parameters of English language.
Discover comprehensive ability.
Connect the efficiency of the students with realities of life.
Evaluate the beauty of literary expression.

### COURSE PLAN

Session	Topic	Learning Resources	Value Additions	Remarks
<b>MODULE I</b>				
<b>ESSAYS</b>				
1	Introducing the text book	Text	PPT	
2	Bores: E V Lucas	Text		
3	Bores: E V Lucas	Text		
4	Bores: E V Lucas	Text		
5	A Glory has Departed- Jawaharlal Nehru	Text	Group Discussion	
6	A Glory has Departed- Jawaharlal Nehru	Text		
7	A Glory has Departed- Jawaharlal Nehru	Text		
8	A Glory has Departed- Jawaharlal Nehru	Text		
9	Tryst with Destiny- Amartya Sen	Text		
10	Tryst with Destiny- Amartya Sen	Text		
11	Tryst with Destiny- Amartya Sen	Text		
12	Tryst with Destiny- Amartya Sen	Text		
13	How to Escape from Intellectual Rubbish-Bertrand Russel	Text	Group Discussion	
14	How to Escape from Intellectual Rubbish-Bertrand Russel	Text		
15	How to Escape from Intellectual Rubbish-Bertrand Russel	Text		
16	How to Escape from Intellectual Rubbish-Bertrand Russel	Text		



17	Discussion			
18	Discussion		Quiz	
<b>MODULE II- Poetry</b>				
19	Sonnet XXX-William Shakespeare	Text	Lecture/PPT	
20	Sonnet XXX-William Shakespeare	Text		
21	Sonnet XXX-William Shakespeare	Text	Poetry Recitation	
22	Ode to a Nightingale-John Keats	Text	Poetry Recitation	
23	Ode to a Nightingale-John Keats	Text		
24	Mending Wall- Robert Frost		Interaction	
<b>First Internal Examination</b>				
25	Mending Wall- Robert Frost	Text	Poetry Recitation	
26	Mending Wall- Robert Frost	Text	Role Play	
27	The Bicycle- David Malouf	Text	Role play	
28	The Bicycle- David Malouf	Text		
29	The Bicycle- David Malouf	Text		
30	The Refuge	Text		
<b>Unit 3: The Boy Comes Home</b>				
30	Poor Girl- Maya Angelou	Text	Lecture/PPT	
31	Poor Girl- Maya Angelou	Text		
32	The Mask- Kamala Suraiya	Text		
33	The Mask- Kamala Suraiya	Text		
34	Goodbye party for Miss Pushpa T S- Nissim Ezekiel	Text	Poetry Recitation	
35	Goodbye party for Miss Pushpa T S- Nissim Ezekiel	Text		
36	Once Upon a Time-Gabriel Okara	text	Quiz	
<b>MODULE III: Short Story</b>				
37	The Lottery Ticket- Anton Pavlovich Chekhov	Text		
38	The Lottery Ticket- Anton Pavlovich Chekhov	Text		
39	The Lottery Ticket- Anton Pavlovich Chekhov	Text		
40	The Lottery Ticket- Anton Pavlovich Chekhov	Text	Quiz	
41	The Lottery Ticket- Anton Pavlovich Chekhov	Text	Video/ e-content	
42	Retrieved Reformation- O. Henry	Text		
43	Retrieved Reformation- O. Henry	Text		
44	Retrieved Reformation- O. Henry	Text		
<b>First Internal Examination</b>				
45	Retrieved Reformation- O. Henry	Text	PPT	
46	Retrieved Reformation- O. Henry	Text		
47	A Shadow- R K Narayan	Text		
48	A Shadow- R K Narayan	Text		
49	A Shadow- R K Narayan	Text		

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

## References

Reading Literature in English: MG University

## COURSE PLAN

PROGRAMME	<b>BSc. MATHEMATICS</b>	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		

<b>COURSE OBJECTIVES</b>
To understand and explain the different prose forms written in Hindi language.
To understand various trends in Hindi Drama and its presentation.
To understand the ancient Indian culture
To understand the socio - cultural change in literature
To understand the development of literature and aesthetics

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
<b>MODULE I</b>				
1	General information about literature	Lecture/Discussion		
2	Development of Drama	Lecture/Discussion		
3	Madhavi – Introduction of Author Bishma Sahni	Lecture/PPT		
4	Madhavi Act – 1, Scene -1	Lecture	Video	
5	Essay - Jeevan Mein Sahitya Ka Sthan Introduction of Author Premchand	Lecture/Discussion		
6	Premchand and his literary works	Lecture/PPT		
7	Madhavi Act – 1, Scene -1	Lecture	Narration of stories related to 'Mahabharat'	
8	Revision	Interaction	Video	
9	Madhavi Act – 1, Scene -1	Lecture		
10	Madhavi Act – 1, Scene -2	Lecture/Discussion		
11	Essay - Jeevan Mein Sahitya Ka Sthan	Lecture		

12	Revision	Interaction	Presentation by students	
13	Madhavi Act – 1, Scene -2	Lecture		
14	Madhavi Act – 1, Scene -2	Lecture		
15	Madhavi Act – 1, Scene -3	Lecture	Presentation by students	
16	Essay - Jeevan Mein Sahitya Ka Sthan	Interaction	Acting	
17	Analyzing the characters of 'Madhavi'	Interaction	Conversation	
18	Essay - Jeevan Mein Sahitya Ka Sthan	Lecture	Seminar	
19	Madhavi Act – 1, Scene -3	Lecture/Discussion	Video	
20	Essay - Jeevan Mein Sahitya Ka Sthan	Lecture		
21	Essay - Jeevan Mein Sahitya Ka Sthan	Interaction		
22	Essay - Jeevan Mein Sahitya Ka Sthan	Lecture/Discussion		
23	Essay - Sahitya Ki Mahatta Introduction of Author Mahaveer Prasad Dwivedi	Lecture/PPT		
24	<b>CIA – I (1Hour Exam)</b>			
<b>MODULE II</b>				
25	Essay - Sahitya Ki Mahatta	Lecture	Seminar	
26	Essay - Sahitya Ki Mahatta	Lecture		
27	Essay - Sahitya Ki Mahatta	Lecture		
28	Essay - Sahitya Ki Mahatta	Lecture/Discussion		
29	Revision	Interaction	Seminar	
30	Madhavi Act – 2, Scene -1	Lecture		
31	Madhavi Act – 2, Scene -1	Lecture	Presentation by students	
32	Madhavi Act – 2, Scene -1	Lecture/Discussion		
33	Madhavi Act – 2, Scene -2	Lecture		
34	Madhavi Act – 2, Scene -2	Lecture		
35	Madhavi Act – 2, Scene -2	Lecture	Presentation by students	
36	Revision	Interaction	Video	
37	Madhavi Act – 2, Scene -3	Lecture		
38	Madhavi Act – 2, Scene -3	Lecture/Discussion		
39	Essay - Lalit Kalayen Introduction of the Author Dr. Syamsundar Das	Lecture/PPT		

40	Essay - Lalit Kalayen	Lecture	Seminar	
41	Essay - Lalit Kalayen	Lecture		
42	Essay - Lalit Kalayen	Lecture/Discussion		
43	Essay - Lalit Kalayen	Lecture/Discussion		
44	Madhavi Act – 2, Scene -3	Lecture	Video	
45	Madhavi Act – 2, Scene -3	Lecture	Video	
46	Interactive session	Discussion	Debate	
47	<b>CIA – II (2 Hours Exam)</b>			
<b>MODULE III</b>				
48	Essay - Rashtra Ka Swaroop Introduction of the Author Vasudev Saran Agraval	Lecture/PPT		
49	Essay - Rashtra Ka Swaroop	Lecture		
50	Essay - Rashtra Ka Swaroop	Lecture		
51	Essay - Rashtra Ka Swaroop	Discussion	Presentation by students	
52	Madhavi Act – 2, Scene -4	Lecture		
53	Madhavi Act – 2, Scene -4	Lecture		
54	Madhavi Act – 3, Scene -1	Lecture		
55	Madhavi Act – 3, Scene -1	Lecture/Discussion		
56	Revision	Discussion	Video	
57	Essay - Tum Ghar Kab Aoge Kavi Introduction of the Author Ramdhari Sinh Dinakar	Lecture/PPT		
58	Essay - Tum Ghar Kab Aoge Kavi	Lecture		
59	Essay - Tum Ghar Kab Aoge Kavi	Lecture	Seminar	
60	Essay - Tum Ghar Kab Aoge Kavi	Lecture		
61	Essay - Tum Ghar Kab Aoge Kavi	Lecture/Discussion		
62	Essay - Tum Ghar Kab Aoge Kavi	Discussion	Presentation by students	
63	Madhavi Act – 3, Scene -2	Lecture		
64	Madhavi Act – 3, Scene -2	Lecture		
65	Madhavi Act – 3, Scene -2	Lecture/Discussion	Video	
66	Madhavi Act – 3, Scene -3	Lecture	Video	
67	Madhavi Act – 3, Scene -3	Lecture/Discussion	Presentation by students	
68	Madhavi Act – 3, Scene -3			
69	Madhavi Conclusion	Interaction	Criticising the drama	

70	Seminar			
71	Seminar			
72	Evaluation of the course			

### INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines (B.Sc. Physics)

Sl.No	Date of Completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	Assignment (October)	Review of a lesson based on the text book 2 and reference-Writing (Individual)
2	Seminar (October)	Presentation on a given topic based on t the text book 1 and reference – oral (Individual)

### GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

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

#### 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](http://epustakalay.com)
- [www.hindikunj.com](http://www.hindikunj.com)

### COURSE PLAN

PROGRAMME	<b>BSc. MATHEMATICS</b>	SEMESTER	1
COURSE CODE AND TITLE	15U1CCFRN1A - FRENCH LANGUAGE AND COMMUNICATION SKILLS I	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72

#### COURSE OBJECTIVES

To understand the basic concepts of French language including grammar, vocabulary and sentence structure

To understand the basic communication skills necessary for living in France and French speaking countries.

Describe oneself and ones surroundings using a repertory of words and expressions in a simple and structured grammatical manner.

Develop business communication skills

Express an issue of concern including topics like environmental, social or health issues, enumerate its causes and consequences and suggest solutions

To understand the mannerisms, culture and tradition of France and Francophone countries and compare it to one's own country and develop co-cultural feeling

To understand and appreciate the history of France and Francophone countries and compare it to one's own country

To understand the special features of France including gastronomy, social institutions, policis, the present French scenario and compare it to one's own country

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



27	explaining the objective of learning French	Discussion, ICT, audio	Lecture, q and A	
28	Revision			
		<b>MODULE III</b>		
29	describe a locality	oral, description	Q and A	
30	Express in quantity	role play, chalk n talk	Lecture	
31	"vivre" verb conjugation	audio, chalk n talk	Lecture	
32	places vocabulary	games, music, audio	Video	
33	Il y a,	audio,	daily needed vocabs	
	il n'y a pas	chalk n talk		
34	definite articles	chalk n talk, audio ppt	Lecture	
35	Adjectives	role play, audio ppt	Lecture	
36	Prepositions	role play, audio ppt	Lecture	
37	Negation	chalk n talk/role play	Lecture	
38	Qualificative adjectives	chalk n talk, audio ppt	Q and A	
39	Describing ur ideal locality	role play/presentation	Lecture	
40	intonations	audio ppt	Lecture	
41	French culture-express preference for city or village	Discussion	knowing culture	
42	revision			
43	CIA 2			
44	Corresponding with a friend expressing one's likings	chalk n talk/Role plays	Q and A	
45	Speak about a person's character	role play, GD	know each other	
46	adjectif possessif part 1	chalk n talk, audio ppt	Lecture	
47	adjectif possessif part 2	chalk n talk, audio ppt	Lecture	
48	Speak about the surroundings	discussion	Lecture	
49	introduce and describe someone	role play	Lecture	
50	activities - vocabulary	lecture, audio	Lecture	
51	sports vocabulary	speaking/role play	general knowledge	
52	Vocabulary - relations	chalk n talk, audio ppt	Lecture	
53	famous French personality	discussion/comprehension	Lecture	
54	lexique des liens de parenté	chalk n talk, audio ppt	Lecture	
	Express one's likings	Audio ppt, discussion	Q and A	
55	lexiques des loisirs	Audio ppt, discussion	Video	

56	forme negation	Audio ppt,discussion	Q and A	
57	pronunciation of verbs	Audio ppt,discussion	Q and A	
58	form filling	Audio ppt,discussion	Q and A	
59	french artists	Audio ppt,discussion	GK	
60	french music	Audio ppt,discussion	Video	
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	
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)
1	By October	Basic vocabulary on communication skills in Malayalam and French
2		roleplays

#### References

Version Originale, site web

## COURSE PLAN

PROGRAMME	BSc. MATHEMATICS	SEMESTER	1
COURSE CODE AND TITLE	15U1CCSAN1A: DRAMA, POETRY AND ALANKARA	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	Mr. Mathew Jose		

### COURSE OBJECTIVES

Students can To understand the poetic style with special reference to classical literature
Students get an awareness about Indian classical poetic tradition
Students familiarize the figures of speech and their usage
Students get an awareness about assthetic values
Express an issue of concern including topics like environmental, social or health issues, enumerate its causes and consequences and suggest solutions
To understand moral values through Drama
To understand the tools to beautify the literature through Alankara
Students identify the richness of Indian Literature

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
<b>MODULE I</b>				
1	Introducing Sanskrit Basics	Lecture		
2	About Mahakavya	Lecture		
3	About Kumarasambava	Lecture		
4	Fifth sarga of Kumarasambava	Lecture	e-resource	
5	Brahmacharipravesha	Lecture		
6	Parvathi's penance	PPT/Lecture		
7	Inviting Brahmachari	Lecture		
8	Purushartha	Lecture		
9	Himalaya	Lecture		
10	Conversation to Parvathy	Lecture		
11	Critisisation	PPT/Lecture		
12	Questioning	PPT/Lecture		
13	Upamas	PPT/Lecture		
14	Revision			
<b>MODULE II</b>				
15	Sanskrit Drama - Introduction	PPT/Lecture		
16	Mahakavi Bhasa's Dramas	Lecture		

17	Bhasa's Karnabharam	Lecture		
18	Mahabharatha	Lecture		
19	Mangalasloka	Lecture		
20	Entry of Karna	PPT/Lecture		
21	Request to Karna	PPT/Lecture		
22	Duryodhana's order	PPT/Lecture		
23	Karna's sadness	PPT/Lecture		
24	Revenge	Lecture		
25	Karna's birth	Lecture		
26	CIA-1			
27	Kunthi's request	Lecture		
28	Karna's study	Lecture		
29	ParaShurama's teaching	PPT/Lecture		
30	Parashrama's curse	PPT/Lecture		
31	Greatness of Kshathriyas	PPT/Lecture		
32	Bravery of Karna	Lecture		
33	Indra's request to karna	Lecture		
34	Brahmana's blessing	PPT/Lecture		
35	Karna offering Horses	PPT/Lecture		
36	Karna offering elephants	PPT/Lecture		
37	Karna offering gold	Lecture		
38	Karna offering his kavacha	Lecture		
39	Indra accepting kavacha and kundala	PPT/Lecture		
40	Indra's blessing	PPT/Lecture		
41	The greatness of giving	PPT/Lecture		
42	<b>Revision</b>			
43	Revision			
44	Revision			
45	Revision			
	MODULE III			
46	Alankara introduction			
47	Kuvalayananda	PPT/Lecture		
48	Upama alankara	PPT/Lecture		
49	Upamana ,Upameya ,sadharana dharma	PPT/Lecture		
50	Ullekha Alankara	PPT/Lecture		
51	Dipika Alankara	PPT/Lecture		
52	Dipika example	PPT/Lecture	Video	
53	Vyathireka Alankara	PPT/Lecture		
54	Aprastutaprasamsa	PPT/Lecture		
55	Revision			
56	Svabhavokthi Alankara	Lecture	Debate	
57	Rupaka Alankara	PPT/Lecture		
58	Drishtantha Alankara	PPT/Lecture		
59	Dristantha -example	PPT/Lecture		
60	Arthantharanyasa	PPT/Lecture		

61	Prathama Ullekha	PPT/Lecture		
62	Dvitheeya Ullekha	PPT/Lecture		
CIA - II				
MODULE IV				
63	Characteristic of Karna	Lecture		
64	Characteristics of Shalya	Lecture	Group discussion	
65	Characteristics of Indra	Lecture		
66	Characteristics of Parvathi	PPT/Lecture		
67	Characteristics of Brahmachari	PPT/Lecture		
68	Himalaya	PPT/Lecture		
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)
1	12/08/2016	The role of Karna in Mahabharatha
2	16/09/2016	Upama kalidasasya

#### GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	23/9/2016	The moral values in Kumarasambava
2	30/9/2016	Purushartha –the means of life

#### 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>BSc. MATHEMATICS</b>	SEMESTER	1
COURSE CODE & TITLE	15U1CCMAL1A കഥ നോവൽ	CREDITS	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	<b>FR. XAVIER C S, VISHNU RAJ P</b>		

COURSE OBJECTIVES
കഥ, നോവൽ എന്നിവയെക്കുറിച്ച് മെച്ചപ്പെട്ട ധാരണ ഉണ്ടാക്കുക
ഭാഷാപഠനം സാഹിത്യാനുഭവത്തിലൂടെ ആവിഷ്കരിക്കുക
വായനാഭിരുചി വർദ്ധിപ്പിക്കുക
സാഹിത്യ പരിചയം ഉണ്ടാക്കുക
വ്യാവഹാരിക തലത്തിൽ മാതൃഭാഷാപ്രയോഗിക്കുവാനുള്ള കഴിവ് നേടുക
ഭാഷാപഠനത്തിലൂടെ ആശയവിനിമയശേഷി വർദ്ധിപ്പിക്കുക

**COURSE PLAN**

Session	Topic	Learning Resources	Teaching Method	Remarks
<b>Module I</b>				
1	മലയാളസാഹിത്യം സാമാന്യാവലോകനം	സാഹിത്യചരിത്രങ്ങൾ	Lecturing	
2	ചെറുകഥയുടെ ചരിത്രം -1	സാഹിത്യചരിത്രങ്ങൾ	Lecturing	
3	ചെറുകഥയുടെ ചരിത്രം-2	സാഹിത്യചരിത്രങ്ങൾ	Discussion	
4	തകഴിയുടെ രചനാലോകം	നോവൽ & ചെറുകഥാപഠനങ്ങൾ	Lecturing	
5	വെളുത്തകുഞ്ഞ്	Text	Reading	
6	വെളുത്തകുഞ്ഞ്	Text	Group Discussion	
7	സന്തോഷ് ഏച്ചിക്കാനത്തിൻറെ കഥകൾ	ചെറുകഥാപഠനങ്ങൾ	Lecturing	
8	അഭിനയമൂഹൂർത്തങ്ങൾ കഥ	Text	Reading	
9	അഭിനയമൂഹൂർത്തങ്ങൾ കഥ	Text	Group Discussion	
10	ഒ വി വിജയനെ പരിചയപ്പെടുത്തുന്നു	നോവൽ & ചെറുകഥാപഠനങ്ങൾ	Lecturing	
11	കടൽത്തീരത്ത്	Text	Reading	
12	കടൽത്തീരത്ത്	Text	Group Discussion	

13	എൻ എസ് മാധവൻറെ കൃതികളുടെ രാഷ്ട്രീയം	നോവൽ & ചെറുകഥാ പഠനങ്ങൾ	Lecturing	
14	നാലാംലോകം കഥ	Text	Reading	
15	നാലാംലോകം കഥ	Text	Group Discussion	
16	നാലാംലോകം കഥ	Text	Group Discussion	
17	ചെറുകഥ - അവലോകനം	Text	Group Discussion	
Module II				
18	എം ടി വാസുദേവൻ നായരുടെ കൃതികൾ	നോവൽ & ചെറുകഥാ പഠനങ്ങൾ	Lecturing	
19	ഷെർലക്ക്	Text	Reading	
20	ഷെർലക്ക്	Text	Group Discussion	
21	ഉണ്ണി ആറിനെ പരിചയപ്പെടുത്തുന്നു	നോവൽ & ചെറുകഥാ പഠനങ്ങൾ	Lecturing	
22	ഒറ്റപ്പെട്ടവൻ-	Text	Reading	
23	ഒറ്റപ്പെട്ടവൻ-	Text	Group Discussion	
24	ജോൺ എബ്രഹാം: സാഹിത്യവും സിനിമയും	നോവൽ & ചെറുകഥാ പഠനങ്ങൾ	Lecturing	
25	നേർച്ചക്കോഴി	Text	Reading	
26	നേർച്ചക്കോഴി	Text	Group Discussion	
27	സാനാ ജോസഫ്, പുരാണ പുനർവായന	നോവൽ & ചെറുകഥാ പഠനങ്ങൾ	Lecturing	
28	തായ്ക്കുലം	Text	Reading	
29	തായ്ക്കുലം	Text	Group Discussion	
30	ചെറുകഥ - അവലോകനം	Text	Group Discussion	
31	Internal Assessment 1	Text		
32	Question paper discussion	Text	Group Discussion	
Module III				
33	മാധവിക്കുട്ടിയുടെ കഥകളുടെ പ്രത്യേകതകൾ	നോവൽ & ചെറുകഥാ പഠനങ്ങൾ	Lecturing	
34	പക്ഷിയുടെ മണം	Text	Reading	
35	പക്ഷിയുടെ മണം	Text	Group Discussion	
36	വൈക്കം മുഹമ്മദ് ബഷീറിൻറെ ലോകം	നോവൽ & ചെറുകഥാ പഠനങ്ങൾ	Lecturing	
37	ശിക്കിടിമുക്കൻ	Text	Reading	
38	ശിക്കിടിമുക്കൻ	Text	Group Discussion	
39	സേതുവിൻറെ കൃതികൾ		Lecturing	
40	ദൂത്	Text	Reading	
41	ദൂത്	Text	Group Discussion	
42	കെ ആർ മീരയുടെ എഴുത്തുകൾ	നോവൽ & ചെറുകഥാ പഠനങ്ങൾ	Lecturing	
43	മോഹമത്തെ	Text	Reading	
44	മോഹമത്തെ	Text	Group Discussion	
45	ചെറുകഥ - അവലോകനം	Text	Group Discussion	

Module - IV				
46	മലയാളനോവൽ ചരിത്രം	സാഹിത്യചരിത്രങ്ങൾ	Lecturing	
47	മലയാളനോവൽ ചരിത്രം	സാഹിത്യചരിത്രങ്ങൾ	Group Discussion	
48	മലയാളനോവൽ നൂതനപ്രവണതകൾ	സാഹിത്യചരിത്രങ്ങൾ	Lecturing	
49	മലയാളനോവൽ നൂതനപ്രവണതകൾ	സാഹിത്യചരിത്രങ്ങൾ	Group Discussion	
50	വിനോയ് തോമസ്- ആമുഖം	നോവൽ പഠനങ്ങൾ	Lecturing	
51	കരിക്കോട്ടക്കരി- നോവൽ ആമുഖം	നോവൽ പഠനങ്ങൾ	Lecturing	
52	കരിക്കോട്ടക്കരി അധ്യായം 1	Text	Group Discussion	
53	കരിക്കോട്ടക്കരി അധ്യായം 2	Text	Group Discussion	
54	കരിക്കോട്ടക്കരി അധ്യായം 3	Text	Group Discussion	
55	കരിക്കോട്ടക്കരി അധ്യായം 4	Text	Group Discussion	
56	കരിക്കോട്ടക്കരി അധ്യായം 5	Text	Group Discussion	
57	കരിക്കോട്ടക്കരി അധ്യായം 6	Text	Group Discussion	
58	കരിക്കോട്ടക്കരി അധ്യായം 7	Text	Group Discussion	
59	കരിക്കോട്ടക്കരി അധ്യായം 8	Text	Group Discussion	
60	കരിക്കോട്ടക്കരി അധ്യായം 9	Text	Group Discussion	
61	കരിക്കോട്ടക്കരി അധ്യായം 10	Text	Group Discussion	
62	കരിക്കോട്ടക്കരി അധ്യായം 11	Text	Group Discussion	
	Internal Assessment 2			
63	കരിക്കോട്ടക്കരി അധ്യായം 12	Text	Group Discussion	
64	കരിക്കോട്ടക്കരി അധ്യായം 13	Text	Group Discussion	
65	കരിക്കോട്ടക്കരി അവലോകനം	Text	Group Discussion	
66	സംവാദം- വിനോയ് തോമസ്	Text	Group Discussion	
67	സെമിനാർ	Text	Presentation	
68	സെമിനാർ	Text	Presentation	
69	സെമിനാർ	Text	Presentation	
70	സെമിനാർ	Text	Presentation	
71	സെമിനാർ	Text	Presentation	
72	Revision	Text	Group Discussion	



**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 വിവരണങ്ങൾ
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**

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

<b>COURSE OBJECTIVES</b>
To explain the fundamental ideas of sets and function
To analyze basic logic and prove statements about sets and functions
To introduce basic number theory
Comprehend various theorems in number theory

<b>Sessions</b>	<b>Topic</b>	<b>Method</b>	<b>Remarks/Reference</b>
1	Introductory Session		
2	Introduction of sets- definition examples	Interactive session	
3	Properties of sets1	Lecturing	
4	Properties of sets2		
5	Problems		
6	Set operations	Lecturing and interaction with students	
7	Problems		
8	Functions introduction examples	Group discussion	
9	Functions Operations	Group discussion	

10	Problems		
11	Tutorial		
12	Sequence & Summation Definition examples	Lecturing	
13	Problems		
14	Revision		
15	Relations Introduction	Interactive session	
16	Examples of relation		
17	Properties of relations	Lecturing	
18	Problems		
19	Tutorial		
20	n-array relations	Group discussion	
21	Examples		
22	Applications		
23	Problems		
24	Tutorial		
25	Representation of Relations	Group discussion	
26	Examples and problems		
27	Equivalence relation	Lecturing and interaction	
28	Examples		
29	Problems		
30	Partial ordering Introduction		
31	Examples		
32	Tutorial and revision		
33	Propositional logic	Interactive session	

34	Logical Operators	Lecturing	
35	Conditional Statements	Lecturing	
36	Truth tables	Lecturing	
37	Propositional Equivalences	Lecturing	
38	Predicates and Quantifiers	Lecturing	
39	Nested Quantifiers	Lecturing	
40	Rules of inference	Lecturing	
41	Introduction to Proofs	Lecturing	
42	Proof methods and strategy	Lecturing	
43	Exercise Problems		
44	Test Paper		
45	Divisibility theory in the integers	Lecturing	
46	The greatest common divisor	Problem solving	
47	The Euclidean algorithm (division algorithm)	Lecturing	
48	The Euclidean algorithm (division algorithm)	Lecturing	
49	Tutorial		
50	Primes and famous numbers	Lecturing	
51	The fundamental theorem of arithmetic	Lecturing	
52	The theory of congruence	Lecturing	
53	Basic properties of congruence	Lecturing	
54	Theorems	Lecturing	
55	Fermat's little theorem	Lecturing	

56	Wilson's theorem	Lecturing	
57	Euler's phi function	Lecturing	
58	Euler's generalization of Fermat's theorem	Lecturing	
59	Revision		
60	Test Paper		
61 – 66	Seminar		
67 – 72	Revision		

### ASSIGNMENTS

	<b>Topic of Assignment &amp; Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)</b>
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**

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

**COURSE OBJECTIVES**

To To understand the concepts of Elastic moduli- Poisson's ratio- twisting couple- determination of rigidity modulus
To To understand the basic concepts of Rotational dynamics of rigid bodies
To To understand the role of oscillations in Physics life
Role of Fourier analysis in Physics – Basic Introduction

<b>SESSION</b>	<b>TOPIC</b>	<b>LEARNING RESOURCES</b>	<b>REMARKS</b>
<b>MODULE I</b>			
1	Introduction – to Elasticity	Lect	
2	Elastic moduli	Lect	
3	Poissons ratio and class activity	Class Activity in Groups	
4	Twisting couple	Lect+PPT	
5	Determination of rigidity modulus	Lect	
6	Determination of rigidity modulus Contd	Lect	
7	Problems	Lect	
8	Static torsion	Lect	
9	Torsion pendulum	Lect	
10	Bending of beams and Cantilever	Lect	
11	Problems	Class Activity in Groups	
12	Uniform Bending	Lect	
13	Non-Uniform bending	Lect+Video	
<b>MODULE II</b>			
14	Angular velocity- angular momentum	Lect	
15	torque- conservation of angular	Lect	

	momentum		
16	angular acceleration	Lect	
17	moment of inertia- parallel axes theorems	Lect	
18	moment of inertia - perpendicular axes theorems	Lect	
19	moment of inertia of rod, ring, disc, cylinder	Lect	
20	moment of inertia of sphere and Problem solving session	Lect + Group Activity	
21	Problem Solving Sessions	Group Activity	
22	To To understand flywheel	Lect	
<b>MODULE III</b>			
23	Periodic and oscillatory motion- simple harmonic motion	Lect	
24	differential equation- expression for displacement and its graphical representation	Lect	
25	differential equation- expression for velocity and its graphical representation	Lect	
26	differential equation- expression for acceleration and its graphical representation	Lect+PPT	
27	energy of a particle executing simple harmonic motion damped oscillation – part 1	Lect+Video	
28	energy of a particle executing simple harmonic motion damped oscillation – part 2	Lect+Video	
29	energy of a particle executing simple harmonic motion forced oscillation – part 1	Lect+Video	
30	energy of a particle executing simple harmonic motion forced oscillation – part 2	Lect+Video	
31	To To understand Resonance	Lect+ Video	
32	Problems	Group Activity	
33	Fourier Series Introduction	PPT	
34	Group Assignment to analyze various wave forms	Group Activity	
35	Group Assignment to analyze various wave forms	Group Activity	
36	Group Assignment to analyze various wave forms	Group Activity	

### INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	15/7/2016	Designing of flyovers – Role of elasticity
2	20/8/2019	To To understand Oscillations in various daily life problems

### **GROUP ASSIGNMENTS– Details & Guidelines**

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

### **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

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

<b>COURSE OBJECTIVES</b>
<b>To understand</b> different measures of central tendency, their properties and different measures of positional averages.
To understand different measures of dispersions – absolute and relative measures of dispersion.
To understand the concepts of Box plots and Lorenz curve.
To understand moments – raw and central moments – inter relations.
To understand the concepts of skewness and kurtosis, scatter diagram, curve fitting – method of least squares.
To understand and apply the concepts of fitting of straight line, second degree curve, exponential curve, power curve.
To understand different types of index numbers, tests to be satisfied by the index numbers, cost of living index numbers and their constructions.
To understand the concepts of time series data, determination of trend, computation of seasonal indices.

<b>SESSION</b>	<b>TOPIC</b>	<b>LEARNING RESOURCES</b>	<b>VALUE ADDITIONS</b>	<b>REMARKS</b>
1	Bridge course	PPT	video	
2	Bridge course	PPT/Lecture		
3	Measures of central tendency	PPT/Lecture		
4	Mean	PPT/Lecture	e-resource	
5	median	PPT/Lecture		
6	Mode	PPT/Lecture		
7	Geometric mean and Harmonic mean, problems	Lecture		
8	Absolute and relative measures of dispersion	Lecture		

9	Range, Quartile Deviation	Lecture		
10	Mean Deviation	Lecture		
11	Standard Deviation	PPT/Lecture		
12	Standard Deviation	PPT/Lecture		
13	Properties, Problems	PPT/Lecture		
14	deciles, percentiles			
15	deciles, percentiles	PPT/Lecture		
16	Coefficient of Variation	Lecture		
17	Problems graphical method	Lecture		
18	Box plots	Lecture		
19	Box plots	Lecture		
20	Quantiles –quintiles	PPT/Lecture		
21	Lorenz Curve	PPT/Lecture		
22	Revision			
23	CIA – I			
24	Index numbers	Lecture		
25	Simple and Weighted index numbers	Lecture		
26	Laspeyre's			
27	Paasche's	Lecture		
28	Bowley's	Lecture		
29	Fisher's index numbers	PPT/Lecture		
30	Test for index numbers	PPT/Lecture		
31	Test for index numbers	PPT/Lecture		
32	Cost of living index numbers			
	Constructions of Cost of living index numbers			
33	Time series- Components of a time series data	PPT/Lecture		
34	Determination of trend- Moving average	PPT/Lecture		
35	curve fitting methods	PPT/Lecture		
36	Computation of and seasonal indices	Lecture	Quiz	
37	Method of simple averages	Lecture	Q & Ans Session	
38	Moments – Raw moments	PPT/Lecture		
39	Central moments	PPT/Lecture		
40	Absolute moments- Inter Relations	PPT/Lecture		
41	Skewness	PPT/Lecture		
42	Pearson, Bowley and Moment measure	Lecture		
43	Revision			
44	CIA II	PPT/Lecture		

45	Kurtosis – Moment measure of kurtosis	PPT/Lecture		
46	Kurtosis – Moment measure of kurtosis	PPT/Lecture		
47	Scatter diagram	PPT/Lecture		
48	Curve fitting	PPT/Lecture		
49	Method of least squares	PPT/Lecture		
50	fitting of a straight line	PPT/Lecture		
51	second degree curve	PPT/Lecture		
52	exponential curve	PPT/Lecture	Video	
53	power curve	PPT/Lecture		
54	exponential curve	PPT/Lecture		
55	power curve			
56	Revision			
57 - 60	Question paper detecting			

### SSIGNMENTS

	<b>Topic of Assignment &amp; Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)</b>
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. Prepration of powerpoint presentation on various topics by the students
4. Personal discussion interacting with each student about the topic