SACRED HEART COLLEGE (AUTONOMOUS)

DEPARTMENT OF MATHEMATICS

BACHELOR OF SCIENCE

[MATHEMATICS]

Course plan

Academic Year 2014 - 15

Semester 2

COURSE PLAN

PROGRAMME	BSc MATHEMATICS	SEMESTER	2
COURSE CODE & TITLE	U2CCENG3: CRITICAL THINKING, ACADEMIC WRITING AND PRESENTATION	CREDIT	4
HOURS/WEEK	5	HOURS/SEM	72
FACULTY NAME	TOM C. THOMAS		

COURSE OBJECTIVES
Comprehends fundamental concepts of critical reasoning and develops the capacity to read and respond critically, drawing conclusions, generalizing, differentiating fact from opinion and creating their own arguments.
Develops appropriate and impressive writing styles for various contexts
Write and correct structural imperfections and edit what they have written.
Develops capacity for making academic presentations effectively and impressively
Synthesize information from various written sources and present them in the form of summaries.
Write original literary creations in different genres as directed, with/without using prompts.

SESSION	TOPIC	LEARNING RESOURCES	REMARKS
	MODULE I		
1	Introduction to Critical Thinking	Lecture/PPT	
2	Introduction to Critical Thinking	Lecture/PPT	
3	Introduction to Critical Thinking	Lecture/PPT	
4	Introduction to Critical Thinking	Lecture/PPT	
5	Reasoning and Arguments	Activities/ Discussion	
6	Reasoning and Arguments	Activities/ Discussion	
7	Reasoning and Arguments	Activities/ Discussion	
8	Reasoning and Arguments	Activities/ Discussion	
9	Reasoning and Arguments	Activities/ Discussion	
10	Reasoning and Arguments	Activities/ Discussion	
11	Deductive and Inductive Arguments	Course book	
12	Deductive and Inductive Arguments	Course book	
13	Deductive and Inductive Arguments	Course book	
14	Deductive and Inductive Arguments	Course book	
15	Deductive and Inductive Arguments	Course book	

16	Fallacies		
17	Fallacies	Course book	
18	Inferential Comprehension	Group Activities	
19	Inferential Comprehension	Group Activities	
20	Inferential Comprehension	Group Activities	
21	Inferential Comprehension	Course book	
22	Inferential Comprehension	Group Activities	
23	Inferential Comprehension	Group Activities	
24	Critical Thinking and Academic Writing	Group Activities	
25	Critical Thinking and Academic Writing	Group Activities	
26	Critical Thinking and Academic Writing	Group Activities	
	INTERNAL ASSESSMENT TEST 1		
27	Writing Models	Presentation	
28	Writing Models	Course book	
29	Writing Models		
30	Writing Models	Course book	
31	Writing Models	Course book	
32	Writing Letters		
33	Writing Letters	Course book	
34	Writing Letters	Course book	
35	Writing Letters		
36	Writing a Letter to the Editor	Course book	
37	Writing a Letter to the Editor	Course book	
38	Writing a Letter to the Editor		
39	Writing a Letter to the Editor	Course book	
40	Letter to the Editor	Course book	
41	Letter to the Editor	Course book	
42	Resume Writing		
	MODULE III		
43	Covering Letter	Lecture	
44	Covering Letter	Lecture	
45	Emails	Course book	
46	Emails	Course book	
47	Interview Skills		
48	Interview Skills	Course book	
49	Interview Skills	Course book	
50	Group Discussion		
52	Group Discussion	Course book	
53	Accuracy in Academic writing	Course book	

54	Accuracy in Academic writing	Course book	
55	Accuracy in Academic writing		
56	Articles and Determiners	Course book	
57	Articles and Determiners	Course book	
58	Nouns and Pronouns		
59	Subject-verb agreement	Lecture	
60	Phrasal verbs	Lecture	
61	Modals		
62	Tenses	Course book	
63	Tenses	Course book	
64	Tenses		
65	Conditional clauses	Course book	
66	Relative Pronouns	Course book	
67	Passive Voices		
	INTERNAL ASSESSMENT TEST 2		
68	Conjunctions	Lecture	
69	Embedded questions	Course book	
70	Embedded questions	Course book	
71	Punctuations and Abbreviations		
72	Soft skills for academic presentations	Course book	
73	Effective communication skills	Course book	
74	Flip Charts, OHP, Power point presentation	Group Presentations	
75	Clarity and brevity in presentation	Group Presentations	
76	Interaction and persuasion	Group Presentations	
77	Interview skills	Group Presentations	
78	Interview skills	Group Presentations	
79	Interview skills	Group Presentations	
80	Group Discussion	Group Presentations	
81	Group Discussion	Group Presentations	
82	Group Discussion	Group Presentations	
83	Group Discussion	Group Presentations	
84	Group Discussion	Group Presentations	
85	Group Discussion	Group Presentations	
86	Review Session 1		

87	Review Session 1		
88	Review Session 2		
89	Review Session 3		
90	Review Session 4		

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	4/1/2015	Writing Tasks- Different Types of Letters

GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	2/02/2015	Brochure design
2	15/1/15	Model Slide Presentation

COURSE PLAN

PROGRAMME	UG COMMON COURSE	SEMESTER	2
COURSE CODE AND TITLE	U2CCENG4: MUSINGS ON VITAL ISSUES	CREDIT	2
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	K M Johnson, Bijo Mathew		

COURSE OBJECTIVES
Appreciate inspirational literatures of various literary genres across cultures
Critically engage with literary texts written in different languages and later translated into English
Critically engage with biographical sketch of the authors and familiarize their personality, oeuvre and style.
Develop a creative and insightful perspective towards life
Apply the unfathomable power of literatures in their writings and creative endeavors.

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
	MODULE I –GLOBALIZATION AND ITS CONSEQUENCES			
1	Fritjof Capra : “The Dark Side of Growth”	PPT/Lecture	video	
2	Fritjof Capra : “The Dark Side of Growth”	PPT/Lecture	video	
3	Fritjof Capra : “The Dark Side of Growth”	Lecture		
4	Joseph Stiglitz : “Globalization”	lecture		
5	Joseph Stiglitz : “Globalization”	PPT/Lecture	video	
6	Joseph Stiglitz : “Globalization”	PPT/Lecture		
7	D H Lawrence : “Money Madness”	Lecture		
8	S Joseph : “For the Dispossessed”	Lecture		
9	S Joseph : “For the Dispossessed”	PPT/Lecture	video	
10	S Joseph : “For the Dispossessed”	PPT/Lecture		
11	Vandana Shiva : “The Social Costs of Economic Globalization”	Lecture		
12	Vandana Shiva : “The Social Costs of Economic Globalization”	Lecture		
13	Vandana Shiva : “The Social Costs of Economic Globalization”	PPT/Lecture	video	

14	Jagannath Prasad Das : “Kalahandi”	PPT/Lecture		
15	Jagannath Prasad Das : “Kalahandi”	Lecture		
16	Jagannath Prasad Das : “Kalahandi”	Lecture		
17	Leah Levin : “Universal Declaration of Human Rights”	PPT/Lecture	video	
18	Leah Levin : “Universal Declaration of Human Rights”	PPT/Lecture		
19	Leah Levin : “Universal Declaration of Human Rights”	Lecture		
20	Nani A Palkivala : “Human Rights and Legal Responsibilities”	PPT/Lecture	video	
21	Nani A Palkivala : “Human Rights and Legal Responsibilities”	Lecture		
22	Nani A Palkivala : “Human Rights and Legal Responsibilities”	Lecture		
23	Martin Luther King : “I Have a Dream”	Lecture		
24	Martin Luther King : “I Have a Dream”	Discussion		
25	Martin Luther King : “I Have a Dream” CIA – I			
MODULE II- HUMAN RIGHTS				
26	Kalpana Jain : “Stigma, Shame and Silence**”**	PPT/Lecture		
27	Kalpana Jain : “Stigma, Shame and Silence**”**	Lecture	video	
28	Kalpana Jain : “Stigma, Shame and Silence**”**	Lecture		
29	Wole Soyinka : “Telephone Conversation**”**	Lecture		
30	Wole Soyinka : “Telephone Conversation**”**	PPT/Lecture		
31	Richard Wright : **“**Twelve Million Black Voices**”**	Lecture	video	
32	Richard Wright : **“**Twelve Million Black Voices**”**	Lecture		
33	Richard Wright : **“**Twelve Million Black Voices**”**	Lecture		
34	Aruna Roy : **“**Tune in to the Voice of the Deprived**”**	PPT/Lecture		
35	Aruna Roy : **“**Tune in to the Voice of the Deprived**”**	Lecture	video	
36	Aruna Roy : **“**Tune in to the Voice of the Deprived**”**	Lecture		
37	Johannes V. Jensen : “Lost Forests”	Lecture		
38	Johannes V. Jensen : “Lost Forests”	PPT/Lecture		
39	Johannes V. Jensen : “Lost Forests”	Lecture	video	
40	Omprakash Valmiki : “Joothan”	Lecture		
41	Omprakash Valmiki : “Joothan”	Discussion		
42	Omprakash Valmiki : “Joothan”	Presentation		
	MODULE –III Gender Question			
43	Jamaica Kincaid : “Girl”	Presentation		
44	Jamaica Kincaid : “Girl”	Presentation		
	MODULE III- GENDER QUESTION			
45	Jamaica Kincaid : “Girl”	Lecture	Video	
46	Taslima Nasrin : “At the Back of Progress”	Discussion		
47	Taslima Nasrin : “At the Back of Progress”			
48	Taslima Nasrin : “At the Back of Progress”			

49	Judy Brady : “Why I Want a Wife”	Lecture	Video	
50	Judy Brady : “Why I Want a Wife”	Lecture, discussion		
51	Judy Brady : “Why I Want a Wife”	Lecture, discussion		
52	J B Priestley : “Mother’s Day”	Lecture, discussion		
53	J B Priestley : “Mother’s Day”	Lecture		
54	J B Priestley : “Mother’s Day”	Discussion	Video	
55	J B Priestley : “Mother’s Day”	Lecture		
56	Amartya Sen : “More Than 100 Million Women are Missing	Lecture		
57	Amartya Sen : “More Than 100 Million Women are Missing	Presentation		
58	Amartya Sen : “More Than 100 Million Women are Missing	Presentation		
59	Amartya Sen : “More Than 100 Million Women are Missing	Presentation		
60 - 72	Revision			
	CIA 2			

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	2/2/2015	Presentations
2	28/1/2015	Role Plays

GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	12/1/2015	Group Discussions
2	20/1/2015	Performances

References

Dr P J George Ed. Musings on Vital Issues. Orient Blackswan and Mahatma Gandhi University.

COURSE PLAN

PROGRAMME	BACHELOR OF SCIENCE – MATHEMATICS	SEMESTER	2
COURSE CODE AND TITLE	U2CCHIN2A - TRANSLATION, CORRESPONDENCE, ESSAYS AND APPLIED GRAMMAR (SEM II)	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	Dr. MINIPRIYA R, SYAMLAL M. S		

COURSE OBJECTIVES
Recognize and get introduced to the minor genres such as essay to develop their social and moral sense in life.
Define grammatical structure of Hindi language and analyse the problems, challenges of communication in Hindi.
Use Hindi language for effective communication in different fields like administration, office proceedings, insurance etc.
Understand translation as a linguistic, communicative and cultural activity.
Acquire skills of correspondence, drafting official and scientific documents in the fields of administration, media and business.

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
MODULE I				
1	Importance of Grammar in Language learning.	Lecture/Discussion		
2	Part I Vyakaran	Lecture/Discussion		
3	Part I Vyakaran	Lecture/PPT		
4	Part I Vyakaran	Lecture	Exercise	
5	Importance of Translation	Lecture/PPT		
6	Translation	Lecture/PPT		
7	Translation	Lecture	Exercise	
8	Exercise -Translation	Interaction	Exercise	
9	Importance of Letter writing	Lecture/PPT		
10	Part II Patra Lekhan	Lecture/Discussion		
11	Ache Patra Ki Visheshtayen	Lecture/PPT		
12	Importance of Hindi Essays	Interaction	Discussion	
13	Patron Ke Prakar	Lecture		
14	Nibandh Ke Prakar	Lecture		
15	Nibandh Ke Prakar	Lecture/PPT	Exercise	
16	Part I Vyakaran	Lecture		
17	Part I Vyakaran	Interaction	Exercise	

18	Exercise -Translation	Lecture		
19	Revision	Discussion		
20	Patron Ke Prakar	Lecture		
21	Nibandh Ke Ang	Lecture		
22	Nibandh Lekhan Sambandhi Avashyak Batein	Lecture/Discussion		
23	Nibandh1,2	Lecture/PPT		
24	CIA – I (1Hour Exam)			
MODULE II				
25	Exercise Oriented Grammar	Lecture		
26	Exercise Oriented Grammar	Lecture/Discussion	Exercise	
27	Exercise Oriented Grammar	Lecture/ Discussion	Exercise	
28	Part II Patra Lekhan, Parivarik Patra	Lecture/PPT		
29	Part II Patra Lekhan, Parivarik Patra	Interaction		
30	Exercise –Translation	Lecture		
31	Exercise –Translation	Lecture/Discussion		
32	Revision	Interaction		
33	Exercise Oriented Grammar	Lecture		
34	Exercise Oriented Grammar	Lecture/ Discussion	Exercise	
35	Part II Patra Lekhan , Nimantran Patra	Lecture/PPT		
36	Nibandh 3	Lecture		
37	Nibandh 3,Exercise	Lecture/ Discussion		
38	Exercise –Translation	Lecture		
39	Exercise –Translation	Lecture/ Discussion		
40	Part II Patra Lekhan,Vyavasayik Patra	Lecture/PPT		
41	Nibandh 4	Lecture		
42	Nibandh 4,Exercise	Lecture/Discussion	Exercise	
43	Nibandh 5	Lecture/Discussion		
44	Nibandh 6	Lecture		
45	Nibandh 6,Exercise	Lecture/ Discussion	Exercise	
46	Revision	Interaction		
47	CIA – II (2 Hours Exam)			
MODULE III				
48	Exercise Oriented Grammar	Lecture/PPT		
49	Exercise Oriented Grammar	Lecture	Exercise	
50	Nibandh 7	Lecture		
51	Nibandh 7, Exercise	Lectutre/Discussion	Exercise	
52	Part II Patra Lekhan, Adhikarik Patra	Lecture/PPT		
53	Part II Patra Lekhan, Adhikarik Patra	Lecture/ Discussion		
54	Exercise –Translation	Lecture		
55	Exercise –Translation	Lecture/Discussion		
56	Nibandh 8	Lecture		
57	Nibandh 8,Exercise	Lecture/ Discussion		
58	Exercise –Translation	Lecture		

59	Exercise Oriented Grammar	Lecture/PPT		
60	Exercise Oriented Grammar	Lecture	Exercise	
61	Part II Patra Lekhan, Shikayati Patra	Lecture/Discussion		
62	Nibandh 9	Lecture		
63	Nibandh 9,Exercise	Lecture/ Discussion		
64	Exercise – Translation	Lecture		
65	Part II Patra Lekhan , Karyalayi Patra	Lecture/PPT		
66	Nibandh 10	Lecture		
67	Nibandh 10,Exercise	Lecture/Discussion		
68	Seminar	Presentation by students		
69	Seminar	Presentation by students		
70	Revision	Interaction		
71	Revision	Interaction		
72	Evaluation of the course			

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	January	Exercise activity based on Patra lekhan (Group Discussion)
2	January	Translation of a passage from English to Hindi.(Group Activity)

References

- Hindi vyakaran by Kamta Prasad Guru , Prabhat Prakashan

Web resource references:

- epustakalay.com
- www.hindikunj.com

COURSE PLAN

PROGRAMME	BSC MATHEMATICS	SEMESTER	2
COURSE CODE AND TITLE	U2CCFRN2A - FRENCH LANGUAGE AND COMMUNICATION SKILLS II	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72

COURSE OBJECTIVES
Understand the basic concepts of French language including grammar, vocabulary and sentence structure
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
Understand the mannerisms, culture and tradition of France and Francophone countries and compare it to one's own country and develop co-cultural feeling
Understand and appreciate the history of France and Francophone countries and compare it to one's own country
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	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
MODULE I				
1	Introducing French Basics	Role play, games		
2	French Basics	Lecture		
3	Pronominal verbs	Games, music		
4	Pronominal verbs practice	Games		
5	Sentence contruction using pronominal verbs	Games		
6	Sentence construction	Games		
7	Sentence construction	Games		
8	Grammar- present tense	Role play		
9	Communicative skills	Lecture		
10	Communicative skills	Role Play		
11	Communicative skills	Role Play		
12	Narrate a day	Discussions ICT		
13	Narrate a day	Discussions		
MODULE II				
14	Interrogative adjectifs	Game		
15	Interrogative adjectifs	Lecture		

16	Demonstrative adjectives	Game		
17.	Demonstrative Adjectives	Lecture		
18.	Sentence construction	Games		
19	Sentence construction	Games		
20	civilisation	discussion		
21	Vocabulary building	games		
22	Vocabulary Building	Games		
23	Buying a product, French products	Lecture/Discussion		
24	Buying a product	Role play		
25	Buying a product	Role play		
26	Revision			
27	Revision			
28	revision			
29	CIA I			
MODULE III				
30	Food vocabulary	PPT/Lecture		
31	Food vocabulary	Games		
32	Intercultural studies	Discussions		
33	Sentence construction	Role play		
34	Sentence Construction	Games		
35	Articles partitifs	music		
36	Sentence construction(negative form)	games		
37	Future proche	Lecture		
38	Future proche	Lecture		
39	Giving and taking order	Role play		
40	Ordering at a restaurant	Role play		
41	Vocabulary building	Games, music		
42	Vocabulary building	Games, Music		
43	civilisation	PPT/Discussion		
44	Civilisation	Discussion		
CIA II				
MODULE IV				
45	Past tense (avoir)	Lecture		
46	Past tense(etre)	Lecture		
47	Past tense (pronominal)	Lecture		
48	Sentence formation	Games		
49	Sentence formation	Games		
50	Describe a past event	Lecture		
51	Narrate your day in the past	communication		
52	Diary writing	assignment		
53	Vocabulary building	games		
54	Part time jobs, vocabulary	Lecture		
55	Part time jobs-ads	Role plays		
56	Exploring part time jobs	Role play		

57	Putting up an ad and responsing to an ad on part-time job	Lecture/Seminar/Discussion		
58	Putting up an ad and responsing to an ad on part-time job	Role play		
59	French culture	Discussion		
60	French Culture	Discussion		
61	French culture	Discussion		
62	French culture	Discussion		
63	DELF PREPARATION			
64	DELF PREPARATION			
65	DELF PREPARATION			
66	DELF PREPARATION			
67	DELF PREPARATION			
68	DELF PREPARATION			
69	DELF PREPARATION			
70	DELF PREPARATION			
71	DELF PREPARATION			
72	DELF PREPARATION			

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 February	Presentation on gastronomy of each region
2		roleplays

References

Version Originale, site web

COURSE PLAN

PROGRAMME	BACHELOR OF SCIENCE IN MATHEMATICS	SEMESTER	2
COURSE CODE AND TITLE	U2CCSAN2A: COMMUNICATION SKILLS IN SANSKRIT	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	Mr. Mathew Jose		

COURSE OBJECTIVES
To develop the basic knowledge in Sanskrit
Students develop the communication skills in sanskrit
Students familiarize the figures of speech and their usage
Students get an awareness about aesthetic values
Students get an awareness about Indian classical poetic tradition
Understand moral values through Drama
Students develop writing skills in Sanskrit
Students get awareness about Verbal forms

SESSION	**TOPIC**	**LEARNING RESOURCES**	**VALUE ADDITIONS**	**REMARKS**
MODULE I				
1	Introducing Vibhakthi	Lecture		
2	Prathama vibhakthi	Discussion		
3	Dvitheeya vibhakthi	Lecture		
4	Thritheeya vibhakthi	Lecture	e-resource	
5	Chathurthi vibhakthi	Lecture		
6	Panchami vibhakthi	Chalk n talk		
7	Shashti vibhakthi	Lecture		

8	Sapthami vibhakthi	Chalk n talk		
9	Sambhodhanaprathama	Lecture		
10	Akarantha pulinga bala shabha	Lecture		
11	Aakarantha sthreelinga Latha shabdha	Discussion		
12	Ekarantha pulinga Kavi shabdha	Discussion		
13	Ukarantha pulinga Guru shabdha	PPT/Lecture		
14	Revision			
MODULE II				
15	Structure of sentence- Present tense	PPT/Lecture		
16	Prathama purusha ekavachaam	Chalk n talk		
17	Prathama purusha dvivachaam	Lecture		
18	Prathama purusha bahuvachaam	Lecture		
19	Madhyama purusha ekavachaam	Lecture		
20	Madhyam purusha dvivachaam	Game		
21	Madhyam purusha bahuvachaam	Game		
22	Uthamapurusha ekavachaam	PPT/Lecture		
23	Uthamapurusha dvivachaam	PPT/Lecture		
24	Uthamapurusha bahuvachaam	Lecture		
25	Past tense- Prathamapurusha	Lecture		
26	CIA-1			
27	Past tense -Madhyamapurusha	Lecture		
28	Past tense - Uthamapurusha	Chalk n talk		
29	Future tense - Prathamapurusha	Chalk n talk		
30	Future tense - Madhyamapurusha	Discussion		
31	Future tense - Uthamapurusha	Discussion		
32	Sentence making in Sanskrit-Active voice	Lecture		

33	Sentence making in Sanskrit –Passive voice	Lecture		
34	Revision			
35	Revision			
MODULE III				
36	Introduction Meghadootha	Lecture		
37	Explaining Khandakavyam	Lecture		
38	Yaksha -curse	PPT/Lecture		
39	Yaksha's meeting with cloud	PPT/Lecture		
40	Requesting to cloud	PPT/Lecture		
41	Praising cloud	Lecture		
42	Yaksha directing cloud	Lecture		
43	Meeting with Balaka bird	Chalk n talk		
44	Departure	Discussion		
45	Rajahamsa	Roleplay		
46	Explaining Mountain	Discussion		
47	Directing to Megha	PPT/Lecture		
48	Revision			
49	Revision			
MODULE IV				
50	Introduction Mrichakatika drama	PPT/Lecture		
51	Charudatha	PPT/Lecture	Video	
52	Vasanthasena	PPT/Lecture		
53	Vasanthasena's visiting	PPT/Lecture		
54	Rajasyala Samsthanaka	Lecture		
55	Vasanthasena 's meeting with Charudatha	Lecture	Debate	
56	Matithreya's conversation with Radanika	PPT/Lecture		

57	Rohasena	PPT/Lecture		
58	Dvitheeyanka	PPT/Lecture		
59	Gambling incident	PPT/Lecture		
60	Catching Gambler	PPT/Lecture		
61	Escaping	PPT/Lecture		
CIA - II				
62	Vasanthasena's talk with her servant			
63	thritheeyanka	Lecture		
64	Rebhila's music discussion	Lecture	Group discussion	
65	Sharvilaka –the thief	Lecture		
66	Taking gold from Maithreya	PPT/Lecture		
67	Charudatha talk with Maithreya	PPT/Lecture		
68	Dootha's talking	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	By February	Kalidasa's Mahakavyas
2		Sanskrit Drama

GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	By February	Bhasa's dramas
2		Khandakavyas in Sanskrit

References

1.Meghadhoota of Kalidasa (Poorva-Megha; 1-20 Slokas)

2.Mrichakatika-kathasamgraha, (Chapters 1, 2&3), by Prof. P.C. Vasudevan Elayat

3.Siddharupam, Vidyarambham Press, Alappuzha

4.Sabdamanjari, Chowkhamba Sanskrit Series office, Varanasi

5.Dhaturupamanjari, Chowkhamba Sanskrit Series office, Varanasi

6.Samskritavyakaranapravesika, Pandit L Anantharama Sastri

7.Balabodhini, Rajarshi Sree Rama Varma, Publication Divison, Govt.Sanskrit College, Trippunittura

COURSE PLAN

PROGRAMME	**B.Sc MATHEMATICS**	SEMESTER	2
COURSE CODE & TITLE	U2CCMAL2A കവിത	CREDITS	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	**FR. XAVIER C S**		

COURSE OBJECTIVES
കവിത എന്ന സാഹിത്യരൂപത്തെക്കുറിച്ച് മെച്ചപ്പെട്ട ധാരണ ഉണ്ടാക്കുക
ഭാഷാപഠനം സാഹിത്യാനുഭവത്തിലൂടെ ആവിഷ്ക്കരിക്കുക
വായനാഭിരുചി വർദ്ധിപ്പിക്കുക
സാഹിത്യ പരിചയം ഉണ്ടാക്കുക
വ്യാവഹാരിക തലത്തിൽ മാതൃഭാഷാപ്രയോഗിക്കുവാനുള്ള കഴിവ് നേടുക
ഭാഷാപഠനത്തിലൂടെ ആശയവിനിമയശേഷി വർദ്ധിപ്പിക്കുക

Session	Topic	Learning Resources	Teaching Method	Remarks
Module I				
1	മലയാളസാഹിത്യം സാമാന്യാവലോകനം	സാഹിത്യചരിത്രങ്ങൾ	Lecturing	
2	മലയാളകവിതയുടെ ചരിത്രം-1	സാഹിത്യചരിത്രങ്ങൾ	Lecturing	
3	മലയാളകവിതയുടെ ചരിത്രം-2	സാഹിത്യചരിത്രങ്ങൾ	Discussion	
4	ചങ്ങമ്പുഴയുടെ രചനാലോകം	കവിതാ പഠനങ്ങൾ പഠനങ്ങൾ	Lecturing	
5	മനസ്വിനി	Text	Reading	
6	മനസ്വിനി	Text	Group Discussion	
7	സൂര്യകാന്തി	കവിതാ പഠനങ്ങൾ പഠനങ്ങൾ	Lecturing	
8	സൂര്യകാന്തി	Text	Reading	
9	ഗോപികാദണ്ഡകം	Text	Group Discussion	
10	ഗോപികാദണ്ഡകം	കവിതാ പഠനങ്ങൾ പഠനങ്ങൾ	Lecturing	
11	ഗോപികാദണ്ഡകം	Text	Reading	
12	വിരാമം	Text	Group Discussion	
13	വിരാമം	കവിതാ പഠനങ്ങൾ	Lecturing	
14	വിരാമം	Text	Reading	
15	പുതിയമാഷന്മാർ	Text	Group Discussion	
16	പുതിയമാഷന്മാർ	Text	Group Discussion	

17	പഠിച്ച കവിതകൾ ഒരു അവലോകനം	Text	Group Discussion	
Module II				
18	ആധുനിക മലയാളകവിതയുടെ സ്വഭാവങ്ങൾ	കവിതാ പഠനങ്ങൾ	Lecturing	
19	യുഗളപ്രസാദൻ	Text	Reading	
20	യുഗളപ്രസാദൻ	Text	Group Discussion	
21	ആത്മഹത്യ ചെയ്ത കർഷകൻ വെള്ളത്തെക്കുറിച്ച് സംസാരിക്കുന്നു	Text	Lecturing	
22	ആത്മഹത്യ ചെയ്ത കർഷകൻ വെള്ളത്തെക്കുറിച്ച് സംസാരിക്കുന്നു	Text	Reading	
23	ആത്മഹത്യ ചെയ്ത കർഷകൻ വെള്ളത്തെക്കുറിച്ച് സംസാരിക്കുന്നു	Text	Group Discussion	
24	കളകൾ	കവിതാ പഠനങ്ങൾ	Lecturing	
25	കളകൾ	Text	Reading	
26	പറക്കം	Text	Group Discussion	
27	പറക്കം	കവിതാ പഠനങ്ങൾ	Lecturing	
28	കീരി	Text	Reading	
29	കീരി	Text	Group Discussion	
30	പഠിച്ച കവിതകൾ ഒരു അവലോകനം	Text	Group Discussion	
31	Internal Assessment 1	Text		
32	Question paper discussion	Text	Group Discussion	
Module III				
33	മലയാള - നൂതന പ്രവണതകൾ	കവിതാ പഠനങ്ങൾ	Lecturing	
34	കാക്ക	Text	Reading	
35	കാക്ക	Text	Group Discussion	
36	മോഹൻദാസും ഗാന്ധിയും നാഥുറാം ഗോഡ്സെയും	കവിതാ പഠനങ്ങൾ	Lecturing	
37	മോഹൻദാസും ഗാന്ധിയും നാഥുറാം ഗോഡ്സെയും	Text	Reading	
38	നാറാണത്ത് പാറ	Text	Group Discussion	
39	നാറാണത്ത് പാറ	കവിതാ പഠനങ്ങൾ	Lecturing	
40	യശോധാരയെന്നവൾ	Text	Reading	
41	യശോധാരയെന്നവൾ	Text	Group Discussion	
42	മാമ്പഴപ്പാത	കവിതാ പഠനങ്ങൾ	Lecturing	
43	മാമ്പഴപ്പാത	Text	Reading	
44	മാമ്പഴപ്പാത	Text	Group Discussion	

45	പഠിച്ച കവിതകൾ ഒരു അവലോകനം	Text	Group Discussion	
Module- IV				
46	മലയാള - നൂതന പ്രവണതകൾ	കവിതാ പഠനങ്ങൾ	Lecturing	
47	ചിന്താഗ്നി	Text	Group Discussion	
48	ചിന്താഗ്നി	Text	Lecturing	
49	ആ പശുകുട്ടിയുടെ മരണം	Text	Group Discussion	
50	ആ പശുകുട്ടിയുടെ മരണം	കവിതാ പഠനങ്ങൾ	Lecturing	
51	തേൾക്കുടം	Text	Lecturing	
52	തേൾക്കുടം	Text	Group Discussion	
53	കൗസല്യ	Text	Group Discussion	
54	കൗസല്യ	Text	Group Discussion	
55	കൗസല്യ	Text	Group Discussion	
56	എന്തു ശുത്തി ഏതു ശുത്തി	Text	Group Discussion	
57	എന്തു ശുത്തി ഏതു ശുത്തി	Text	Group Discussion	
58	സമകാലീക മലയാള കവിത	കവിതാ പഠനങ്ങൾ	Group Discussion	
59	സമകാലീക മലയാള കവിത	Text	Group Discussion	
60	സമകാലീക മലയാള കവിത	Text	Group Discussion	
61	പഠിച്ച കവിതകൾ ഒരു അവലോകനം	കവിതാ പഠനങ്ങൾ	Group Discussion	
62	പഠിച്ച കവിതകൾ ഒരു അവലോകനം	Text	Group Discussion	
	Internal Assessment 2			
63	Question paper discussion	Text	Group Discussion	
64	പഠിച്ച കവിതകൾ ഒരു അവലോകനം	കവിതാ പഠനങ്ങൾ	Group Discussion	
65	പഠിച്ച കവിതകൾ ഒരു അവലോകനം	കവിതാ പഠനങ്ങൾ	Group Discussion	
66	സംവാദം-	Text	Group Discussion	
67	സെമിനാർ	Text	Presentation	
68	സെമിനാർ	Text	Presentation	
69	സെമിനാർ	Text	Presentation	
70	സെമിനാർ	Text	Presentation	
71	സെമിനാർ	Text	Presentation	
72	Evaluation of the course	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 February	മലയാളത്തിലെ തെരെഞ്ഞെടുത്ത കവികളുടെ വിവരണങ്ങൾ
2		സിലബസിൽ പഠിക്കാൻ ഇല്ലാത്ത കവിതകളുടെ ആസ്വാദനം

SEMINAR

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

Reference :

1. സമ്പൂർണ മലയാള സാഹിത്യചരിത്രം – എഡിറ്റർ :പന്മന രാമചന്ദ്രൻ നായർ

2. മലയാള കവിതാസാഹിത്യ ചരിത്രം - ഡോ .എം .ലീലാവതി

COURSE PLAN

PROGRAMME	BSC MATHEMATICS	SEMESTER	2
COURSE CODE AND TITLE	U2CRMAT02-ANALYTIC GEOMETRY, TRIGONOMETRY AND MATRICES	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	JEET KURIAN MATTAM		

COURSE OBJECTIVES
To find the equation to tangent and normal at a point on a conic
To find the polar equation of a line, circle, tangent and normal to conics
To familiarize with real and imaginary parts of a circular and hyperbolic functions of a complex variable
To solve a system of linear equations using the inverse of a matrix
To familiarize with the characteristic roots and characteristic vectors
To find the inverse of a matrix by Cayley- Hamilton theorem.

SESSIONS	TOPIC	METHOD	REMARKS
1	Analytic geometry-preliminaries	Lecture, Group discussion, Problem solving	
2	Analytic geometry-preliminaries	Lecture, Group Discussion,Problem solving	
3	Analytic geometry-preliminaries	Lecture, Group Discussion,Problem solving	
4	**Module 1** Tangents in terms of their slope	Lecture, Group Discussion,Problem solving	
5	Number of tangents from a point	Lecture, Group Discussion,Problem solving	

6	Orthoptic Locus	Lecture, Group Discussion,Problem solving	
7	Tangent at a point	Lecture, Group Discussion,Problem solving	
8	Chord joining two points, tangent , intersection of tangents and normal of a parabola	Lecture, Group Discussion,Problem solving	
9	Problems	Group Discussion,Problem solving	
10	Chord joining two points, tangent , intersection of tangents and normal of an ellipse	Lecture, Group Discussion,Problem solving	
11	Chord joining two points, tangent , intersection of tangents and normal of a hyperbola	Lecture, Group Discussion,Problem solving	
12	Problems	Group Discussion,Problem solving	
13	Chord of contact	Lecture, Group Discussion,Problem solving	
14	Chord with a given mid point	Lecture, Group Discussion,Problem solving	
15	Problems	Group Discussion,Problem solving	
16	Equation of the polar of a given point and pole of a given line	Lecture, Group Discussion,Problem solving	
17	Conjugate lines and problems	Lecture, Group Discussion,Problem solving	

18	Conjugate diameters of ellipse	Lecture, Group Discussion,Problem solving	
19	Properties and problems	Lecture, Group Discussion,Problem solving	
20	Conjugate diameters of hyperbola	Lecture, Group Discussion,Problem solving	
21	Problems	Group Discussion,Problem solving	
22	Asymptotes	Lecture, Group Discussion,Problem solving	
23	Conjugate hyperbola	Lecture, Group Discussion,Problem solving	
24	Properties and problems	Lecture, Group Discussion,Problem solving	
25	Rectangular hyperbola, Parametric coordinates	Lecture, Group Discussion,Problem solving	
26	Problems	Group Discussion,Problem solving	
27	Problems	Group Discussion,Problem solving	
28	**Module 2** Polar coordinates, distance between the points, area of a triangle	Lecture, Group Discussion,Problem solving	
29	Equation of a straight line, Parallel lines, perpendicular straight lines	Lecture, Group Discussion,Problem solving	
30	Test	1 hour	

31	Equation of a circle	Lecture, Group Discussion,Problem solving	
32	Problems	Group Discussion,Problem solving	
33	Polar equation of a conic	Lecture, Group Discussion,Problem solving	
34	Chord of a conic	Lecture, Group Discussion,Problem solving	
35	Tangent and normal of a conic	Lecture, Group Discussion,Problem solving	
36	Polar of a point with respect to a conic	Lecture, Group Discussion,Problem solving	
37	Asymptotes of conic	Lecture, Group Discussion,Problem solving	
38	Problems	Group Discussion,Problem solving	
39	Problems	Group Discussion,Problem solving	
40	CIA-1	1 hour	
41	**Module 3** Trigonometry-Introduction	Lecture, Group Discussion,Problem solving	
42	Expansion of sine and cosine functions	Lecture, Group Discussion,Problem solving	
43	Hyperbolic functions and relation connecting hyperbolic and circular functions	Lecture, Group Discussion,Problem solving	

44	Problems	Group Discussion,Problem solving	
45	Problems	Group Discussion,Problem solving	
46	Separation into real and imaginary parts - problems	Lecture, Group Discussion,Problem solving	
47	Problems	Group Discussion,Problem solving	
48	Problems	Group Discussion,Problem solving	
49	Factorisation of x^n -1	Lecture, Group Discussion,Problem solving	
50	Problems	Group Discussion,Problem solving	
51	Factorisation of x^n +1	Lecture, Group Discussion,Problem solving	
52	Problems	Group Discussion,Problem solving	
53	Factorisation of $x^{2n} - 2x^n a^n \cos nx + a^{2n}$	Lecture, Group Discussion,Problem solving	
54	Problems	Group Discussion,Problem solving	
55	Summation based on geometric series - problems	Lecture, Group Discussion,Problem solving	
56	Summation based on binomial series - problems	Lecture, Group Discussion,Problem solving	

57	Summation based on exponential series-problems	Lecture, Group Discussion,Problem solving	
58	Summation based on logarithmic series-problems	Lecture, Group Discussion,Problem solving	
59	Summation based on hyperbolic series - problems	Lecture, Group Discussion,Problem solving	
60	**Module 4** Rank of a matrix and problems	Lecture, Group Discussion,Problem solving	
61	Elementary transformations and inverse of Elementary transformations	Lecture, Group Discussion,Problem solving	
62	Equivalent matrices	Lecture, Group Discussion,Problem solving	
63	Normal form of a matrix to find the rank and problems	Lecture, Group Discussion,Problem solving	
64	Row equivalent canonical form to find the rank and problems	Lecture, Group Discussion,Problem solving	
65	System of non homogenous linear equations and matrix method to solve	Lecture, Group Discussion,Problem solving	
66	Problems	Group Discussion,Problem solving	
67	Cramer's rule and problems	Lecture, Group Discussion,Problem solving	
68	System of homogenous linear equations and problems	Lecture, Group Discussion,Problem solving	
69	Characteristic equation of a matrix and roots	Lecture, Group Discussion,Problem solving	

70	Characteristic vectors and problems	Lecture, Group Discussion,Problem solving	
71	Cayley-Hamilton theorem and problems	Lecture, Group Discussion,Problem solving	
72	Problems	Group Discussion,Problem solving	
73	CIA-2	2 hours	

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	21/12/2014	PROBLEMS FROM MODULE-1
2	19/1/2015	PROBLEMS FROM MODULE -2

REFERENCES

1.Manicavachagom Pillay , Natarajan–Analytic Geometry (Part I, Two Dimensions)

2.S.L.Loney–Plane TrigonometryPart –II, S. Chand and Company Ltd.
3.Frank Ayres Jr-Matrices , Schaum's Outline Series, TMH Edition.

COURSE PLAN

PROGRAMME	BACHELOR OF MATHEMATICS	SEMESTER	2
COURSE CODE AND TITLE	U2CPPHY2: ELECTRIC AND MAGNETIC PHENOMENA, THERMODYNAMICS AND SPECIAL THEORY OF RELATIVITY	CREDIT	2
THEORY HOURS/WEEK	2	HOURS/SEM	36
FACULTY NAME	DR. ROBY CHERIAN &DR. SUMOD S.G		

COURSE OBJECTIVES
Analyzing the concepts Dielectrics
Apply the concepts Magnetic materials
Introduce the role of equilibrium thermodynamics
Applying the concepts of Special theory of relativity

SESSION	TOPIC	LEARNING RESOURCES	REMARKS
	MODULE I		
1	Dielectrics- polar and non-polar dielectrics	Lect	
2	polarization- sources of polarization	Lect+PPT	
3	Gauss's law in dielectrics + Problem solving	Lect + Group Activity	
4	permittivity	Lect	
5	dielectric displacement vector- dielectric constant	Lect	
6	susceptibility- ferroelectricity	Lect	
7	Dielectrics- polar and non-polar dielectrics	Lect	
8	Problem Solving	Group Activity	
9	Magnetization in materials	Lect	
10	linear and non-linear materials-	Lect+PPT	
11	Diamagnetism paramagnetism	Lect	
12	ferromagnetism- hysteresis	Lect	
13	FerromagneticDomains antiferromagnetism	Lect	
14	Problem Solving	Group Activity	

15	Thermodynamic systems- thermodynamic equilibrium	Lect	
16	thermodynamic processes- isothermal process- adiabatic process	Lect	
17	zeroth law of thermodynamics	Lect	
18	first law of thermodynamics	Lect	
19	heat engine	Lect	
20	heat engine	Lect+Video	
21	the Carnot engine	Lect+PPT	
22	the Carnot engine + Problem solving	Lect + Group Activity	
23	refrigerator concept of entropy-	Lect	
24	second law of thermodynamics	Lect	
25	- third law of thermodynami	Lect	
26	Maxwell's thermodynamic relations.	Lect	
	MODULE II		
27	Special theory of relativityIntroduction	Lect	
28	Galilean transformation	Lect	
29	Newtonian principle of relativity	Lect+PPT	
30	Special theory of Relativity-Conceptual Description	Lect	
31	postulates: Explanation with discussion on its implications	Lect	
32	Lorentz transformation- Derivation, Length Contraction	Lect	
33	Time dilation –Concept and derivation	Lect + Group Activity	
34	relativity of simultaneity, addition of velocities-	Group Activity	
35	relativistic mass transformations	Lect	
36	mass energy relation and Problem solving and revision	Lect	

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	20/12/2014	Dielectrics in daily life
2	20/1/2015	Applications of ferromagnetic materials

GROUP ASSIGNMENTS– Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	Class activity in Feb 2015	Thermodynamics related problem solving (Group Discussion)

REFERENCES

1. Introduction to Modern Mathematics- H.S. Mani and G.K. Mehta (Affiliated East West press Pvt. Ltd)
2. Concepts of Modern Mathematics- A. Beiser (Tata McGraw-Hill, 5th Edn.)
3. Modern Mathematics- R. Murugeshan (S. Chand and Co.)
4. Introduction of Electrodynamics- D.J. Griffiths (PHI Pvt. Ltd)
5. Modern Mathematics- G.Aruldas and P.Rajagopal (PHI Pub)
6. Thermodynamics- Zemansky and Dittmann (Tata McGraw-Hill)
7. Heat and Thermodynamics- Brijlal and Subrahmanyam (S. Chand &Co)

COURSE PLAN

PROGRAMME	BACHELOR OF MATHEMATICS	SEMESTER	2
COURSE CODE AND TITLE	U2CRSTA02 : PROBABILITY AND STATISTICS	CREDIT	3
HOURS/WEEK	4	HOURS/SEM	60

COURSE OBJECTIVES
Analyse different approaches to probability - their properties, Addition & Multiplication theorem, Theorem of total probability.
Introduce random variables, probability distributions - their properties, distribution functions, Reliability functions, change of variables (univariate case only).
Comprehend joint distribution of a pair of random variables, marginal & conditional distributions, independence of random variables.
apply the concepts of correlation - its properties, different measures of correlation.
Introduce the regression equations - their identificaion, Probable error, Coefficient of determination, Linear regression (Three variable case), partial & multiple correlations - their expressional properties (no derivation).

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
1	Random Experiments,sample space	PPT	video	
2	Events, Algebra of events	PPT/Lecture		
3	Borel field of events.Approaches to probability	PPT/Lecture		
4	Statistical definition of probability	PPT/Lecture	e-resource	
5	Classical definition of probability	PPT/Lecture		
6	Axiomatic definition of probability	PPT/Lecture		
7	Addition theorem on probability, conditional probability	Lecture		
8	Independence of events	Lecture		
9	Problems	Lecture		
10	Problems	Lecture		
11	Theorem of total probability	PPT/Lecture		
12	Properties, Problems	PPT/Lecture		
13	Bayes theorem	PPT/Lecture		

14	Problems			
15	Random variables	PPT/Lecture		
16	Probability distribution of discrete random variables, properties	Lecture		
17	Probability distribution of continuous random variables,properties	Lecture		
18	Distribution function	Lecture		
19	Problems	Lecture		
20	Joint distribution of a pair of random variables,	PPT/Lecture		
21	marginal and conditional distributions	PPT/Lecture		
22	Problems			
23	Independence of random variables	PPT/Lecture		
24	Problems	Lecture		
25	Correlation and its properties	Lecture		
26	Rank correlation			
27	Regression equations	Lecture		
28	Coefficient of determination	Lecture		
29	Partial and multiple correlation	PPT/Lecture		
30	Properties	PPT/Lecture		
31	Reliability functions	PPT/Lecture		
32	Change of variables			
	Problems			
33	Joint distribution o f a pair of random variables	PPT/Lecture		
34	Problems	PPT/Lecture		
35	Properties of joint p.d.f	PPT/Lecture		
36	Problems	Lecture	Quiz	
37	Distribution functions	Lecture	Q & Ans Session	
38	Marginal distribution	PPT/Lecture		
39	Problems	PPT/Lecture		
40	Conditional distribution	PPT/Lecture		
41	Problems	PPT/Lecture		
42	Independence of random variables	Lecture		
43	Problems			
44	Correlation	PPT/Lecture		
45	Types of correlations	PPT/Lecture		
46	Correlation coefficient	PPT/Lecture		

47	Properties of correlation coeff.	PPT/Lecture		
48	Problems	PPT/Lecture		
49	Rank correlation	PPT/Lecture		
50	Problems	PPT/Lecture		
51	Regression	PPT/Lecture		
52	Properties	PPT/Lecture	Video	
53	Multiple regression	PPT/Lecture		
54	Examination	PPT/Lecture		
55	Partial and multiple correlation			

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	Problems ON CORRELATION COEFFICIENT
2	Problems using PROBABILITY AND BAYES THEOREM

REFERENCES:

1. S.P.GUPTA STATISTICAL METHODS
2. S.C.GUPTA ,V.K.KAPOOR FUNDAMENTALS OF MATHEMATICAL STATISTICS
3. B.L.AGARWAL BASIC STATISTICS