

**THEIVANAI AMMAL COLLEGE FOR WOMEN
(AUTONOMOUS)
VILLUPURAM**
(Re-Accredited by NAAC with 'A' Grade & ISO 9001:2008 Certified)
(A UNIT OF E.S.S.K. EDUCATIONAL CHARITIES)



**ACADEMIC COUNCIL BOOKLET – VI
Arts , Science and IQAC (Master Copy)**



2014

jkpoha;Tj;Jiw

KfTiu

- ,sq;fiy gphptpw;F Jiwrhh; tpUg;gg;ghlk; kw;Wk; Jiwrhuh tpUg;gg;ghlk; Mfpa ghlij;jpl;lq;fs; Gjpajhf mwpKfg;gLj;jg;gl;Ls;sd.
- ghIQ;rh; njhopy; epWtdq;fspy; gapw;rp ngWk; jpl;l tiuT kw;Wk; ghlij;jpl;l;jpd; mfkjjpg;gPl;Lf;Fupa %d;W ehd;F cl;\$Wfs;; ,j;Jld; ,izf;fgl;Ls;sd.

UTAE502 jkpo;g;ngz; gilg;ghsh; ,yf;fpaq;fs; (2014 -2017 Mk; fy;tpahz;L Kjy; gapYk; khztpah;f;FhpaJ)

gUtk; : le;jhk;; gUtk; juk; : 2
gphpT : Jiwrhuh tpUg;gg; ghlk; thukzp Neuk; : 4
tFg;G : jkpo; khztpah; jtpu gpwJiw khztpah; nkhj;j kzp Neuq;fs; : 52

Nehf;fk; :

- ngz; ,yf;fpaq;fis mwpe;Jnfhs;sy;
- gilg;Gfis cUthf;Fk; Mh;tj;ijj; J}z;ly;.
- gilg;Gfis cUthf;Fjy;.

myF -1 rq;fk; kw;Wk; mw ,yf;fpaq;fs; 12 kzpfs;

ngz;ghw;Gyth;fs; mwpKfk; - rq;ffhy;ngz;ghw; Gyth;fspd; ghly;fs; - mt;itahh; (Gwk;-206, FW-15) nts;sptPjpahh; (FW44,mfk;45) nghd;Kbahh; (Gwk;-312) ,eg;griyahh; (mfk;-22) - mw ,yf;fpaf; fhy mt;it – nfhd;iwNte;jd; (KotJk;), ey;top(KotJk;),

myF -2 gf;jp ,yf;fpaq;fs; 10 kzpfs;

Mz;lhs; - ehr;rpahh; jpUnkhop Kjy; gj;Jg; ghly;fs; ,jpUg;ghit Kjy; gj;Jg; ghly;fs; – fhiuf;fhy; mk;ikahh; - mw;Gjj; jpUte;jhjp,Kjy; gj;Jg; ghly;fs; jpUthyq;fhl;L %j;j jpUg;gjpfk; Kjy; gj;Jg; ghly;fs; ,ul;ilkzpkhiy Kjy; gj;Jg; ghly;fs;

myF -3 GJf;ftpijfs; 10 kzpfs;

ry;khftpijfs;- tpLgly;,kuzf;Fwpg;G-1 epiy fhiy te;jNghJ kuzf;Fwpg;G-2 vy;iy cd; ek;gpf;iffspd; jpirkPwp ,Wjpf;fzk ,utpd; Kd;nghOJ ePh;Fkpopfs;. sjhkiu – xU fjTk; nfhQ;rk; fs;spg;ghYk; Kjy; gj;Jf; ftpijfs; kpj;uh - i`f;\$ ftpijfs; Kjy; gj;Jf; ftpijfs;

myF -4; rpWfijfs; 10 kzpfs;

ngz; rpWfijfs; (njhFg;G Ehy;) jdpik-,uh[k;fpU\;zd;> Fg;gk;khtpd; ngz;fs; - Mh;R+lhkzp> mk;khtpd;me;juq;fk;- N[hjpyjhfhph[h> fWg;Gf;Fjpiur;rJf;fk; - mk;ig khpah – fhNthp.

myF -5 ehlfk; kw;Wk; ehty;fs; 10 kzpfs;

m.kq;if -gdpj;jP ehlfk; , ry;kh - ,uz;lhk; [hkq;fspd; fij ehty; ,ghkh - kD~\p ehty;

ghIE}y;fs;;:

- KUNfr ghz;bad; - rq;ffhy ngz;ghw; Gyth;; ghly;fs;;; fhtpah ntspaPL- nrd;id 2002
- gjpNdhuhk; jpUKiw –jh;kGuk; gjpg;gfk;- nrd;id- 2000
- ry;kh- gr;irj;Njtij- fhyRtL gjpg;gfk; ehfh;Nfhtpy; 2010

**ghlQ;rh; njhopy; epWtdq;fspy; gapw;rp ngWk; jpl;l tiuT
(tpUg;gk; cs;s khztpah;f;FhpaJ))**

jhspd;ngah;	gzpmDgtk;			xUq;fpide;j epWtdk;	nryT tptuk;	Kjpg;gPl;L Kiw
	epWtdk;	fhy msT(ehl;fs; thuk; khjk;)	fhy tiuaiu			
ehl;Lg;Gwtpay; UTAM606	kdy;kFb mikg;G	10 ehl;fs;	nrg;lk;gu;	kdy;kFb mikg;G	2000	nra;KiwNj h;T
,jopay; PTAE202	gpurhj;];\$y; Mg; kPbah	10 ehl;fs;	nrg;lk;gu;	gpurhj;];\$y; Mg; kPbah	500	nra;jp Nrfhpj;jy;

**ghlj;jpl;l mikg;G
mfkjpg;gPl;bw;fhd III Mk; kw;Wk; IV Mk; cl;\$Wfs;
,sq;fiy;jkpo;**

gUtk;	tif	ghlf;FwpaPL	ghlj;jiyg;G	III cl;\$Wfs;	IV cl;\$Wfs;
I	jkpo;	UTAL103	nghJ;jkpo;-I	xg;gilg;Gj;jhs;	tpdhbtpdh
		UTAL104	rpwg;Gj;jkpo;-I	xg;gilg;Gj;jhs;	ftpij vOJjy;
	Kjd;ikg;ghlk;-1	UTAM103	,f;fhy,yf;fpak;	;ftpijvOJjy;	E}y;kjpg;Giu
	Kjd;ikg;ghlk;-2	UTAM102	ed;Dhy;- vOj;jjpfhuk;	xg;gilg;Gj;jhs;	tpdhbtpdh
	rh;G ghlk;	UTAA102	jkpof tuyhWk; gz;ghLk;- I	xg;gilg;Gj;jhs;	jfty; ml;ltiz
II	jkpo;	UTAL203	nghJ;jkpo;-II	xg;gilg;Gj;jhs;	tpdhbtpdh
		UTAL204	rpwg;Gj;jkpo;-II	xg;gilg;Gj;jhs;	rpWfijg; gilj;jy;
	Kjd;ikg;ghlk;-3	UTAM203	rka ,yf;fpaq;fSk; rpw;wpfyf;fpaq;fSk;	xg;gilg;Gj;jhs;	jytuyhW Nrfhpj;jy;
	Kjd;ikg;ghlk;-4	UTAM202	ed;Dhy;- nrhy;yjpfhuk;	mfuhjp jahhpj;jy;;	tpdhbtpdh
	rh;G ghlk;	UTAA202	jkpof tuyhWk; gz;ghLk;- II	jdpahs; Ma;T	jfty; ml;ltiz
	Jiwrhuh tpUg;gg;ghlk;	UTAE201	kf;fs;jfty; njhlh;gpay;	fUj;juq;fk;	tpdhbtpdh
UTAE202		gilg;Gf;fiy	rpWfij vOJjy;	ehspjo; tpkh;rdk;	
jkpo;	jkpo;	UTAL303	nghJ;jkpo;-III	xg;gilg;Gj;jhs;	tpdhbtpdh
		UTAL304	rpwg;Gj;jkpo;-III	nra;jp vOJjy;	jpiug;gl tpkh;rdk;;
	Kjd;ikg;ghlk;-5	UTAM303	ahg;gUq;fyf;fhhpif	xg;gilg;Gj;jhs;	kuGf;ftpij

III					vOJjy;
	Kjd;ikg;ghlk;-6	UTAM302	fhg;gpaq;fs;	xg;gilg;Gj;jhs;	fl;Liu vOJjy;
	rhh;G ghlk;	UTAA302	jkpof tuyhWk;gz;ghLk;-III	jfty;ml;ltiz	jdpahs;Ma;T
	Jiwrhuh tpUg;gg;ghlk;	UTAE302	jkpo; nkhop mwpKfk;-; - I	xg;gilg;Gj;jhs;	tpdhbtpdh
UTAE303		tsh;jkpo; - I	xg;gilg;Gj;jhs;	tpdhbtpdh	
UTAE304		nkhop;ngah;g;Gf;fiy	nkhop;ngah;g;G nra;jy;	;rpWfijnkhop ngah;g;G	
IV	jkpo;	UTAL403	nghJ;jkpo;-IV	xg;gilg;Gj;jhs;	tpdhbtpdh
		UTAL404	rpwg;Gj;jkpo;-IV	kly; vOJjy;	ehlfk; vOJjy;
	Kjd;ikg;ghlk;-7	UTAM401	Gwg;ngHs; ntz;ghkhiy	xg;gilg;Gj;jhs;	tpdhbtpdh
	Kjd;ikg;ghlk;-8	UTAM403	ek;gpmfg;ngHs;	xg;gilg;Gj;jhs;	tpdhbtpdh
	rhh;G ghlk;	UTAA401	jkpo; ,yf;fz tuyhW-1	xg;gilg;Gj;jhs;	jfty;ml;ltiz
	Jiwrhuh tpUg;gg;ghlk;	UTAE406	muRgzpNghi;bj; Njh;T	xg;gilg;Gj;jhs;	tpdhbtpdh
		UTAE404	jkpo; nkhop mwpKfk; - II	xg;gilg;Gj;jhs;	tpdhbtpdh
UTAE403		tsh;jkpo; - II	xg;gilg;Gj;jhs;	tpdhbtpdh	
V	Kjd;ikg;ghlk;-9	UTAM501	rq;f,yf;fpak; - mfk;	xg;gilg;Gj;jhs;	fl;Liu vOJjy;
	Kjd;ikg;ghlk;-10	UTAM504	jkpo; nkhop tuyhWk;; xg;gpyf;fzKk;	gUtj;jhs;	tha;nkhopj; Njh;T
	rhh;G ghlk;	UTAA505	jkpo; ,yf;fz tuyhW-II	xg;gilg;Gj;jhs;	tpdhbtpdh
		UTAA504	Clftpay;	tpsk;guk; vOJjy;	fl;Liu vOJjy;
		UTAA504	jfty; njhlh;gpay;	xg;gilg;Gj;jhs;	Clfkjpg;gPL
		UTAA506	nkhop;ngah;g;Gf;fiy	fbjnhop;ngah;g;G	rpWfijnkhop ngah;j;jy;
		UTAA507	mw,yf;fpaq;fs;	xg;gilg;Gj;jhs;	tpdhbtpdh
Jiwrhuh tpUg;gg;ghlk;	UTAE501	rpj;j kUj;Jtk;	My;gk; jahupj;jy;	fsMa;T	
VI	Kjd;ikg;ghlk;-11	UTAM601	rq;f,yf;fpak; - Gwk;	xg;gilg;Gj;jhs;	fl;Liu vOJjy;
	Kjd;ikg;ghlk;-12	UTAM602	jz;bayq;fhuk;	xg;gilg;Gj;jhs;	fl;Liu vOJjy;
	Kjd;ikg;ghlk;-13	UTAM603	,yf;fpaj; jpwdha;tpay;	xg;gilg;Gj;jhs;	;Ejy;jpwdha;T
	Kjd;ikg;ghlk;-14	UTAM 604	,jopay;	jfty;; Nrfhpj;jy;	,jo;jahhpj;jy;

	Kjd;ikg;ghlk;-15	UTAM606	ehl;Lg;Gwtpay;	tof;fhWfisir; Nrfhpj;jy;	fsMa;T
	Jiwrhu; tpUg;gg;ghlk;	UTAO603	Ngr;Rf;fiy	fUj;juq;fk;	Nkilg;Ngr;R

KJfiyj;jkpo; :

gUtk;	tif	ghlf;FwpaPL	ghlj;jiyg;G	III cl;\$Wfs;	IV cl;\$Wfs;
I	Kjd;ikg;ghlk;-1	PTAM101	rq;f ,yf;fpak;	fUj;juq;fk;	E}y;kjpg;gPL;
	Kjd;ikg;ghlk;-2	PTAM102	njhhy;fhg;gpak; - vOj;jjpfhuk;	fUj;juq;fk;	,yf;fzxc;gPL
	Kjd;ikg;ghlk;-3	PTAM103	xg;gpyf;fpak;	fUj;juq;fk;	gUtj;jhs;
	Kjd;ikg;ghlk;-4	PTAM104	njhhy;ypay;	fUj;juq;fk;	fsMa;T
	Kjd;ikg;ghlk;-5	PTAM105	,yf;fpaj;jpy; ngz;zap;	fUj;juq;fk;	fl;Liu (jpwdha;T)
	Jiwrhuh tpUg;gg;ghlk;	PTAE101	Rw;Wyhtpay;	fUj;juq;fk;	fsMa;T
	PTAE102	gjpg;gpay;	fUj;juq;fk;	gjpg;Gg;gzp	
II	Kjd;ikg;ghlk;-6	PTAM205	,f;fhy ,yf;fpag; Nghf;Ffs;	fUj;juq;fk;	mwpQH;fspd; Ehy;fisg; gl;bayply;
	Kjd;ikg;ghlk;-7	PTAM206	fhg;gpaq;;fSk; rpw;wpyf;fpaq;fSk;	fUj;juq;fk;	gUtj;jhs;
	Kjd;ikg;ghlk;-8	PTAM203	njhhy;; - nrhy;yjpfhuk;	fUj;juq;fk;	,yf;fzf; Fwpg;gpidf; fz;lwpjy;
	Kjd;ikg;ghlk;-9	PTAM207	mf,yf;fpaf; Nfhl;ghLfs;	fUj;juq;fk;	E}y;kjpg;gPL;
	Kjd;ikg;ghlk;-10	PTAM208	Rw;Wyhtpay;	gazf;fl;Liu	fsMa;T
	Jiwrhuh tpUg;gg;ghlk;	PTAE201	Clfj;jkpo;	fUj;juq;fk;	Clfkjpg;gPL;
	PTAE202	,jopay;	fUj;juq;fk;	,jo; jahhpj;jy;	
III	Kjd;ikg;ghlk;-11	PTAM301	njhhy;fhg;gpak;- nghUsjpfhuk;	fUj;juq;fk;	E}y;kjpg;gPL;
	Kjd;ikg;ghlk;-12	PTAM302	jpuhtpl ,yf;fpak;	fUj;juq;fk;	gUtj;jhs;
	Kjd;ikg;ghlk;-13	PTAM305	Muha;r;rp newpKiwfs;	fUj;juq;fk;	Ma;Tfl;Liu vOJy;
	Kjd;ikg;ghlk;-14	PTAM306	nkhopngah;g;Gf; fiy	fUj;juq;fk;	nkhopngah;jjy

IV	Kjd;ikg;ghlk;-15	PTAM401	njhy;fhg;gpak;- nghUsjpfhuk;	fUj;juq;fk;	E}y;kjpg;gPL;
	Kjd;ikg;ghlk;-17	PTAM403	,yf;fpa ,af;fq;fSk; jpwdha;Tk;	fUj;juq;fk;	fl;Liu vOJjy;
	Kjd;ikg;ghlk;-18	PTAM404	Clftpay;	fUj;juq;fk;	Clfkjpg;gPL

DEPARTMENT OF ENGLISH

PREAMBLE:

- Syllabus for newly introduced courses under the categories Non - Major Elective and Major Optional offered in the UG programme and
- Provision for Experiential learning and Mode of evaluation for components III and IV of courses are presented here.

UENE503 WOMEN IN LITERATURE

(With effect from 2012-15 batch onwards)

Semester : V

Category : NME

Class & Major : III UG

Credit : 2

Hours/week : 4

Total Hours : 52

Objectives:

To enable students

- comprehend the background of Feminism.
- approach the literature with Feministic Perspectives and apply in their writings.

UNIT- I INTRODUCTION

12 Hrs

Feminism, Feminist Theories and Gender Studies., Historic Purview of Women's Emancipation.

UNIT -II POETRY

8 Hrs

Sylvia Plath – Insomniac, A Birthday Present
Kamala Das Surayya - Introduction .

UNIT - III DRAMA

11 Hrs

Wendy Wasserstein-The Sister's Rosensweig
Suzan Lori Parks - Topdog/Underdog

UNIT- IV SHORT STORIES

10 Hrs

Hilda Doolittle – Hermione
Bharathi Mukherjee – Isolated Incidents

UNIT- V FICTION

11 Hrs

Anita Nair – Ladies Coupe
Margaret Atwood-The Edible Woman

Reference Books

- Barry, Peter. *Beginning Theory: An Introduction to Literary and Cultural Theory*. New York: Manchester University, 2013.
- Doolittle, Hilda. *Hermione*. New York: New Directions, 2004.
- Nair, Anita. *Ladies Coupe*. New Delhi: Penguin Books, 2001.
- Narasimhaiah, C.D., Ed. *An Anthology of Common Wealth Poetry*. Macmillan: New Delhi, 2009

UENO604 SUBALTERN LITERATURE

(With effect from 2012-15 batches onwards)

Category : Major Optional
Class & Major : III BA English
Semester : VI

Credit : 4
Hours / week : 5
Total Hours : 65

Objectives:

To enable the Students

- understand the theme of subaltern Literature.
- create works with subaltern voices.

UNIT – I INTRODUCTION AND POETRY 14 Hrs

Introduction to Subaltern Literature,
 Keki.N. Daruwallah- Pestilence in 19th Century Calcutta
 Langston Hughes – The Negro Speaks of Rivers
 Gwendolyn Brooks – The Children of the Poor.

UNIT – II PROSE 12 Hrs

Gayathri Chakravorty Spivak – Can the Subaltern Speak?
 Chinua Achebe - An Image of Africa: Racism in Conrad’s Heart of Darkness .

UNIT – III SHORT STORIES 8 Hrs

Baburao Ramaji Bagul – Mother
 Mahashweta Devi - Draupadi

UNIT – IV NOVEL 16 Hrs

Mulkraj Anand- The Untouchable
 Bama- Karukku
 Bharathi Mukherjee, - Jasmine.

UNIT – V DRAMA 15 Hrs

Lorraine Hansberry- Raisin in the Sun.

Reference Books:

- Walsh, William. *Readings in Commonwealth Literature*. Oxford Clarendon Press: Delhi, 2010.
- Narasimhaih.C.D. *An Anthology of Common Wealth Poetry*. Macmillan Publishers: Chennai, 2009.
- Mukherjee, Bharati. *Jasmine*. Grove Press: New York, 2012.
- Narasimhaih.C.D. *An Anthology of Common Wealth Prose*. Macmillan Publishers: Chennai, 2009

Experiential Learning (only for interested students)

Related Paper	Work Experience		Proposed Period (Sem Break/May/Any Other)	Collaborating Agency	Mode of Evaluation
	Nature of the Institution	Proposed Duration(No. of Days/Weeks/Months)			
Language and Linguistics	Newspaper Agency	1 week	May	The Hindu	Report Submission
Phonetics	Library	1 week	May	British Council Library	Report Submission

Sem.	Category	Course Code	Course Title	Component III	Component IV
I	Language	UENL105	Basic English-I	Album Making	Assignment
		UENL106	Advanced English -I	Assignment	Album Making
	Core I	UENM103	Chaucerian and Elizabethan Age	Poster Presentation	Assignment
	Core II	UENM104	English Fiction	Assignment	Chart Presentation
	Allied	UENA102	Literary Forms	Assignment	Chart presentation
II	Language	UENL205	Basic English-II	Assignment	Poster Presentation
		UENL206	Advanced English -II	Poster Presentation	Assignment
	Core III	UENM203	Neo- Classical Age	Poster Presentation	Album making
	Core IV	UENM204	Romantic Age	Assignment	Seminar
	Allied	UENA202	History of English Literature -I	Chart Presentation	Seminar
	Non - Major Elective –I	UENE201	Communicative English	Assignment	Dialogue speaking
		UENE202	Business Writing	Assignment	Article Writing
UENE203		Communicative English	Dialogue Speaking	Role Play	
III	Language	UENL305	Basic English-III	Album Making	Assignment
		UENL306	Advanced English -III	Assignment	Seminar
	Core V	UENM303	Victorian Age	Album Making	Assignment
	Core VI	UENM304	Twentieth Century Literature	Assignment	Chart Presentation
	Allied	UENA302	History of English Literature -II	Chart Presentation	Album making
	Non Major Elective I	UENE301	Media Studies	Assignment	Report writing
UENE302		Skills for Communication	Dialogue Speaking	Group discussion	
IV	Language	UENL405	Basic English-IV	Poster Presentation	Assignment
		UENL406	Advanced English -IV	Album Making	Character Parade
	Core VII	UENM403	Indian Writing in English	Assignment	Seminar

	Core VIII	UENM404	Post Colonial Literature	Assignment	Seminar
	Allied IV	UENA401	Social History of England	Album Making	Seminar
	Non Major Elective – III	UENE401	Advanced Writing Skills	Creative writing	Resume preparation
		UENE402	Report Writing & Editing	Report writing	Article Writing
V	Core IX	UENM505	Language and Linguistics	Assignment	Seminar
	Core X	UENM502	American Literature	Seminar	Assignment
	Core XI	UENM503	Criticism I	Chart Presentation	Seminar
	Allied Optional	UENA501	Basics of Translation	Translating a short story	Translating a Poem
		UENA502	Journalism	News Article	Model News Paper.
	Core XII	UENM508	Indian Diaspora	Album Making	Seminar
	Non Major Elective - IV	UENE501	Dramatics	Role Play	Dialogue writing
		UENE502	English for Competitive Examinations (TNPSC)	Written Test	Written Test
VI	Core XIII	UENM605	Women's Writing in English	Poster Presentation	Seminar
	Core XIV	UENM606	Phonetics	Dialogue Transcription	Seminar
	Core XV	UENM603	English Language Teaching	Assignment	Classroom teaching
	Core XVI	UENM604	Literary Criticism-II	Assignment	Seminar
	Major Optional	UENO601	South Indian Fiction in Translation	Seminar	Translation of a short story
		UENO602	Contemporary World Literature	Assignment	Seminar
		UENO603	New Literature	Seminar	Album Making

Sem.	Category	Course Code	Course Title	Component III	Component IV
I	Core I	PENM104	English Literature 1500-1600	Seminar	Paper presentation
	Core II	PENM105	Indian Writing in English	Paper presentation	Seminar
	Core III	PENA106	Classics in Translation	Assignment	Seminar
	Core IV	PENM107	Principles of Literary Criticism	Seminar	Chart Presentation
	Non-Major Elective-I	PENM102	Writing and Publishing a Scientific Paper	Seminar	Paper presentation
		PENM103	English for Competitive Examination	Written Test	Written Test
II	Core V	PENM205	Restoration and 18 th Century English Literature	Seminar	Paper Presentation
	Core VI	PENM206	Language and Linguistics	Paper presentation	Seminar
	Core VII	PENM207	Shakespeare	Seminar	Assignment
	Core VIII	PENM208	Theory and Practice in Translation	Seminar	Translation of a Novella.
	Non-Major Elective-II	PENE201	Creative writing	Poetry Writing	Short story Writing
		PENE202	Writing competency	Article Writing	Report writing
		PENE203	Preparatory Course for IELTS	Written Test	Written Test
III	Core IX	PENM305	Romantic & Victorian Age	Seminar	Role play
	Core X	PENM306	American Literature	Seminar	Paper presentation
	Core XI	PENM307	Canadian Literature	Assignment	Seminar
	Core XII	PENM308	Rhetoric & Research Methodology	Paper presentation	Seminar
	Non Major Elective-III	PALE301	Preparatory Course for NET/SET Exam	Model Exam	-
IV	Core XIII	PENM404	Twentieth Century Literature	Seminar	Assignment
	Core XIV	PENM405	Critical Approaches to Literature	Seminar	Paper Presentation
	Core XV	PENM406	Post Colonial Literature	Seminar	Paper presentation
	Core XVI	PENM407	Journalism	Album Making	News Paper model

DEPARTMENT OF BUSINESS ADMINISTRATION

PREAMBLE

- Syllabus for newly introduced courses under the categories - Allied Optional, Major Optional and Non - Major Elective in the UG programme and
- Provision for experiential learning and Modes of evaluation components of III & IV of courses are presented.

UBAO 507 WOMEN IN MANAGEMENT

(With effect from 2012-2015 batch onwards)

Semester: V

Category: Allied optional

Class & Major: III UG

Credits : 4

Hours/Week : 5

Total Hours : 65

Objectives:

To enable the students

- understand the nature of management.
- carry out the functions of management
- get sensitized to the challenges faced by the women at work.

UNIT – I INTRODUCTION

12 Hrs

Management-Meaning- nature, functions of management, qualities of manager- Nature of Women- case studies.

UNIT – II HISTORY OF WOMEN IN MANAGEMENT

15 Hrs

Growing up – gender socialization – history of women managers-Defining glass ceiling – women at top-insights from the successful women managers- International women managers - case studies.

UNIT – III WOMEN IN CORPORATE SECTOR

12 Hrs

Life styles of women managers – corporate response to work - work life balance – relationship in workplace-mentoring and networking – case studies.

UNIT – IV WOMEN BUSINESS LEADERS

13 Hrs

Leadership – lessons from careers of successful women – factors affecting performance of women managers – strength of women managers -challenges to women as managers (Social, psychological and family pressures) – A review of gender differences in managerial behavior and effectiveness – feminine value – emotion and management – case studies.

UNIT – V LAWS TO PROTECT WOMEN AT WORK

13 Hrs

Equal remuneration Act 1976 – The sexual Harassment of women at work place (Prevention, Prohibition and redressal, ACT 2013)– Risk assessment for pregnant workers, Pregnant workers Fairness Act 2013 – Provision for Women in minimum wages Act 2014 – case studies.

Text book

- Gary N. Powell. *Women and men in management*. SAGE Publications, 2010.

Reference books

- Burke, J Ronald , and Marilyn J Davidson, *Women in Management worldwide: progress & prospects*. British Library Catalogue, MPG Books, 2009.
- Bilmoria,D. *Handbook on women in Business and Management*, Google Books, 2006.

UBAE 304 RURAL MANAGEMENT
(With effect from 2012-2015 batch onwards)

Semester: III
Category: Non Major Elective
Class & Major: II UG

Credit : 2
Hours/Week : 4
Total Hours : 52

Objectives:

To enable the students

- understand the rural scenario in India
- realize the significance of management of rural resources
- analyze the impact of Government schemes in rural development

UNIT – I INTRODUCTION TO RURAL MANAGEMENT 10 Hrs

Importance, Market Size and Physical Structure of Rural Society, Corporate Interest in Rural Market, Classification of Rural Product and Rural Market. Socio-Economic Reforms, Use of Durable and Non-Durables by Indian Rural folk.

UNIT – II RURAL RESOURCE MANAGEMENT 12 Hrs

Concepts – Interventions (SHG, Chetanayalya & Women empowerment, Gram sabha, Self- governance, skill development Initiatives – Micro entrepreneurship development Programme(MEDP) – Rural Health Development – Rural self employment and rural youth development- case studies

UNIT – III MARKETING OF AGRICULTURE PRODUCTS 10 Hrs

Agricultural Inputs and their Types, Government Efforts, Challenges, Agricultural Marketing, Marketing Rural Non-Farm Products, Marketing Network, Social Structure of Rural Society, Different Marketing Agencies and Institutions, Various Types of Distribution Channels in Rural Marketing- case studies

UNIT – IV NEW THRUST AREAS IN RURAL INFRASTRUCTURE 10 Hrs

Bharath Nirman – objectives – Irrigation, rural roads, housing, water Supply, Electrification – Rural connectivity through Prathan manthri Gram Sadak Yojana, Indira awas Yojana -Government of India measures for encouraging solar energy –Field visit to successful SHGs.

UNIT – V RURAL FINANCING 10 Hrs

Introduction to Rural Financing, Sources of Finance, Requisites of a Good Finance System, National Level Credit Agency- NABARD, Functions of NABARD, Schemes and Patterns of NABARD - financial inclusion - case studies

Text book

- Gopalaswamy T.P. *Rural Marketing Environment, Problems and Strategies* . Vikas, 1st Ed.,2009
- Warren, M. *Financial Management for Farmers and Rural Managers*. Blackwell Publishing, 2008.

References:

- Prag, P A. *Rural Diversification*. EG Books, 2009.
- Thorner, Daniel, and Alice Morner. *Land and Labour in India*. Asia Publishing House , 2010.
- Deu, S. Mahendra and K.S. Basu. *Economic and Social Development*. Academic Foundation, 2007.

UBAO 606 EMERGING BUSINESS PRACTICES IN INDIA

(With effect from 2012-2015 batch onwards)

Semester: VI
Category: Major Optional
Class & Major: III BBA

Credit : 4
Hours/Week : 5
Total Hours : 65

Objectives:

To enable the students

- understand the emerging business practices in India.
- realise the significance of IT enabled services
- apply the above in organizational context.

UNIT – I KNOWLEDGE MANAGEMENT

12 Hrs

Concept- importance of KM in organizations, learning organizations- KM process in organizations – challenges in creating organizational knowledge – KM strategies – Architecture and Tools – KM practices – case studies

UNIT – II SIX SIGMA

14 Hrs

Concept – steps involved in launching Six sigma- Combining Six sigma with quality – six sigma strategies – six sigma process improvement – benefits derived – case studies.

UNIT – III IT ENABLED SERVICES IN HRM

15 Hrs

Introduction- Data and information needs for HR manager- HR Management process and HRIS- HRIS and Employee Legislation-An Integrated View of HRIS.

UNIT – IV IT ENABLED SERVICES IN OTHER BUSINESS DOMAINS

13 Hrs

Business / Knowledge process out sourcing – Enterprise resource planning – Threats in IT enabled services - emergence and need of ERP – strategies for ERP – case studies.

UNIT – V CORPORATE GOVERNANCE

11 Hrs

Concept, significance in Indian context, corporate social responsibility – role of board of Directors – Recommendations of Birla committee and Narayana Murthy committee – Sarbanes – Oxley Act of 2002.

Text books

- Awad Elias M and M. Ghaziri Hassan. *Knowledge Management*. Pearson Education,2009.
- Eckes. *Six sigma for Everyone*. John Wiley & Sons, New Jersey,2012.

Reference Books

- Singa.S ,*Corporate governance*. Excel books ,2010.
- Weston, Chung, Hong. *Mergers Restructuring and corporate control*. Pentice Hall, 2009.
- Womack James, Daniel Jones, Daniel Roos. *Machine that Changed the world*. New York : Harper Perennial, 2011.

UBAE 506 GLOBAL BUSINESS
(With effect from 2012-2015 batch onwards)

Semester: V
Category: Non major Elective
Class & Major: III UG

Credit : 2
Hours/Week : 5
Total Hours : 65

Objectives:

To enable the students

- understand the modes of global business.
- analyze global business issues.
- develop global perspectives of business.

UNIT – I INTRODUCTION TO GLOBAL BUSINESS **11 Hrs**
Meaning, definition, significance, modes of global business – Issues in Global business.

UNIT – II WORLD TRADE ORGANIZATION **15 Hrs**
Objectives – Organizational Structure and Functioning, WTO and India, International liquidity: Problems of liquidity – Implications of WTO to important sectors: GATS, TRIPS, TRIMS. International Financial Institutions – IMF, IBRD, IFC, ADB – The role in managing international liquidity problems

UNIT – III FACILITATORS OF GLOBAL BUSINESS **15 Hrs**
EXIM Bank, ECGC, STC, MMTC, MITCO, HHEC, DGFT, EDA, APEDA, SEZs, AEZs, STPs, EHTP. Challenges faced by Indian Business Organizations operating in India – Recent Case Studies.

UNIT – IV CHALLENGES FOR INDIAN BUSINESS OPERATING ABROAD **12 Hrs**
Global Business Organizations functioning abroad, Challenges faced by Indian Business Organizations operating abroad – Recent Case Studies.

UNIT – V MERGERS AND ACQUISITION **12 Hrs**
Procedure, trends, Transfer pricing, Recent M&As -Successful and unsuccessful. Home country & Host Country & third party.

Text books

- Jeevanandam C. *Foreign Exchange Management*. New Delhi : Sultan Chand & Sons, , 2008.
- Francis, Cherunilam. *International Business Text and Cases*. New Delhi : Prentice Hall of India, 2008.

Reference books

- Bhull, V.K, and S.Shivaramu. *International Business Environment*. New Delhi : Anmol, 2003.
- Aswathappa,K. *International Business*. New Delhi : Tata McGraw Hill, 2004.
- Ramu, S. Shiva. *Globalisation and Indian Liberalisation*. New Delhi : South Asia Publication, 2007.

EXPERIENTIAL LEARNING (Mandatory for all)

Related Paper	Work experience			Collaborating Agency	Mode of Evaluation
	Nature of the Institution	Proposed Duration (No. of Days/ Week/ Months)	Proposed Period (Sem. Break / May/ Any other)		
Financial accounting UBAM203	Auditor's office	3 days	Month of January	Auditors in and around Villupuram.	Report submission
Production management UBAM405	Industries	3 days	Month of January	Manufacturing industry in and around Villupuram.	Report submission
Industrial relation UBAM607	Industries	3 days	Month of January	Industries in and around Villupuram	Report submission

III AND IV EVALUATION COMPONENTS OF CIA

UG:

Sem.	Category	Course code	Course title	Component III	Component IV
I	Core-I	UBAM103	Business Organization	Chart presentation	Album making
	Core-II	UBAM104	Principles of Management	Album Making	Posters Presentation
II	Core-III	UBAM202	Business Communication	Draft agenda for meetings.	Album Making
	Core-IV	UBAM203	Financial Accounting - I	Assignment	Problem solving
	Non major Elective-I	UBAE202	Leadership Skills	Poster presentation	Case study
III	Core-V	UBAM304	Business Environment	Album making	Chart presentation
	Core-VI	UBAM305	Human Resource Management	Assignment	Chart presentation
	Core-VII	UBAM306	Office Management	Logbook	Assignment

	Core -VIII	UBAM307	Financial Accounting - II	Assignment	Problem solving
	Non major Elective-II	UBAE303	Negotiation & Counseling skills	Poster presentation	Case studies
IV	Core -IX	UBAM402	Marketing Management	The new product Presentation	Ad-Writing
	Core -X	UBAM404	Financial services	Assignment	Chart presentation
	Core -XI	UBAM405	Production & materials Management	chart Presentation	Album making
	Non Major Elective-II	UBAE404	Managerial competencies and Career Development	Assignment	Album making
V	Core -XII	UBAM504	Management Accounting	Assignment	Interpretation of financial statement
	Core -XIII	UBAM505	Business ethics	Assignment	Case study
	Core -XIV	UBAM503	Business law	Poster presentation	Case study
	Non major Elective-III	UBAE505	Total Quality Management	Assignment	Album making
	Allied Optional	UBAA504	Travel management	Itinerary presentation.	Poster presentation
VI	Core -XV	UBAM605	Strategic Management	Seminar	Case study
	Core -XVI	UBAM606	Women Entrepreneurship	Poster presentation	Case study
	Core -XVIII	UBAM603	Service Marketing	Seminar	Case study
	Core -XVII	UBAM607	Industrial Relations	Assignment	Case study

	Major Optional	UBAO603	Event management	Chart Presentation	Preparation of event
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Sem	Category	Course Code	Course Title	Component III	Component IV
I	Core I	PBAM104	Business Management	Seminar	Case study
	Core II	PBAM105	Organizational Behaviour	Seminar	Case study
	Core III	PBAM 106	Managerial communication	Seminar	Case study
	Core IV	PBAM 107	Human Resource Management	Seminar	Case study
II	Core V	PBAM 205	Labour legislations	Seminar	Case study
	Core VI	PBAM202	Training & Development	Seminar	Case study
	Core VII	PBAM206	Industrial Relations	Seminar	Case study
	Core VIII	PBAM 207	International Business Management	Seminar	Case study
III	Core IX	PBAM 305	Research Methodology	Seminar	Case study
	Core X	PBAM 306	Strategic HRM	Seminar	Case study
	Core XI	PBAM 307	Knowledge Management	Seminar	Case study
	Core XII	PBAM 308	Management information system	Seminar	Case study
IV	Core XIII	PBAM 404	Organizational development & Change	Seminar	Case study
	Core XIV	PBAM 405	Performance Management	Seminar	Case study
	Core XV	PBAM406	Business Ethics	Seminar	Case study
	Core XVI	PBAO407	Counseling skills for managers	Seminar	Case study

DEPARTMENT OF COMMERCE

PREAMBLE:

- Syllabus for newly introduced courses under the categories – major and allied optional for UG programme and
- Provision for experiential learning and modes of evaluation for components III and IV of courses are presented.

UCOM611/UCCM611 WOMEN ENTREPRENEURSHIP

(With effect from 2012-2015 batch onwards)

Semester	: VI	Credit	: 4
Category	: Core XVII/XIII	Hours/Week	: 4
Class & Major	: III-B.Com & III-B.Com (CA)	Total hours	: 52

Objectives.

To enable the students

- Understand the basic concepts involved in women entrepreneurship & project finance
- Gain knowledge on the role of financial institutions in entrepreneurship development.
- Become self employed, successful entrepreneurs.

UNIT-I INTRODUCTION AND THEORIES OF ENTREPRENEURSHIP 10 Hrs

Introduction - Entrepreneur – Definition –Concept of Women Entrepreneurs – Characteristics of Entrepreneur- Functions, Growth and Problems of Women Entrepreneurs, Theories of Entrepreneurship.

UNIT- II PROJECT IDENTIFICATION AND CLASSIFICATION 11 Hrs

Search for a Business Idea – Sources and Selection – Project Classification and Identification – Selected Entrepreneurial Ventures suitable for Women Entrepreneurs - Constraints – Steps for Starting a Small Industry -Selection of Type of Organization.

UNIT-III ROLE OF WOMEN ENTREPRENEURS 11 Hrs

Women Entrepreneurial Behavior – Innovation and Entrepreneur – Role of an Entrepreneur in Economic Growth as an Innovator .

UNIT-IV PROJECT FINANCE 10 Hrs

Project Finance –Sources of Project Finance, Credit Facilities – Evaluation by Financing Institutions - Lease Financing.

UNIT-V INCENTIVES AND SUBSIDIES 10 Hrs

Incentives and Subsidies - Central Government Schemes and State Government Schemes of Incentives for Women Entrepreneurs- Successful Women Entrepreneurs.

Text Books

- Gupta, C.B & N.P. Srinivasan. *Entrepreneurial Development in India*. New Delhi : SultanChand &Son, 2009
- Charantimath. *Entrepreneurial Development & Small Business Enterprise*. New Delhi : Pearson Edn., 2003

Reference Books

- Suresh, Jayshree. *Entrepreneurial Development*, Chennai : Margham Publications, 2003
- Saravanavel, P. *Entrepreneurial Development, Principles, Policies and Programmes*. Ess Pee Kay Publishing House, 2005
- Khanka S.S. *Entrepreneurial Development*, New Delhi : S.Chand & Co., 2007

UCCA503 - RURAL FINANCE (With effect from 2012-2015 batch onwards)

Semester	: V	Credit	: 4
Category	: Allied optional	Hours/Week	: 5
Class & Major	: III BA (Eng.), B.A. (Tamil) & BBA	Total hours	: 65

Objectives:

To enable the students

- Study the various rural finance concepts in business parlance
- Gain knowledge about emerging rural finance offered by Commercial & Co-operative Banks.

UNIT – I INTRODUCTION TO RURAL FINANCE **13 Hrs**

Introduction – Problems of Rural indebtedness - Need for rural credit - role of credit - objectives of the credit - sources of the rural credit - institutional and non-institutional credit - Credit delivery mechanism in rural finance.

UNIT – II ROLE OF COMMERCIAL BANKS AND RURAL CREDIT **13 Hrs**

Role of Commercial Banks and Rural Credit - Objectives and functions of commercial Banks -The Progress of Commercial Banks - Types of Rural Credit - Short term and long term credit -Terms and Conditions of finance - Repayment conditions - Lead Banks Scheme and Rural Credit: - Service Area Approach - New Strategy for Rural Credit.

UNIT – III ROLE OF RRBS IN RURAL CREDIT **13 Hrs**

Regional Rural Banks - Role of RRBs in Rural Credit - Aims Objectives and Functions RRBs -Progress of RRBs - Financing and Re-payment procedure of RRBs - NABARD and Rural Credit - Objectives and Functions of NABARD - Achievements and Performance of NABARD - Problems – Micro finance – Self help groups

UNIT – IVROLE OF CO-OPERATIVES IN RURAL DEVELOPMENT **13 Hrs**

Co-operative Credit: importance and role of Co-operatives in Rural Development – growth and Progress of cooperatives – cooperative movement in India and evolution – Principles of Cooperatives - Aims, objectives and Functions of Cooperatives - Role of Cooperative credit – the trends in growth-Structure - Organizations and functions.

UNIT - V ROLE OF CREDIT SOCIETIES IN RURAL DEVELOPMENT **13Hrs**

Rural Co-operative Credit Societies - The Structure of cooperative credit societies – PACs, DCCBs, and APSCB - Their Aims, objectives and functions - Terms and Conditions of Finance -Re-payment Procedure - progress and problems of Finance.

Text Books

- Dingra, I.C. *Rural Banking in India*. New Delhi : S.Chand & Co. Limited.
- Mathur, B.S. *Co-operation in India*. Agra : Sahitya Bhawan.

Reference Books

- Una , Murray. *Rural finance and Book-keeping*. Rome: 2005
- Johanne, Hanko. *Rural finance and Book-keeping Education and Training*. Bangkok : Regional Office For Asia And The Pacific, 2006

EXPERIENTIAL LEARNING (Only for Interested Students)

Related Paper / Course Code	Work Experience			Collaborating Agency	Mode of Evaluation
	Nature of Institution	Proposed Duration(No. of days / Weeks / Months)	Proposed Period(Sem. Break/May /Any other)		
Accounting Package / UCOM604	Tally Training Institute	5 days	February	ICAT TALLY Training Institute	Written Test

III & IV Evaluation Components of CIA**UG:**

Sem.	Category	Course Code	Course Title	Component – III	Component – IV
I	Core I	UCOM103	Financial Accounting-I	Ratio Analysis	Problem Solving
	Core II	UCOM102	Business organization	Album Making	Case Study
II	Core III	UCOM201/ UCCM201	Banking Law & Practice	Banking Instrument Banking Practical - Commerce Lab	Album Making
	Core IV	UCOM202	Financial Accounting II	Ratio Analysis	Problem solving
	Non Major Elective-I	UCOE202/ UCCE201	Modern Accounting Package – NME	Assignment	T&P DPA Viva
III	Core V	UCOM304 UCCM304	Corporate Accounting	Assignment	Problem solving
	Core VI	UCOM302 UCCM302	Business Law	Case Study – (Newspapers)	Seminar
	Core VII	UCOM303	Financial services	Assignment	Written Quiz
	Non Major Elective-II	UCOE301	Individual Tax planning	Assignment	Problems solving
		UCCE301	Women Entrepreneurship Development	Successful History of Women Entrepreneur	Album Making

IV	Core XVIII	UCOM402 UCCM402	Practical Auditing	Audit Reports	Business Quiz
	Core IX	UCOM405 /UCCM404	Modern Marketing	Poster presentation	Business quiz
	Core X	UCOM406	Corporate Finance	Final Accounts of Companies	Problem Solving
	Non Major Elective-III	UCOM401	Internet Banking	Internet Practical	Mini project
UCCE401		Practical Banking	Poster Presentation	Business Quiz	
V	Core XI	UCOM504 UCCM504	Cost Accounting	Assignment	Problems solving
	Core XII	UCOM505 UCCM505	Income Tax Laws & Practice	Commerce Lab (Income Tax Forms)	Problems solving
	Non Major Elective-IV	UCOE501	Investment Planning	Album Making	Case study
		UCCE501	Risk Management (Insurance)	Poster Presentation	Quiz
VI	Core XIII	UCOM606 UCCM606	Company Law	Case study	Mock Court
	Core XIV	UCOM608/ UCCM608	Management Accounting	Management Audit Report	Problems solving
	Core XV	UCOM609/ UCCM609	Indirect Taxation	Commerce lab (Income Tax Forms)	Problem solving
	Core XVI	UCOM610/ UCCM610	Entrepreneurial Development	Album Making	Case study
	Core XVII	UCOM604 UCCM604	Accounting package	Assignment	Problems solving
	Core XVIII	UCOR605	Accounting package -Lab	Assignment	Problem solving

PG:

Sem.	Category	Course Code	Course Title	Component – III	Component – IV
I	Core I	PCOM101	Financial policies & Decision	Assignment	Problems solving
	Core II	PCOM102	Business Environment & Policy	Assignment	Poster presentation
	Core III	PCOM103	Global perspective in Business	Poster Presentation	Quiz
	Major Elective- I	PCOO101	Logistics Management	Poster presentation	Quiz

	Non Major Elective-I	PCOE101	Preparatory course for Bank Exam	Problems solving from Quantitative aptitude	Quiz from Banking Sector
		PCOE102	Business Letters	Tender, Quotation	Letter Drafting
II	Core IV	PCOM201	Advanced Accounting	Assignment	Problem solving
	Core V	PCOM202	Global Marketing	Collection of current news related to global market	International Product Album Making
	Core VI	PCOM203	Cost control Techniques	Assignment	Problem solving
	Non Major Elective-II	PCOE202	Export and import procedures	Case study	Album making
		PCOE203	Accounting packages	Practical	Problems solving
III	Core VIII	PCOM301	Human resource Management	HR practices	Open book quiz
	Core IX	PCOM302	Direct Taxes	Commerce Lab (IT LAB)	Problem solving
	Core X	PCOM303	Research Methodology	Mini project	Seminar
	Core XI	PCOM304	Service Marketing	Case study	Seminar
IV	Core XII	PCOM404	Indirect Taxes	Commerce Lab (Tax Forms)	Seminar
	Core XIII	PCOM402	Operations Research	Seminar	Problem Solving
	Major Elective-II	PCOO402	Organizational Effectiveness	Seminar	Open Book

SCIENCE

DEPARTMENT OF PHYSICS

PREAMBLE

- syllabi for newly introduced courses under the categories – Allied Optional and Major optional offered in the UG programme,
- provision for Experiential learning and Modes of evaluation for components III & IV of CIA of courses are presented.

UPHA503 HOME ELECTRICAL WIRING FOR DOMESTIC APPLIANCES (With effect from 2012-2015 batch onwards)

Semester	: V	Credits	: 4
Category	: Allied Optional	Hours/week	: 3T+2P
Class & Major	: III UG	Total Hours	: 39T+26P

Objectives:

To enable the students

- understand the distribution symbols and electrical connections used in electrical wiring.
- apply the basic aspects of electrical wiring for trouble shooting.

UNIT - I ELECTRICITY GENERATION

7 Hrs

Fundamentals of electricity – Current, Volt, Resistance – Ohm’s law –Power - Kilowatt hour – Watt meter – Electrical measurements – Electric power generation by Thermal, hydro and nuclear methods – Battery–Generators – Study of Generator.

UNIT - II ELECTRIC CIRCUITS AND DISTRIBUTION

8 Hrs

Symbols of electrical parameters – Series and Parallel connections – AC and DC – Circuits– LCR circuits Transformer – Distribution methods – Single phase and three phases – Star and Delta connections – Rules of electric connections – SWG–Motors – Study of motor Series and parallel circuits.

UNIT - III ELECTRICAL APPLIANCES

8 Hrs

Tungsten - filament bulb – tube light –mercury and sodium vapour lamp – emergency lamp - heater – iron box – table fan – ceiling fan – battery eliminator – electrical requirement of washing machine and refrigerator –electrical faults rectification in electrical appliances.

UNIT - IV HOUSE WIRING

8 Hrs

Experimental study of house wiring-Tools – Methods of Joining conductors – House wiring methods –Glit, Wood casing, Tough – Rubber sheathed conduits or PVC pipe –concealed. Switches – ceiling roze – lamp holders, sockets – Fuse base –Distribution box –Trip switches – Earth connection.

UNIT - V DISTRIBUTED WIRING

8 Hrs

Experimental study of main distribution and switch boards - Main board preparation – Distribution – Cut–out preparation – Switch board preparation – Power factor –IEE regulations – Safety precautions –Testing the insulation.

LIST OF EXPERIMENTS

26 Hrs

1. Experimental study of house wiring
2. Ceiling roze and lamp holders-using connecting wires
3. Experimental study of switch board
4. Experimental study of main board
5. Wood casings
6. Emergency lamp
7. LCR circuit transformer
8. AC and DC circuits – series and parallel

Text Books

- Kanickairaj, B, *Electrical Wiring*. Department of Physics, SJC, 2011.
- Jain, V.K, and Amitabh bajaj. *Design of Electrical Installations*. 17th Ed. Lakshmi Publications Ltd: New Delhi, 2009.
- Simmons, Phil, and Ray C. Mullin. *Electrical Wiring Residential*. 17th Ed. New Delhi : 2011.

Reference Books

- Herbert P. Richter & W. Creighton Schwan. *Practical Electrical Wiring*. Twentieth Edition, Park Publishing, 2008.
- Ray C. Mullin & Robert L. Smith, *Electrical Wiring – Industrial*. 14th edition, 2011.
- Ray McReynolds, J. *Step By Step Guide to Home Wiring*. Step By Step Guide Book Co, 1994.

UPHO603 SPINTRONICS (With effect from 2012-2015 batch onwards)

Semester	: VI	Credits	: 4
Category	: Major Optional	Hours/week	: 5
Class & Major	: III B.Sc physics	Total Hours	: 65

Objectives:

To enable the students

- understand the fundamental and the new technological applications in the field of magnetic recording and Spintronics.
- analyse the solid basis in magnetism and the magnetic properties of nanomaterials.

UNIT - I CRYSTAL GROWTH TECHNIQUES

12 Hrs

Solution Growth Technique: Low temperature solution growth: Solution - Solubility and super solubility – Expression of super saturation – Miers T-C diagram - Constant temperature bath and crystallizer – Seed preparation and mounting - Slow cooling and solvent evaporation methods.

UNIT - II MAGNETIC MATERIALS

14 Hrs

Origin of magnetic moment – Bohr magneton – comparison of Dia, Para and Ferro magnetism – Domain theory – Hysteresis – soft and hard magnetic materials – anti - ferromagnetic materials – Ferrites and its applications – Materials - Classification, Crystalline,

Amorphous – Glasses - Metals – Alloys – Semiconductors - Polymers Ceramics - Bio-materials
Polymers – Blends - Composites - Bulk and Nanomaterials - Quantization effect.

UNIT - III SEMICONDUCTORS

13 Hrs

Intrinsic semiconductor – carrier concentration derivation – Fermi level – Variation of Fermi level with temperature – electrical conductivity – band gap determination – compound semiconductors - direct and indirect band gap - derivation of carrier concentration in n-type and p-type semiconductor – impurity concentration.

UNIT - IV MAGNETIC SEMICONDUCTORS

13 Hrs

Introduction – Solid state Structure, Band Structure, Electrons and Hole: Semiconductor Statistics – Intrinsic - Extrinsic and Compensated Semiconductors - Electron and Hole Mobilities and Drift Velocities - Hall effect - Determination of Hall coefficient - Applications.

UNIT - V SPINTRONICS DEVICES

13 Hrs

Materials for spin electronics - Nanostructures for spin electronics - Deposition techniques - micro and nanofabrication Techniques - Spin - Valve and spin - tunneling devices- Read Heads – MRAMS - Field Sensors - Spintronics Biosensors - Quantum Computing with spins.

Text Books

- Bandyopadhyay, S, and M. Cahay. *Introduction to Spintronics*. Boca Raton, USA : CRC Press, 2008.
- Johnson, M. *Magnetolectronics*. New York : Academic Press, 2004.

References

- Sellmyer, D.J, and R. Skomski. *Advanced Magnetic Nanostructures*. Springer : Berlin 2006.
- Maekawa. *Concepts in Spin Electronics*. Oxford University Press : New York, 2006.
- Awschalom, DD, R.A. Buhrman, J.M. Daughton, S.V. Molnar, and M.L. Roukes, Iuwer, *Spin Electronics*, Norwell : Academic Publishers, 2004.
- Xu, Y B, and S.M.Thompson. *Spintronic Materials and Technology*. Taylor & Francis: Boca Raton ,2006.

UPHP601 MINI PROJECT

(With effect from 2012-2015 batch onwards)

(Extra credit earning provision for interested final year students only)

Semester	: VI	Credits	: 1
Category	: Project	Class & Major	: III B.Sc physics
		Total hours	: 30

Objectives:

To enable the students

- acquire the experimental based knowledge about their subject.
- conduct the experiments on their own knowledge.

Mini-Project:

- This Course will be offered as Mini Project for the final year UG students under extra credit earning provision to gifted students outside the class hours
- It could be done either individual or as a group with the maximum of three students.

Evaluation scheme for the project (Internal 60+external 40)

Internal assessment:

S.No	Component	Weightage
1.	Review of the literature	10
2.	Title of the topic	10
3.	Experimental section	10
4.	Tabulation	10
5.	Result and discussion	10
6.	Project report preparation	10
Total		60

External assessment :

1. Report : 10
2. Presentation: 20
3. Viva Voce : 10

Total : 40

EXPERIENTIAL LEARNING (Mandatory for all students)

Related Paper	Work Experience			Collaborating Agency	Mode of Evaluation
	Nature of Institution	Proposed Duration (No. of days /weeks /Months)	Proposed Period (Sem. Break/May/ Any other		
Thermal Physics (UPHM103)	Power Station	2 days	September	NLC, Neyveli	Report Submission
Electricity & Magnetism (UPHM402)	Educational Institution	7 days	October	Institute of ceramic Technology, Virudhachalam/ ES Engineering College/ Any Industry in Puducherry.	Report Submission

III and IV Evaluation for components of CIA

Semester	Category	Course Code	Course Title	Component-III	Component-IV
I	Core I	UPHM103	Mechanics	Seminar - Power Point Presentation	Working Models
	Core II	UPHM104	Thermal and Statistical Physics	Poster Presentation	Simple Heat experiments (Model display)
	Allied	UPHA101	Physics for chemistry - I	Assignment	Poster presentation

II	Core III	UPHM202	Properties of Matter & Acoustics	Assignment(Collection of real time examples of elasticity)	Seminar(Statistical analysis(Noise pollution))
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	Core IV	UPHM203	Mathematical Physics	Poster Presentation (collection of formulae to solve the problems)	Problem solving
	Allied	UPHA202	Physics for chemistry - II	Seminar	PPT
	Non major elective	UPHE202	Applied Physics	Seminar	PPT
III	Core V	UPHM302	Optics & Laser Physics	Simple optics Experiments-model display	Seminar – Recent trends in laser physics
	Allied	UPHA303	Digital Electronics	Assignment (Problem solving)	PPT
	Non Major Elective	UPHE302	Physics for competitive exam	Assignment	PPT
IV	Core VI	UPHM402	Electricity & Magnetism	Working Models (Generation of electricity)	Usage of magnetic materials in day today life (poster presentation)
	Allied	UPHA402	Electronics for Mathematics	Assignment	Poster
	Non Major Physics	UPHE402	Energy Physics	Poster presentation	PPT
V	Core VII	UPHM501	Quantum Mechanics & Relativity	Problem solving	Seminar –Power point presentation (Applications of Quantum Mechancis)
	Core VIII	UPHM505	Basic Electronics	Poster presentation(electronic components)	Circuit analysis report (Eg: mobiles, PC, TV,etc.)
	Core IX	UPHM506	Numerical Methods With – C	Problem solving (using different numerical methods)	Program writing using C(different methods)
	Allied Optional	UPHA501	Conservation of Energy	Seminar	PPT

	Non Major Elective	UPHE501	Remote sensing technique	Seminar	Assignment
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VI	Core X	UPHM608	Solid State Physics	Journal review	Crystal growth (assignment)
	Core XI	UPHM606	Atomic & Molecular Physics	Non-working model(atomic structure)	PPT(Various spectroscopic techniques)
	Core XII	UPHM607	Digital Electronics & Microprocessor	Working Models	Simple programs making(assignment)
	Core XII	UPHM602	Nuclear Physics	Assignment- Data collection(Power generation from nuclear power stations)	PPT(Recent discovery of nuclear particles)
	Core Optional	UPHO601	Nanophysics	Online Journal review	Seminar using PPT

DEPARTMENT OF BIOCHEMISTRY

PREAMBLE

- syllabi for newly introduced courses under the categories – Allied Optional, Non- Major Elective and Major Optional offered in the UG programme and
- provision for Experiential learning and Modes of evaluation for components III & IV of CIA of courses are presented.

UBCE502 WOMEN'S HEALTH, NUTRITION & DISORDERS

(Science students who opted the Allied Optional Reproductive Biology UBCA504 are not eligible)

(With effect from 2014 – 17 batch onwards)

Semester : V

Credit : 2

Category : NME

Hours /week : 4

Class &Major: III UG

Total hours : 52

Objectives:

To enable the students

- know the different stages of women's life.
- understand physiological changes that occur during the women's life.
- create awareness on anaemia and about various diseases due to hormonal imbalance.

UNIT - I PHYSIOLOGICAL CHANGES

10Hrs

Concepts, Normal health-Stages in woman's life- Infancy, Child hood, Adolescence, Young lady, Middle age, Elderly - Physical & Psychological changes, General causes of health defects - Steps to a healthy life style.

UNIT – II PUBERTY

10Hrs

Definition - Development of secondary sexual characteristics- Factors affecting onset of puberty - Genetic, Psychological, Geographical, Nutritional status. Menstrual cycle - Hormones affecting puberty & Menstrual cycle - Normal & Abnormal influences on female reproductive system.

UNIT – III PREGNANCY & LACTATION

10Hrs

Concept of Pregnancy – Stages of pregnancy - Role of hormones in pregnancy -Influence of Drugs during pregnancy – Parturition - Lactation - Importance of breast feeding - Precautions during pregnancy & lactation.

UNIT – IV DISORDERS

12Hrs

Menstrual disorders, premenstrual syndrome – PCOD - endometriosis, menorrhoea, dysmenorrhoea, amenorrhoea, risk factors of hormone replacement therapy – Heart attack, Breast & Cervical Cancer, Stroke, Osteoporosis – indications and Management.

UNIT – V ANAEMIA

10Hrs

Anaemia - Definition,-Types of anaemia - Iron deficiency, Microcytic , Macrocytic Aplastic, Sickle cell, Vitamin deficiency - Anaemia due to chronic infection & pregnancy - Signs & symptoms, Diagnosis, treatment & prevention.

Text books

- Hall, Guyton. *Textbook of Medical Physiology*. 12^h ed. Philadelphia : W.B. Saunders, 2010.
- Sembulingam, K and Prema Sembulingam. *Essentials of medical physiology*. New Delhi : Jaypee Brothers, 2006.

References

- Lange, W Ganong. *Review of Medical Physiology*. 21st edition, 2003.
- Hillman R.S ,Kennet Ault. *Hematology in Clinical Practice*. New York : McGraw-Hill. 5th edition, 2010.
- Paulman. P In ET Bope, et al., eds., *Conn's Current Therapy* 2011, Philadelphia: Saunders.

UBCA505 RURAL WASTE MANAGEMENT (With effect from 2012 – 15 batch onwards)

Semester : V

Category : Allied optional

Class & Major: III UG Science students except Biochemistry

Credit : 4

Hours /week : 5

Total hours : 65

Objectives:

To enable the students

- understand the basic concept of biocomposting, Vermi composting & biomass degradation.
- create awareness on waste water treatment.
- apply the concept of environmental ethics on waste management.

UNIT – I HOME & ENVIRONMENT CLEANLINESS

10Hrs

Introduction – definition, scope & importance of home & environment clean up, domestic & environment waste, role of an individual in preserving the environment, disposal methods to remove domestic & environmental waste, use of ecofriendly products like solar kitchens, biogas fuels of environment.

UNIT – II BIOCOMPOSTING & VERMICOMPOSTING

15Hrs

Biocomposting – compost, definition, role of microbes, inoculum culture, procedure for biocomposting, aerobic & anaerobic composting, biofertilizer production & plant productivity. Vermicomposting - definition, concept, vermiculture, procedure & requirements for vermicomposting, Advantages of vermicomposting.

UNIT – III BIOMASS DEGRADATION & ROLE OF MICROBES

15Hrs

Biomass degradation – definition, microbes in natural habitats – air, water, soil, role of microorganism, production of biogas, methods of disposal landfills, incineration, recycling & sustainability, conversion of biofuels, manure for agricultural use.

UNIT - IV WASTE WATER RECYCLING

15Hrs

Waste water management – definition, waste water production & treatment - collection, transport, processing or disposal of domestic water, waste water - waste water treatment.

UNIT – V ENVIRONMENTAL ETHICS

10Hrs

Definition, Environmental ethics & Environment act on higher animal, species & biodiversity ethics, land ethics.

Text books

- Singh, D.P and S.K. Dwivedi. *Environmental Microbiology and Biotechnology*. Published by New Age International Pvt Limited, 2009.
- Chandrappa , Ramesha and D.R. Ravi. *Environmental Issues, Law and Technology – An Indian Perspective*. Delhi : Research India Publication, 2009.

References

- Trivedi, R.K. *Handbook of Environmental Laws, Rules Guidelines, Compliances and Stadards*. Vol I and II, Enviro Media (R).
- Rao M N. & A.K. Datta. *Waste Water treatment*. Oxford & IBH Publ. Co. Pvt. Ltd., 1987.
- Jadhav, H & Bhosale. V.M, *Environmental Protection and Laws*. Delhi : Himalaya Publishing House, 1995.

UBCO606 PATHOBIOLOGY OF HUMAN DISEASES AND DISORDERS
(With effect from 2012 – 15 batch onwards)

Semester	: VI	Credits	: 4
Category	: Major optional	Hours / Week	: 5
Class & Major:	III B.Sc Biochemistry	Total Hours	: 65

Objectives:

To enable the students

- to know the cellular changes during pathology of disease.
- understand the human diseases and mechanisms associated with the onset and progression of diseases.
- practice pathology with greater emphasis on the biological and the medical aspects.

UNIT – I MECHANISM OF CELL INJURY **10 Hrs**

Principle of cell injury, depletion of ATP, Mitochondrial damage, influx of calcium, accumulation of reactive oxygen species, increased permeability of cellular membranes, accumulation of damaged DNA & misfolded proteins, apoptosis.

UNIT - II INFLAMMATION AND WOUND HEALING **12Hrs**

Edema - hyperemia and congestion – hemorrhage - hemostasis and thrombosis – endothelium - platelets coagulation system - genesis of thrombosis - fate of thrombus - embolism pulmonary, systemic, amniotic fluid, air and fat – infarction - septic shock.

UNIT - III HEPATIC DISORDERS **15Hrs**

Hepatic injury - Hepatitis A through E - Alcohol liver disease - Drug and toxin induced liver disease – cirrhosis - pregnancy associated - transplantation associated - adenomas and primary carcinoma.

UNIT - IV STORAGE DISORDERS **15Hrs**

Glycogen storage disease - definition, types of glycogen storage disease, metabolic pathophysiology, diagnosis, treatment. Lipid storage disease - definition types, Gauchers disease, Tay sach's disease, Niemann's picks disease, metabolic pathophysiology, diagnosis, treatment.

UNIT - V CANCER **13Hrs**

Cancer - Definition, benign & malignant neoplasm, carcinogenic agents & their cellular interactions, host defence against tumors, immunosurveillance.

Text Books

- Cotran, Kumar, Robbins. *Pathological Basis of Disease*. 7th edition Prism: India, 2004.
- Richard & Harvey. *Lippincott's Illustrated Reviews Biochemistry*. 6th edition, 2014.

References

- Goodman & Gilman. *Pharmacological Basis of therapeutics*. 11th edition, McGraw Hill, 2006.
- Zilva & Pannell. *Clinical Biochemistry in Diagnosis & Treatment*. Lloyd Luke Publications USA, 8th edition, 1984.

EXPERIENTIAL LEARNING (Mandatory for all Students)

Related Paper	Work Experience			Collaboration agency	Mode of Evaluation
	Nature of Institution	Proposed Duration	Proposed Period		
Nutrition and Women's Health (UBCM303)- II B.Sc.	Dairy institute	2 Days	August	Aavin Milk Factory, Villupuram	Report on Milk processing
Advanced Clinical Bio Chemistry (UBCM602) - III B.Sc.	Hospital	3-5 days	January	E.S Hospital, Villupuram	Case Study

III & IV EVALUATION COMPONENTS OF CIA

Semester	Category	Course code	Course title	Component III	Component IV
I	Core Paper	UBCM104	Introductory Biology	Poster Presentation	Assignment
	Core Paper	UBCM105	Cell Biology	Album Preparation (Discoveries of Cell Biology)	Species Observation report
II	NME	UBCE202	Biomedical Techniques	Assignment	DPA + Practical Test
	Core Paper	UBCM202	Biomolecules	Model Preparation	Assignment
III	Core Paper	UBCM302	Analytical Biochemistry I	Assignment	Model Preparation
	Core Paper	UBCM303	Nutrition & Women's Health	Assignment	Chart Preparation
	NME	UBCE301	Hormonal biochemistry	Assignment	Poster presentation
		UBCE302	Food microbiology	Model preparation	Seminar
IV	Core Paper	UBCM402	Analytical Biochemistry II	Model Presentation	Assignment
	NME	UBCE401	Nutrition and Health	Diet chart preparation	Case study
		UBCE402	Clinical Nutrition	Poster presentation	Seminar
		UBCE403	First Aid Management	Assignment	Case study

V	Core Paper	UBCM501	Enzyme & Intermediary Metabolism	Assignment	Seminar
	Core Paper	UBCM502	Human Physiology	Poster Presentation	Seminar
	Core Paper	UBCM503	Bioinformatics	Assignment	Seminar
	NME	UBCE501	Basics of Bioinformatics	Practical Test	Assignment
	Allied Optional	UBCA502	Clinical Diagnostics	Case Study	DPA + Practical Test
		UBCA503	Microbiology	Assignment	Seminar
		UBCA504	Reproductive biology	Poster presentation	Assignment
VI	Core Paper	UBCM605	Biotechnology	Assignment	Power Point Presentation
	Core Paper	UBCM606	Advanced Clinical Biochemistry	Seminar	Case Study
	Core Paper	UBCM603	Molecular Biology	Poster Presentation	Seminar
	Major Optional	UBCO603	Immunology	Poster presentation	Power point presentation
		UBCO604	Stem cell Biology	Culture preparation	Seminar
		UBCO605	Molecular Endocrinology	Poster Presentation	Seminar

DEPARTMENT OF CHEMISTRY

PREAMBLE

- syllabi for newly introduced courses under the categories – allied optional and Major Optional offered in the UG programme,
- provision for Experiential learning and Modes of evaluation for components III & IV of CIA of courses are presented.

UCHA504 Chemical Treatment of Water and Soil (With effect from 2012-15 batch onwards)

Semester : V **Credit** : 4
Category : Allied Optional **Hours/ Week** : 5
Class & Major : III UG Science students except Chemistry **Total hours** : 65

Objectives:

To enable the students

- understand the chemical characteristics of water and its analysis.
- know about the treatment of water and soil.
- know the chemical characteristics of soil.

UNIT - I CHEMICAL CHARACTERISTICS OF WATER **11 Hrs**

Color, turbidity, odour, taste, temperature, pH , electrical conductivity, Acidity, Alkalinity, hardness, Total solids oxidation, transparency and silica content. Polarity, hydrogen bonding, surface tension, structure and hybridization of water. Water as a solvent. Water in acid base reaction.

UNIT- II ANALYSIS OF WATER **15 Hrs**

Analysis of solids present in water- suspended solids, dissolved solids, free CO₂, free chlorine, calcium, Mg, Fe, Mn, Ag and Zn. Analysis of chemical substance affecting health- NH₃, nitrate, nitrite, cyanide, sulphate, sulphide, chloride, fluoride-analysis of chemical substance indicative of pollution- Dissolved oxygen-biochemical oxygen demand(BOD), Chemical Oxygen demand(COD). Water softening method- Clark's process-lime soda process-ion exchange process-demineralization of water. Determination of hardness of water- Titration method-complexometric method using EDTA.

UNIT- III EFFLUENT WATER TREATMENT **14 Hrs**

Sources of industrial wastewater- Iron and steel industry, Food industry, Paper industry, Sugar industry and Nuclear industry. Treatment of industrial wastewater -Brine treatment, Solids removal, Oils and grease removal, Removal of biodegradable organics, Treatment of other organics, Treatment of acids and alkalis, Treatment of toxic materials.

UNIT- IV SOIL CHEMISTRY **12 Hrs**

Introduction- Soil classification, properties of soil, soil water, soil air, soil temperature, soil minerals, soil colloids, soil reaction and buffering, soil pH, soil acidity, soil salinity and alkalinity, soil fertility and soil formation.

UNIT- V TREATMENT OF SOIL **13 Hrs**

Handling and storage of soil sample, soil analysis-physical parameter-pH, texture. Pre-treatment and extraction technique for contaminants in soil. Soil analysis- Chemical parameter, organic matter, NPK, biological parameter- Enumeration of bacteria and actinometry in soil.

Text Books

- Dee, A.K. *Environmental Chemistry*. 6th Ed. New Age International (P) Ltd. : New Delhi, 2006.
- Sharma, B.K. *Industrial Chemistry*. 1st Ed. Goel Publishing house: Meerut, 2007.

Reference Books

- Mahajan, S.P. *Pollution Control in Process Industries*. 1st Ed. Tata McGraw Hill Publishing Company Ltd.: New Delhi, 2007.
- Nyle, C and Bread. *The Nature and Properties of Soil*. 9th Ed. S.Chand and Company Ltd.: New Delhi, 2006.
- Agarwal, S.K. *Water Pollution and Management*. 1st Ed. Wiley Eastern Ltd.: Chennai 2005.

UCHO604 CHEMISTRY OF BIOMOLECULES
(With effect from 2012-15 batch onwards)

Semester	: VI	Credit	: 4
Category	: Major Optional	Hours/Week	: 5
Class & Major	: III B.Sc., Chemistry	Total hours	: 65

Objectives:

To enable the students

- understand the extraction, isolation and purification methods of natural products
- know about the chemical and biological aspects of plant hormones, pigments and enzymes
- know about the plant products as drugs in the drug discovery process.

UNIT- I EXTRACTION OF NATURAL PRODUCTS **15 Hrs**

Introduction, definition, factors influencing the choice of extraction, Selection of Solvents for Extraction. Types of extraction- Distillation, Soxhlet, Cold percolation and Microwave methods. Methods of isolation and purification of natural products- Principles of different chromatographic techniques-TLC, Column, Paper and HPLC used to identify the following compounds like- Starch, Citric acid, Pectin, Lycopene, Curcumin, Lemon grass oil, Sandal wood oil and Caffeine.

UNIT- II HORMONES **12Hrs**

Introduction, Definition, Classification, Source, Structure and biological importance of plant and animal hormones like - Auxins, Cytokinins, Gibberellins(plant hormones) and estrogens, androgens, progesterone(animal hormones).

UNIT- III PIGMENTS **13 Hrs**

Introduction, Definition, Classification, Source, importance and Structure (STRUCTURAL ELUCIDATION NOT EXPECTED) of natural pigments viz., Carotene, Lycopene, Bixin, Chlorophyll, Quercetin, Indigotin, pectin and apigenin.

UNIT- IV ENZYMES **13 Hrs**

Introduction, Definition, Classification, Source and biological importance of plant and animal enzymes like-glycosides hydrolases, lactase, amylase, yeast, papain(plant enzymes) and insulin, trypsin, chymotrypsin, lipase and catalase(animal enzyme).

UNIT- V NATURAL PRODUCTS IN DRUG DISCOVERY **12Hrs**

Introduction to Nanotechnology in drug delivery, Nano-sized Advanced Delivery Systems. Role of natural products as leads to the design of new drugs with case history with example of Citric acid, Pectin, Lycopene, Curcumin, Lemon grass oil and Sandal wood oil as drugs.

Text Books

- Iqbal, A. *Text Book of Phytochemistry*. 1st Ed. Discovery Publishing House Private Limited: Chennai, 2012.
- Finar, I.L. *Stereochemistry and the Chemistry of Natural Products*. 5th Ed. Dorling Kindersley (India) Pvt. Ltd, Pearson education: South Asia, 2008.

Reference Books

- Evans, W.C, Trease and Evans. *Pharmacognosy*. 15th Ed. Saunders Publication : Philadelphia, 2008.
- Mukherjee, P.K. *Quality control of Herbal Drugs-An Approach to Evaluation of Botanicals*, 1st Ed. Bussiness Horizons Pharmaceuticals Publishers: New Delhi, 2009.
- Majumdar,D.K, J.N.Govel and V.K.Singh. *Recent Progress in Medicinal Plants*. 1st Ed. Volume II, Studium Press: New Delhi, 2007.

EXPERIENTIAL LEARNING (Mandatory for all Students)

Related Paper	Work Experience			Collaborating Agency	Mode of Evaluation
	Nature of Institution	Proposed Duration (No. of days/weeks/ Months)	Proposed Period (Sem. Break/May/ Any other		
Organic Chemistry I(UCHM502)	University	2 days	September	Bharathidasan University, Trichy.	Report Submission

III and IV Evaluation Components of CIA

UG

Semester	Category	Course Code	Course Title	Comp III	Comp IV
I	Core I	UCHM103	General Chemistry I	Problem Solving	Seminar
	Core II	UCHM102	Analytical chemistry I	Problem Solving	Seminar
	Allied I	UCHA101	Chemistry I	Assignment	Seminar
II	Core III	UCHM201	General chemistry II	Problem Solving	Seminar
	Allied II	UCHA201	Chemistry II	Assignment	Seminar
	NME	UCHE202 UCHE203	Solid waste Management Waste Management	Assignment Assignment	Seminar Seminar
III	Core IV	UCHM302	General Chemistry III	Mechanism Writing	Seminar
	Allied III	UCHA301	Chemistry III	Assignment	Seminar
	NME	UCHE302	Cosmetics and detergents	Assignment	Seminar
IV	Core V	UCHM402	General chemistry IV	Problem Solving	Seminar
	Allied IV	UCHA401	Chemistry IV	Assignment	Seminar
	NME	UCHE402	Vocational Chemistry	Assignment	Seminar
V	Core VI	UCHM501	Inorganic chemistry I	Assignment	Seminar
	Core VII	UCHM502	Organic Chemistry I	Mechanism Writing	Seminar
	Core VIII	UCHM503	Physical chemistry I	Problem Solving	Seminar
	Allied Optional	UCHA501 UCHA502 UCHA503	Green chemistry Industrial Chemistry Food Chemistry	Assignment Assignment Assignment	Seminar Seminar Seminar

	NME	UCHE502 UCHE503	Health and hygiene Health Chemistry	Assignment Assignment	Seminar Seminar
VI	Core IX	UCHM601	Inorganic chemistry II	Problem Solving	Seminar
	Core X	UCHM602	Organic Chemistry II	Problem Solving	Seminar
	Core XI	UCHM603	Physical chemistry II	Problem Solving	Seminar
	Core XII	UCHM606	Analytical Chemistry II	Assignment	Seminar
	Major optional	UCHO601 UCHO602	Pharmaceutical Chemistry Polymer chemistry	Assignment	Seminar

PG

Semester	Category	Course Code	Course Title	Comp III	Comp IV
I	Core I	PCHM104	Organic Chemistry I	Mechanism Writing	Seminar
	Core II	PCHM105	Inorganic Chemistry I	Problem Solving	Seminar
	Core III	PCHM106	Physical Chemistry I	Problem Solving	Seminar
	NME	PCHE101 PCHE102	Consumer Chemistry Industrial Chemistry	Assignment Assignment	Seminar Seminar
II	Core IV	PCHM204	Organic chemistry II	Mechanism Writing	Seminar
	Core V	PCHM205	Inorganic Chemistry II	Problem Solving	Seminar
	Core VI	PCHM206	Physical Chemistry II	Problem Solving	Seminar
	NME	PCHE201 PCHE202	Environmental Science Applied Chemistry	Assignment Assignment	Seminar Seminar
III	Core VII	PCHM301	Organic Chemistry III	Problem Solving	Seminar
	Core VIII	PCHM302	Inorganic Chemistry III	Problem Solving	Seminar
	Core IX	PCHM303	Physical Chemistry III	Problem Solving	Seminar
	Core X	PCHM304	Research Methodology	Assignment	Seminar
IV	Core XI	PCHM401	Organic chemistry IV	Mechanism Writing	Seminar
	Core XII	PCHM402	Inorganic Chemistry IV	Structural Interpretation	Seminar
	Core XIII	PCHM403	Physical Chemistry IV	Problem Solving	Seminar

DEPARTMENT OF MATHEMATICS

PREAMBLE

- Syllabi for newly introduced Major Courses at PG & M.Phil. levels and Mini-Project at UG level
- Modes of Evaluation for Component III & IV of CIA are presented here.

UMAP601 MINI PROJECT –CONTRIBUTIONS OF MATHEMATICIAN

(With effect from 2012-15 batch onwards)

Semester : VI

Credit : 1

Category : Major

Total hours: 30

Class & Major: III B.Sc. Mathematics

Objectives:

To enable the Students

- acquire in-depth knowledge about Mathematicians & their contributions
- understand the evolution of Mathematical concepts

Guide Lines

- This Course is offered as an individual project to the gifted Students at UG level under extra credit earning provision.
- The student can choose any one of the Mathematician listed below:

List of Mathematicians

1. Isaac Newton
2. Archimedes
3. Carl F. Gauss
4. Leonhard Euler
5. Bernhard Riemann
6. Joseph-Louis Lagrange
7. David Hilbert
8. Euclid of Alexandria
9. Gottfried W. Leibniz
10. Karl W. T. Weierstrass
11. René Descartes
12. Augustin Cauchy
13. Carl G. J. Jacobi
14. George Cantor
15. Srinivasa Ramanujan
16. Arthur Cayley
17. Pythagoras of Samos
18. Leonardo 'Fibonacci'
19. William R. Hamilton
20. Charles Hermite
21. Aryabhata
22. Pierre-Simon Laplace
23. Jean le Rond d'Alembert
24. Jacob Bernoulli
25. Hermann G. Grassmann
26. Joseph Liouville

- | | |
|---------------------------|-----------------------------|
| 27. Joseph Fourier | 39. Godfrey Harold Hardy |
| 28. Stefan Banach | 40. John Ederson Littlewood |
| 29. Albert Einstein | 41. John Von Neumann |
| 30. Daniel Bernoulli | 42. Leonardo Pisano Blgollo |
| 31. Adrie-Marie Legendre | 43. Andrey N. Kolmogorov |
| 32. Johannes Kepler | 44. Richard Dedekind |
| 33. Jacob Bernoulli | 45. Michael F. Atiyah |
| 34. Hermann Minkowski | 46. Felix Christian Klein |
| 35. Bháscara Áchárya | 47. Brook Taylor |
| 36. Niels Abel | 48. Siemann Denis Poisson |
| 37. Jules Henri Poincare | 49. George Pólya |
| 38. Andrei Henri Poincare | 50. Alfred Clebsch |

Project report limited to 20 – 25 pages includes

- Life History of an eminent Mathematician whom you admire
- His contribution in the field of Mathematics
- The challenges faced in the Research
- Analysis of the Research
- Outcomes & applications of the Research findings

Evaluation

S.No	Criteria	Evaluation	
		CIA (Valuation by Faculty Guide) (60)	ESE (Average of Internal &External Marks) (40)
1	Life History of Mathematician	10	-
2	Contribution in the field of Mathematics	10	-
3	Challenges faced in the Research	10	-
4	Analysis	10	-
5	Outcomes & applications	20	-
6	Written report	-	20
7	Oral presentation	-	10
8	Viva voce	-	10
Total		100	

PMAM407 OPTIMIZATION TECHNIQUES

(Replaces the Course PMAM404 Difference Equations found in Academic Council Booklet II with effect from 2015-17 Batch onwards)

Semester	: IV	Credit	: 4
Category	: Major	Hours/Week	: 5
Class & Major:	II M.Sc Maths	Total Hours	: 65

Objectives:

To enable the Students

- understand the various techniques of research
- solve Real life Problems in Business and Management.

UNIT- I GOAL PROGRAMMING

12 Hrs

A Goal Programming Formulation-Goal Programming Algorithm- The Weighting Method, The Preemptive Method.

UNIT- II NON LINERA PROGRAMMING-CLASSICAL OPTIMIZATION THEORY- UNCONSTRAINED EXTREMAL PROBLEMS

12 Hrs

Necessary and Sufficient Conditions- The Newton-Raphson Method-Problems.

UNIT- III NON LINERA PROGRAMMING-CLASSICAL OPTIMIZATION THEORY- CONSTRAINED EXTREMAL PROBLEMS

13 Hrs

Equality Constraints - Inequality Constraints - The Kuhn - tucker Condition - Problems.

UNIT- IV GEOMETRIC PROGRAMMING

14 Hrs

Introduction-Geometric –Arithmetic Mean inequality - Unconstrained Geometric programming - Constrained Geometric programming problem.

UNIT- V DETERMINISTIC DYNAMIC PROGRAMMING

14 Hrs

Recursive Nature of Computations in DP - Forward and Backward Recursion - Selected DP Applications - Knapsack/Flyway Kit/ Cargo - Loading Model, Work force Size Model.

Text Books

- Hamdy A.TAHA, “*Operations Research An Introduction*” (VII Edition), Prentice Hall of India, Pvt Ltd, New Delhi, 2003.
- Kanti Swaroop,Gupta P.K.and Manmohan , “*An Introduction to Management Science Operations Research*”, Sultan Chand & Sons, Delhi, 15th edition, 2010.

Reference Books

- Sharma, J.K. *Operation Research*. Macmillan India Ltd, 2013.
- Sharma, S.D. *Operation Research*. Kedar Nath Ram Nath & Co, 2013.
- Kapoor, V.K. *Introduction to Operation Research*. Sulthan Chand & Sons, 2013.

MMA103 ALGEBRA AND ANALYSIS

(Replaces the Course MMA101 Algebra and Analysis found in Academic Council Booklet I with effect from 2015-16 Batch onwards)

Objectives:

To enable the Students

- understand the concept of algebra in detail.
- to Investigate interpret and communicate solutions to mathematical and Real world problems.
- provide critical thinking and Knowledge for research.

Semester : I

Category : Major

Class & Major: M.Phil Maths

Credit : 5

Hours/Week : 6

Total Hours : 72

UNIT I THE RADIAL

15 Hrs

The Radial of an Algebra- Nakayama's lemma-Jacobsan Radial – The Radial of an Artinian Algebra – Artinian Algebras are Noetherian- Nilpotent Algebras – The Radial of a Group Algebra- Ideals in Artinian Algebras.

UNIT II INDECOMPOSABLE MODULES

14 Hrs

Direct Decompositions- Local Algebras- Fitting's Lemma- The Krull- Schmidt theorem- Representations of Algebras- Indecomposable and Irreducible Representations.

UNIT III ABSTRACT INTEGRATION

14 Hrs

The Concept of Measurability- simple functions- Elementary Properties of measures- Integration of Positive functions- Integration of Complex functions- The Role played by sets of measure zero.

UNIT IV POSITIVE BOREL MEASURES

14 Hrs

Vector Spaces- Topological preliminaries- The Riesz Representation theorem- Regularity properties of Borel measures- Lebesgue measure- Continuity properties of Measurable functions.

UNIT V FOURIER TRANSFORMS

15 Hrs

The Inversion Theorem – The Planchaerel Theorem- The Banach algebra L^1 .

Text Books:

- Pierce, R.S. *Treatment as in Associative Algebra*. Prentice Hall of India Private Limited : New Delhi, 2003.
- Walter Rudi,, *real & complex Analysis*. 3rd Ed. Prentice Hall of India Private Limited : New Delhi, 1997.

III & IV Evaluation Components of CIA

UG

Semester	Category	Course Code	Course Title	Component III	Component IV
I	Core I	UMAM101	Algebra and Trigonometry	Assignment	Poster Presentation (Real life problems - Trigonometrically ratios)
	Core II	UMAM102	Calculus	Assignment	Formula Analysis - Report
	Allied	UMAA109	Mathematical Statistics-I	Assignment	DPA
		UMAA110	Mathematical Methods-I	Assignment	Written Quiz
		UMAA104	Algebra, Differential Calculus & Trigonometry	Assignment	Poster Presentation
		UMAA105	Statistics I	Assignment	DPA
UMAA107	Statistical Methods	Assignment	DPA		
II	Core III	UMAM203	Vector Analysis, Linear Transform and Fourier series	Assignment	Poster Presentation (Origin & its Applications)
	Core IV	UMAM202	Analytical Geometry of 3D	Assignment	Models on geometrical shapes
	Allied	UMAA207	Mathematical Statistics-II	Assignment	DPA
		UMAA216	Mathematical Methods-II	Assignment	Written Quiz
		UMAA210	Mathematics for Computer science	Assignment	Problem Solving
		UMAA212/ UMAA202	Fundamentals of Mathematics for Physics	Assignment	Problem Solving
		UMAA214	Business Mathematics	Assignment	Problem Solving
		UMAA205	Statistics II	Assignment	DPA
UMAA211	Business Statistics	Assignment	DPA		
Non-Major Elective	UMAE204	Basic Mathematics	Assignment	Written Quiz	
III	Core V	UMAM302	Differential Equation	Assignment	Problem Solving
	Core VI	UMAM303	Statics	Assignment	Poster Presentation (Real life applications)
	Allied	UMAA306/ UMAA102	Algebra, Differential Calculus & Trigonometry	Assignment	Written Quiz

IV	Core VII	UMAM402	Graph Theory	Assignment	Models on Applications in Recent Trend
	Core VIII	UMAM403	Dynamics	Assignment	Poster Presentation – Real life applications
	Allied	UMAA404	Resource Management Techniques	Assignment	Poster Presentation
		UMAA406/ UMAA202	Integral Calculus, Laplace Transform and Ordinary Differential Equations	Assignment	Problem Solving
		UMAA403	Business Statistics	Assignment	DPA
		UMAA407	Biostatistics	Assignment	DPA
	Non-Major Elective	UMAE402	Operations Research for Managers	Assignment	Poster Presentation
V	Core IX	UMAM501	Modern Algebra	Seminar	Poster Presentation
	Core X	UMAM505	Sequence and series	Seminar	Investigation of sequence & series-Report
	Core XI	UMAM506	Number Theory	Seminar	Number analysis-Report
	Allied	UMAA505	Quantitative Techniques for Business	Assignment	Problem solving
	Allied	UMAA512	Discrete Mathematical Structures	Assignment	Poster Presentation
	Non-Major Elective	UMAE504	Basics for TANCET Preparation	Assignment	Poster Presentation
VI	Core XII	UMAM602	Complex Analysis	Seminar	Problem solving
	Core XIII	UMAM604	Linear Algebra	Seminar	Poster Presentation
	Core XIV	UMA0606	Discrete Mathematics	Seminar	Problem solving
	Core XV	UMAM607	Real Analysis	Seminar	Poster Presentation
	Core XVI	UMAM608	Operation Research	Seminar	Problem solving
	Major Optional	UMA0605	Numerical Methods with JAVA	Assignment	Problem solving
	Major Optional	UMAO604	Beginners for MATLAB	Assignment	Poster Presentation

PG

Semester	Category	Course Code	Course Title	Component III	Component IV
I	Core I	PMAM101	Modern Algebra	Poster Presentation	Seminar
	Core II	PMAM102	Real Analysis	Term Paper	Seminar
	Core III	PMAM103	Ordinary Differential Equations	Problem Solving	Seminar
	Core IV	PMAM 104	Graph Theory	Model Building	Seminar
	CoreIII	PCAM103	Mathematical Foundation	Problem Solving	Seminar
II	Core V	PMAM201	Field Theory	Poster Presentation	Seminar
	Core VI	PMAM202	Measure and Integration	Problem Solving	Seminar
	Core VII	PMAM203	Partial Differential Equation	Problem Solving	Seminar
	Core VIII	PMAM204	Classical Mechanics	Model Building	Seminar
	Core IX	PMAM205	Operations Research	Problem Solving	Seminar
	Core VIII	PCAM206	Applied Statistics	Poster Presentation	Seminar
III	Core X	PMAM305	Complex Analysis	Problem Solving	Seminar
	Core XI	PMAM306	Discrete Mathematics	Application in recent trends(Poster Presentation)	Seminar
	Core XII	PMAM307	Topology	Term Paper	Seminar
	Core XIII	PMAM308	Number Theory and Cryptography	Poster Presentation	Seminar
IV	Core XIV	PMAM405	Functional Analysis	Term Paper	Seminar
	Core XV	PMAM406	Mathematical Statistics	Applications in recent trends(Poster Presentation)	Seminar
	Core XVI	PMAM403	Differential Geometry	Poster Presentation	Seminar
	Core XVII	PMAM404	Difference Equation	Problem Solving	Seminar
	Core	PCOM402	Operations Research	Problem Solving	Seminar
V	Core XXI	PCAM505	Operational Research	Problem Solving	Seminar

M.Phil

Semester	Category	Course Code	Course Title	Component III	Component IV
I	Core I	MMA101	Algebra and analysis	Seminar	Term Paper
	Core II	MMA102	Topology and Differential Geometry	Seminar	Term Paper
II	Core III	MMA201	Self study Paper	Seminar	Term Paper

DEPARTMENT OF COMPUTER SCIENCE

PREAMBLE

- syllabus for newly introduced course under the category – Major Optional offered in the UG programme and
- provision for Experiential learning and Modes of evaluation for components III & IV of CIA of courses are presented.

UCSO606/UCAO605 XML AND WEB SERVICES (With effect from 2014-15 batch onwards)

Semester	: VI	Credit	: 4
Category	: Major Optional	Hours/week	: 3T + 2P
Class & Major	: III B.Sc CS/III BCA	Total Hours	: 39T +26P

Objectives:

To enable the students

- acquire knowledge about XML Scripting Techniques.
- design XML Application
- construct Web Service for Internet Server

UNIT - I XML TECHNOLOGY

8 Hrs

XML – Benefits – Advantages of XML over HTML – EDI – Databases – XML based standards – Structuring with schemas – DTD – XML schemas – XML processing – DOM – SAX – Presentation technologies – XSL – XFORMS – XHTML – Transformation – XSLT – XLINK – XPATH – Xquery

UNIT - II ARCHITECTING WEB SERVICES

8 Hrs

Business motivations for web services – B2B – B2C – Technical motivations – Limitations of CORBA and DCOM – Service Oriented Architecture (SOA) – Architecting web services – Implementation view – Web services technology stack – Logical view – Composition of web services – Deployment view – From application server to peer to peer – Process view – Life in the runtime.

UNIT - III WEB SERVICES BUILDING BLOCKS

8 Hrs

Transport protocols for web services – Messaging with web services – Protocols – SOAP – Describing web services – WSDL – Anatomy of WSDL – Manipulating WSDL – Web service policy – Discovering web services – UDDI – Anatomy of UDDI – Web service inspection – Ad hoc discovery – Securing web services.

UNIT - IV IMPLEMENTING XML IN E-BUSINESS

8 Hrs

B2B – B2C applications – Different types of B2B interaction – Components of E - Business XML systems – EBXML – RosettaNet – Applied XML in vertical industry – Web services for mobile devices.

UNIT - V SEMANTIC WEB AND SECURITY**7 Hrs**

Semantic web – Role of Meta data in web content – Resource description framework – RDF schema – Architecture of semantic web – Content management workflow – XLANG – WSFL – Securing web services.

LAB EXERCISES**26 Hrs**

1. XML document creation.
2. Importing and Exporting XML document in database.
3. XSL Transformation
4. Internal and External DTD creation
5. XML Schema creation
6. Merging and Validating two or more XML documents
7. Parsing XML document using DOM/SAX parser.
8. Web Service creation using JAX-WS
9. Web Service creation using JAX-RS
10. Web Service creation using .NET

Text Books

- Ron Schmelzer and Travis Vandersypen. *XML and Web Services unleashed*. New Delhi : Pearson Education, 2012.
- Keith Ballinger. *NET Web Services Architecture and Implementation*. New Delhi : Pearson Education, 2010.

Reference Books

- David Chappell. *Understanding .NET A Tutorial and Analysis*. New Delhi : Addison Wesley, 2012.
- Kennard Scibner and Mark C. Stiver. *Understanding SOAP*. New Delhi : SAMS Publishing, 2010.

EXPERIENTIAL LEARNING (Mandatory for all students)

Related Paper	Work Experience			Collaborating Agency	Mode of Evaluation
	Nature of Institution	Proposed Duration (No. of days/weeks/Months)	Proposed Period (Sem. Break/May/Any other)		
PCSM207 TCP/IP Networks	Telecommunication Training Institute	3 days	February	BSNL, Chennai	Report Submission

III & IV Evaluation components of CIA**UG**

Semester	Category	Course Code	Course Title	Component III	Component IV
I	Core-I	UCSM103	Computer Fundamentals and C Language	Assignment	Problem Solving
	Allied	UCSA102	Office Automation	Assignment	Problem Solving

II	Core-II	UCSM202	Object oriented Programming and Data Structure using C++	Assignment	Problem Solving
	Allied	UCSA202	Programming in C	Assignment	Problem Solving
III	Core-III	UCSM302	Java Programming	Assignment	Problem Solving
	Allied	UCSA302 / UCSA501	Visual programming	Assignment	Problem Solving
	Allied	UCSA303/ UCSA402	Mathematical Programming in C	Assignment	Problem Solving
	Elective	UCSE302	Programming in C	Assignment	Problem Solving
	Elective	UCSE303	2D Animation	Assignment	Designing
IV	Core-IV	UCSM402	Data Base Management System	Problem solving	Seminar
	Core-V	UCSM403	Microprocessor and its Applications	Assignment	Problem Solving
	Allied	UCSA403	Data Base Management System	Problem solving	Seminar
	Allied	UCSA404/ UCSA601	Office Automation	Assignment	Designing
	Elective	UCSE402	Programming in C++	Assignment	Problem Solving
	Elective	UCSE403	Multimedia and its Application	Assignment	Designing
V	Core-VI	UCSM501	Visual programming	Assignment	Problem Solving
	Core-VII	UCSM505	Computer system architecture	Assignment	Seminar
	Core-VIII	UCSM506	Operating system	Assignment	Seminar
	Allied	UCSA508	Web Designing	Designing	Problem Solving
	Allied	UCSA505	Tamizh kanini	Assignment	seminar
	Allied	UCSA507	Object Oriented Programming using Java	Assignment	Problem Solving
	Elective	UCSE502	Visual programming	Assignment	Problem Solving
	Elective	UCSE503	Web Designing	Designing	Problem Solving
	Allied optional	UCSA502	Relational database management System	Problem solving	Seminar
	Allied optional	UCSA504	Digital logic Fundamentals	Problem solving	Quiz
	Allied optional	UCSA510	Data Mining with Tools	Case studies	Seminar
Core-IX	UCSM605	Web Technology	Designing	Problem Solving	
	Core-X	UCSM606	Computer networks	Assignment	Seminar

VI	Core-XI	UCSM607	Multimedia	Seminar	Designing
	Major Optional	UCSO604	Mobile Technology	Assignment	Seminar
	Major Optional	UCSO605	Data warehousing and data mining	Case studies	Seminar

PG

I	Core I	PCSM104	Advanced Java Programming	Problem Solving	Seminar
	Core II	PCSM105	Advanced Computer Architecture & Parallel Processing	Case Study	Seminar
	Core III	PCSM106	Advanced Relational Database Management System	Problem Solving	Seminar
	NME	PCSE101	Web designing tools	Seminar	Designing
	NME	PCSE102	Object Oriented Programming	Seminar	Problem Solving
II	Core IV	PCSM205	C# and ADO.Net	Problem Solving	Designing
	Core V	PCSM206	Compiler Design	Problem Solving	Seminar
	Core VI	PCSM207	TCP/IP Networks	Case Study	Seminar
	Core VII	PCSM208	Research Methodology	Case Study	Designing
	NME	PCSE203	Advanced Internet Concepts	Case Study	Seminar
	NME	PCSE204	Worksheet Analysis	Seminar	Problem Solving
III	Core VIII	PCSM305	Design and Analysis of Algorithms	Problem Solving	Seminar
	Core IX	PCSM306	ASP.Net	Problem Solving	Designing
	Core X	PCSM307	Distributed Operating System	Case Study	Seminar
	Core XI	PCSM308	Cloud Computing	Case Study	Seminar
IV	Core XII	PCSM402	Data Warehousing And Mining	Case Study	Seminar
IV	Major	PTAM402	fzpdpg; gad;ghl;oay;	Case Study	Seminar

DEPARTMENT OF COMPUTER APPLICATIONS & ISM

PREAMBLE

- syllabus for the newly introduced courses under the categories – Non major elective and major optional offered in the UG programme are presented here.
- provision for Experiential learning and Modes of evaluation for components III & IV of CIA of courses are presented.

UCAE304 FUNDAMENTALS OF DATABASE

(With effect from 2014 – 2017 batch onwards)

Semester : III

Credits : 2

Category : Non-Major Elective

Hours/week: 2T+2P

Class &Major: All II UG except CA & CS

Total Hours: 26T+26P

Objectives:

To enable the students

- Understand the fundamental concepts of Database, Query, forms, and reports
- Acquire knowledge on Oracle, SQL queries and statements.
- Construct database applications

UNIT-I INTRODUCTION

6 Hrs

Introduction to database- Purpose of database system – MS Access:creating databases- creating tables - adding, editing and viewing data – sorting

UNIT-II QUERY

5 Hrs

Query - Introduction - Types of queries - Creating a query - Viewing the dynaset - Running an action query - Refining queries - Changing field properties - Creating cross-tab queries - Creating action queries - Updating queries

UNIT-III FORMS & REPORTS

5 Hrs

Forms: Creating forms with form wizards - Making hierarchical forms work properly - Charts - Opening and using a form - Changing the style – Reports: Kinds of reports - Groups, totals and summary reports - Using wizards to create a report

UNIT-IV ORACLE

5 Hrs

Oracle - Introduction - Overview of SQL - SQL Basics: Data types- Primary Key -Foreign key - Built in functions.

UNIT-V DDL & DML

5 Hrs

Data Definition Language (DDL) Statements: Create, alter, and drop - Data Manipulation Language (DML) Statements: Select, Insert, Update, Delete- Transaction Control Statements: Commit, Rollback

Text Books

- Ullman, D, Jeffrey and Jennifer Widom. *A First course in database systems*. Delhi : Addison Wesley Longman Pvt. Ltd., 2001.
- Groff, James R., Andrew J.Oppel & Peul N.Weinberg. *The complete reference. SQL*, McGraw Hill, 3rd Edition, 2011.

Reference Books

- Elmasri Ramez, Shamkant B.Navathe. *Fundamentals of database systems*. 3rdEd. Delhi : Addison Wesley Longman Pvt. Ltd, 2001.
- Elmasri, Navathe, Somayajulu, Gupta. *Fundamentals of Database Systems*. 4th Ed. Pearson Education, 2008.
- Silberschatz, Korth and Sudarshan. *Database System Concepts*. McGraw Hill, 1997.

LAB EXERCISES

26Hrs

MS –ACCESS

1. Create a database for school and do various manipulations such as inserting, modifying and deleting records.
2. Create a form for student database
3. Create a report for student database
4. Creating Queries for student database

SQL

5. Simple queries using DDL, DML and DCL
6. DML set operations
7. DML Aggregate function
8. Sorting and grouping.
9. Built-in functions of SQL

EXPERIENTIAL LEARNING (Mandatory for all students)

Related Paper	Work Experience			Collaborating Agency	Mode of Evaluation
	Nature of Institution	Proposed Duration (No. of Days/Weeks/Month)	Proposed Period (Sem. Break/May/Any other)		
PCAM309 Visual Programming & Web Hosting	Software Technologies	01 Week	May,2014	iGATE India Pvt Ltd., Chennai	Report Submission
PCAM506 Distributed Technology	Software Technologies	01 Week	May,2014	Cognizant Technology Solutions, Chennai	Report Submission

III & IV Evaluation components of CIA

UG

Semester	Category	Course Code	Course Title	Component III	Component IV
I	Core I	UCAM103	Foundation of Computers	Poster Presentation	Case Study
	Core II	UCAM104	Office Automation and HTML	Problem Solving	Web Page Creation
	Core I	UISM104	Enterprise Resource Planning	Poster Presentation	Design Models
	Core II	UISM105	Office automation and HTML	Problem Solving	Web Page Creation
II	Core III	UCAM101/ UCAM202	Programming in C	Problem Solving	Debugging
	Core III	UISM203	Programming in C	Problem Solving	Debugging
III	Core IV	UCAM301/ UCAM304	Programming in C++	Problem Solving	Debugging
	Core V	UCAM305	E-Commerce and its Applications	Poster Presentation	Working Model
	Core VI	UCAM302/ UCAM306	Fundamentals of Data Structures	Problem Solving	Seminar
	NME	UCAE303	Internet Concepts	Poster Presentation	DPA
	NME	UCAE304	Database Concepts	E-R Diagram	DPA
IV	Core VII	UCAM401	Programming in Java	Problem Solving	Debugging
	Core VIII	UCAM403	Object Oriented Analysis and Design	System Modeling	Seminar
V	Core IX	UCAM501	Visual Programming	Problem Solving	Application Development
	Core X	UCAM503	Database Management System	ER Diagram	Queries
	Core XI	UCAM504	Software Engineering	System Modeling	Software Testing
	NME	UCAE502	Visual Basic	Case Study	DPA
	Allied Optional	UCAA503	Animation Techniques	Case Study	DPA
VI	Core XII	UCAM601	Distributed Technology	Problem Solving	Seminar
	Core XIII	UCAM602	Data Communication Networks	Working Model	Seminar
	Core XV	UCAM605	Operating Systems	Problem Solving	Case Study
	Major Optional	UCAO601/ UCAO603	Mobile Computing	Poster Presentation	Working Model
	Major Optional	UCAO603	Computer Graphics	Problem Solving	Seminar
	Major Optional	UCAO604	Cloud Computing	Working Model	Seminar
	Major Optional	UCSO606/UC AO605	XML & Web Services	Case Study	DPA

PG

Semester	Category	Course Code	Course Title	Component III	Component IV
I	Core III	PCAM106	C Programming	Problem Solving	Debugging
	Core IV	PCAM107	Operating Systems	Problem Solving	Case Study
	NME	PCAE101	Web Designing	Problem Solving	DPA
II	Core V	PCAM302/ PCAM205	Database Management System	ER Diagram	Queries
	Core VII	PCAM201/ PCAM207	Object Oriented Programming using C++	Problem Solving	Debugging
	Core VIII	PCAM208	Data Structures and Algorithms	Problem Solving	Seminar
	NME	PCAE201	RDBMS with SQL	SQL Commands	DPA
III	Core X	PCAM308	Java Programming	Problem Solving	Debugging
	Core XI	PCAM309	Visual Programming and Web Hosting	Problem Solving	Application Development
	Core XII	PCAM310	Computer Networks and Network Security	Working Model	Problem Solving
	NME	PALE301	Preparatory Course for NET/SET	Test	Test
	Core XIV	PCAM407	Cloud Computing	Working Model	Poster Presentation
IV	Core XV	PCAM408	Unified Modeling Techniques	System Modeling	Seminar
	Core XVI	PCAM409	Multimedia and its applications	Pattern Creation	Seminar
V	Core XVII	PCAM506	Distributed Technology	Problem Solving	Seminar
	Core XVIII	PCAM507	Data Mining and Warehousing	Case Study	Seminar
	Core XIX	PCAM508	Wireless Technology	Working Model	Seminar
	Core XXI	PCAM510	Software Engineering	System Modeling	Software Testing

POLICY RECOMMENDATIONS OF IQAC**SUPPLEMENTARY EXAM OF UG – SEM VI & PG – SEM. IV**
(Replaces the resolution found in page 53 of Academic Council Booklet – IV)

III UG / II PG students can appear for supplementary exam for courses offered in Semester V (UG / Semester III (PG) only in April / May Examination (i.e.) Semester VI / Semester IV