FATIMA COLLEGE (AUTONOMOUS)



Re-Accredited with A⁺⁺(NAAC IV Cycle)
Maryland, Madurai- 625 018, Tamil Nadu, India

NAME OF THE DEPARTMENT: ZOOLOGY

NAME OF THE PROGRAMME: B.Sc

PROGRAMME CODE : UAZO

ACADEMIC YEAR : 2022-2023

	FATIMA COLLEGE (Au	onomons), MADURAI-625018
	MINUTES OF THE BOARD	OF STUDIES
4.	NAME OF THE DEPARTMENT: B.SC	COOLOGY
	TO BE IMPLEMENTED FROM: 2022	- 2025 ONWARDS
	VENUE: Department of Zoology CONVENED ON: 15.03.2022	CONVENED AT: 02.00 pm
	DACMASSA DOCACATI	
	MEMBERS PRESENT:	
1.	Dr. A. Tamil Selvi	Head of the Department
		Head of the Department
2.	Dr. Capt. N. Arun Nagendran	University Nominee
	Associate Professor	
¥.	Pa & Research Department of Zoology	15/3/W
	Thiagarajar College	
	Madurai - 625009	
3.	Dr.F. Brisca Renuga	Subject Expert (Zoslog
	Associate Professor	
	Department of Zoology	m3 ov 15/3/2022
	Holy cross college (Autonomous)	O O Could will
	Nagercoil -04	
4.	Dr. R. Uma Maheswari	Subject Expert (Zoslo
	Assistant Professor	the state of the s
	PG Department of Zoology	R. On huly
	Arulmigu Palaniandavar	15 3/1
13	Arts collège for women	
	Palani - 624-615	
- Andrews	Superior Specification	

	A TAMES (Americans) BARTERS	CATTER COL
	Dr. A. Vanniarajan	Industrialist / Scientist
	Scientist Aravind Medical Research	A. Vanne (1)2522
	Foundation Madurai -625 020	The State of the Said Control of the Said Cont
6.	Miss.s. Susaritha	Alumna
	Research Scholar	Alumna 8. Jusantha - 15/03/22
	PG & Research Department of Zoology	to the control of the
CONCENSION DESCRIPTION OF THE PROPERTY OF THE	The American college Madurai - 625020	Sees on mark and special
Se and a second department of the second sec		
T squade modulation dates	Dr. N. Malathi	Dean of Academic Affairs
rucere -		
8.	Dr. Antony Amala Jayaseeli	Staff Member
(A) (A) (A)		Staff Member
9.	Dr. N. Malathi	Staff Member Staff Member Staff Member
9.	Dr. N. Malathi Dr. Sr. Biji cyreac	Staff Member Staff Member Staff Member (absent)
9.	Dr. N. Malathi	Staff Member Staff Member (absent) Staff Member V-8ht. 3-22
Simulation of the second of th	Dr. N. Malathi Dr. Sr. Biji cyreac	Staff Member Staff Member (absent) Staff Member Ville 3.22 Staff Member
CONTRACTOR OF THE PROPERTY OF	Dr. N. Malathi Dr. Sr. Biji cyriac Dr. V. Bharathy Dr. N. Nagarani	Staff Member Staff Member (absent) Staff Member V. M. 3.22 Staff Member M. Nog 15/3/2022 Staff Member
9. 10. 11. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13	Dr. N. Malathi Dr. Sr. Biji cyreac Dr. V. Bharathy Dr. N. Nagarani Dr. S. Barathy	Staff Member Staff Member (absent) Staff Member V. M. 3.22 Staff Member M. Nop 15/3/2022 Staff Member Staff Member Staff Member Staff Member
10- 11:	Dr. N. Malathi Dr. Sr. Biji cyriac Dr. V. Bharathy Dr. N. Nagarani	Staff Member Staff Member (absent) Staff Member V. R. 3.22 Staff Member M. Rog 15/3/2022 Staff Member Staff Member Staff Member Staff Member Staff Member Staff Member
10.	Dr. N. Malathi Dr. Sr. Biji cyreac Dr. V. Bharathy Dr. N. Nagarani Dr. S. Barathy	Staff Member Staff Member (absent) Staff Member V. My. 3.22 Staff Member M. Nog 15/3/2022 Staff Member Staff Member Staff Member Staff Member Staff Member

1 100	M	INUTES OF	F THE BOI	ARI) of	:_S	Tuj	DIE:	s:				
	. Ac	CTION TAK	EN REPORT	T_F	OR	202	-1.=	202	2	B .	Sc	Zoology	
osine Go	s. No	COMMON	Suggestl Previous	on! Be	DFF	GRE1	D			-		FOR THE ACADEMIC	
		may be g	rejects/Field liven to UG nt local B	98	tude	ents	12.	· · · · · · · · · · · · · · · · · · ·					
	2.												
	and graduate environ	The DOE	3	Service of Contract Page 19 and 19 an	_				each course				
G A	en lectrate de la cristia e S	each f	- S.C.		100				uniformity.				
		141.92.41				Let					5		
	S. NO	OLD COURSE CODE	NEW COURSE CODE	OL	LD C	OURS	SE	NEH	V COU	IRSE		NEED FOR CHANGE	
		Z5cc II	1925013	200				Fun		nenta	als of	As per the guideliness Academic Deans to	
			DO TO THE PARTY OF									avoid Repetition of course Title	
	2.	Z6CC14	19 Z 6 CC 17	Z6CC17 Immundogy				Basic	L Im	mut	islogy	of Academic Deans to avoid repetition of course title.	
	3.	Zbcc15	19266618	Bìo	tech	nolog	1 7	Princ Bio	ciple. tech	s of note	-	As per the guideline	
1										Co-year Ethiopia		course title	
			Const. Sect. 5-2	IEM				NTROI E TO			MANAGEMENT AND	And the second of the second o	
	S. No	COURSE CODE	COURSE TITLE		L	R	N		SCE	1	-		
	1.	1925ME2	Animal Behavion	اد	L	R	7	G			SD	To introduce the classical aspects of Zoology	
	2.	1925CC15	The state of the s		1		7	G	ЕмР		SD	Implementation of Semesterwise	
			Analysis		2	Bari,			1001			Practical	

ACTION OF

			i e teamini				1	2.7	, M	31, 196, 20 32, 113	+ Tom planeable
	3.		Lab-Molecular			7	G	EMP		SD	Implementation of Semester wise
West and Control Michigan Co.	a constroine	a section to one decision are security as section as	Biology			-		1			Practical
No. of the contract of the con	4.	1926cc19	The factor of the	125	***	N	G	EMP	1 1 1 1	SD	Implementation of semesterwise Practical
	a proportion to	while or file life	Immundogy		LIT	10	100 per	r	63 01	1 500	Practical
The second secon	5.	1926cc20		5.4	3	N	4	EMP	-	1	Implementation of Semesterwise
1 21	į.	3 130 al	Biotechnology		1 -			377	135	24 11	Practical
	6.	1	00	-1:	SU		Q.	4 7 5		\$) <0 x 10 t	Offered to the
ESCALUES AND CONTRACTOR OF THE			Protein	L	R	N	GI	EMP	ENT	SD	Advanced
gettern and an artist proper or	e de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición dela composición de la composición dela com		Culture			1 1 1 1 1 1 1 1 1		53.414		- 7	Learners
+					- The same of the	A STATE OF THE STA	errore de la constante de la c	THE RESIDENCE OF THE PARTY OF T	CHOCK COMMON TO A	The second second	Appendit of Unit organizated Hillinden Withhornson Control 2

The State of the S			- Annual Control of the Control of t				-		AND AND AND SHAPE		and Characters his	
			REVISED COURS			L D.C		451	7 =	To	-04	3
	3.	COURSE	UNIT NO 4 REVISED		NEED FOR						OPE FOR	
-	NO	COVE	CONTENT	Sion	REVISION	L	R	N	G	TZP TZP	学	ا ع A
	1.	1925ME1	unit-IV-Correlations	ā	As per the		*	1	G	E	1	9
24	88	Biostahistics	Regression - Goodness of fitness (problem) and in	2%	recommendation of	Land			Ç	MP	_	D
44	11.	5,03,4,13,702	Unit W- Tostal Vanionce	7	Subject Expert			- Company				ALL SELECTION OF THE PERSON OF
- 4			Student's t test cambe specified		Datasegel scott	TO THE AREA STORY				The person of the		C EUROPE PORTE
-	2	1075023	specifica.		Aspen the	L	R	N	G		E	4
	2.	19 Z5SB3 Ornamental	Canbe included in	27.	reommend ation of Subject		and description	7.6		MP	NT	4
and the	1	Fish Culture	241/ Tabadultanto		Exput	Ribber w providence	CONTRACTOR SERVING	20 de 20			And the second s	ではまるの間で 中心をからぬ
upr C	3.	1925SB4	The popic - National	-	As per the	Mary September 1	-	in the state of th		E	£	S
inas des	- 10	Sericulture	Sericulture Project (NSP) can be included in	51.	recommen dation of	L	R	N	G	M	N.	D
			unit-I, Inhoduction to		Subject	- Company	10.56TE 2000	SHEET THE SHEET CAN	And the second	1	T	STATE STATES
	~/ 2000		Sericulture	Personal Property	Expert	Color Color	Street Street	15 to 10 to	au San ann an			S. 11.00 * 0.00 C. 11.00 C. 11
	4.	1926ME6	The topoic Lac insect-	4	As per Ke	935 A 15 Char		Mark acceptance	administration of the state of			5
		Entomology	culture 4 harvesting can be included in	5%	dahim of	L.F	2 /	N	4	-		D
			unit-III Beneficial		Subject	A signature	Section sale		-			TE AND THE PERSON NAMED IN COLUMN TO PERSON
			insects	-1	Expert	200.00		-	***			O Carried Office of the Carried Office of th
	5.	1926 0020	one example can be		As per the	Principle Constitution	White Park Is No.		eth device Setting	£		C
Š.		Lab-	specified for Holometabolus (Butlerfly)	5%	dation of	- F	N	1.0		M		D
		Biotechnology	Hemi metabolous		subject	No. of Control of Control	Contraction of	and the same of th	Contraction and	P		
content			(cockroach) insects	I	xbert	Die Phasita	Start San Start St	P.C. (* Photo)	Sale of	-		-

			for 1	molecular visualing	exam	ple 2		elaking adril procession to					ene glabiger (Conse) grund danadalisma et enem (19 A)	nggh, i shi
	2 To 2	1926SB6 Dairy	The ind	hopic - Bignificance	of	27.	Aspen			R,	N		EE	J
	73	Farming	Can	igenous breeds of c be included in introduction)	Onit-	ı	dation Subje Expen	ut	e 1					
2.	U	pdation of	open	Educational R	esow	rces			712		booteansely			Mada
	S	NO COURSE C	ODE	COURSE TITLE	Di	ETALL	s of	UP	P	AT:	Lor	4		ne ope
1	1	-	-	- A - 1 - 174		A		1	1257	4				
				Allega Alexandra Sa		f. in . in		and the second	or workplaners	with some Pall			-	-
٦.	R			ses	9									
					nettente-columnation co	The state of the s	ED FOR	RE	LE	VA	NCE	ع	cop	E
	S. Ho	COURS E TITLE	Ur.	CONTENT	R ₄	on RE	EVISION	L	R	N	G	uΣρ.	K E X	
				e Following hopics a		As	per the	12.1		1				
				luded - UNIT-II		4	idelines	1 1	-	N	G	EM	-	
			£	teria-Autotrophic	4	1	Academic	1 1				P	al Arthenistics (Inc.	8
			8	enotrophic nutritio	713. 8	1	ouns 4	Ą			1	S designation of	The second secon	
	1		4	cobic canaerobic	6		om men	A CAN'T LEAD THE PAGE AND	7,	7		de Sabendada	SP - SATE OF SP - SP	
		Maria Sa	1	piration, Beneficial	8	1.	ion of	Politicas (Paris)				of designation and	Constitution and the D	
				mful role of bacteria	É	ì	rse	Activities and					CAS SEGMENTS LAND	
				I-II Vinuses - Lyh	70	1.	chers	*Trutholispeace		1			S. September 1	
	vandino line zu		£	ysogenic cycle,	scients and producted			PRODECTATION: PL. III	v St. An atticophism samp				A T. CALCULATION OF THE PARTY O	
	And a second sec			namission of viruses	IN			The Participation of the Control of	or or the manage suggests		8		or the latter of	
	Secretaria de Cara			nts, animals 4 man	3	3	1	SALVERBOACS SON	Dru-Crastille	C Designation of the last of t			a Ballings pr	
	9.	1924882		Following topics		AIF	er the	of all obstacl to the	4 Thurselft was	CAT-Strattering			C. UPS, PARSON OR N	
		Mushroom	E	included in Unit-	TI.	1	lelines	Expression L	2	N	G	EM	EN	
	2	Cultivation		Utivation Technique	Si .	10	ademic	Perce Chilanelle in Se	· Allerton	The specification and	1	P	T	
	To the second			post-materials for	g		ns 4	Contraction of the	A simple research to a	and an experience of the same	A PARTHUM PART			Salara and
	A Marin Series			post preparation-		reso	mmen	STREET, MA	A STATE OF THE PARTY OF THE PAR	Putablisher o par	Consideration of	The Marie of the Control	W.	Charles True for
tern A				hods of composhing	2		n of	The state of the s	C. Callering Co.	N. Tabel Free Section	The Bull-Parish street	- Well-standarding		The second
	A STANCTION STAN			macteristics of		Teach	3	Part of the second	A JOS	de la constant		- Approximately		Calculated a

	and a survey and a survey and a survey of the survey of th	compost-spawning-methods	State of the American			†		-
at and the state of	and the second s	Types, Storage - Spawn				-		
		running	ter en		1	+		The state of the s
3	19Z5CC15	Sakaguchi test 4 separatim of	As per the		0 1	14	E M-	2
	Lab-	amino acids by circular	of Academi				P	F
	Biochemical	paper chromatography are 10	. Deans	Name of the last		1		- Total
	Analysis	included under experiments.	recommen dation of	1 2	1			Contraction of the Contraction o
		Then Layer chromatography	Course					Witness Street
		is included as spotter.	Teachers		1		Caller Walter	And the last
4	. 19 Z5CC16	Isolation of UV mutations					Action (Billians	The Control of the Co
+	Lab-	neing_colony plate_Replica	As per the				_	Company Age vo.
	Molecular	plating, Setting up of 10	10	€ 8	N	61	M-	T D
1 .90	Biology	Southern blotting, chemical	of Academic			and	P	-
-		mutagenesis & Genotoxicity	Deams 4			deligate or of the		The state of the s
		analysis are included	Recommendation of		The state of the s	Employed Street		Carlo Giano
		under experiments.	course		SALT OF SALES			A Party of the Par
	And Profession - Mark 1	Agarde gel electrophoresis	Teachers		MCNu Shephody			7.5
		& SDS-PAGE are included		Ambien Countries	PANT IN US ASSESSED		The state of the s	The state of
-	and the second of the	under spotters	-	and as \$5.00 1885	TO THE PARTY OF TH		man (i) the sale of	and
5.	1925ME2	The Following topics are	As per the	- Parity	OCCUPANT NO	A STATE OF THE STATE OF T	-	and the same
1	Animal	included - Unit-I-Introduction	guidelines		N	4		. S
	Behavioner	to Animal Behaviour-	of Academic	and white	Service of the servic	Part of	off-ref. It is bloom	
		Hormonal regulation of 10%.	Decens 4		Description of the	Die Art	West Action	- Andrews
	A 3 /	behaviour, Ethogram	recommen		DOS-TICHED	of salt of 20 land	And the second second	Strate Species Strategy
		Unit-11 Social & Reproductive	dation of	-	A STATE OF THE STA	A CONTRACTOR	A 20	-
		Behaviour, Reproductive	Course			1	Salating and State of	-
		behaviour - Strategies a	Teachers				200	
		mating systems, Making			- Andrews	1 100	The state of the s	- Park
	- 3	behaviour of Penguins				Talliana S		
6.	19260019	- · · · · · · · · · · · · · · · · · · ·	As per Ke		de Significant de	and the second	_	The state of the s
	Lab-	Flow cytometry are included 10%. under Immunology Spotters.	anideline	R	N	G	M -	5
	Immundegy	under Immunology Spotters.	of Academic			7	P	-

	Company of the property of the second of the	Amniocenteris, Pregnancy Deans 4
V 200 W		diagnostic kit, Haemocytometer, grecommen
2 - 1 - 545 - 4		Centifuge and Semi dation of
- 100.00		Automated analyzer are course
	austin placetim recedental retiremental according to the con-	included under spotters of Teachers
The second secon		Clinical Laboratory Techniques
7.	1926CC20	Taplation of genomic DNA As per the
A COMMENTED	Lab-	from goat liver/bacteria, 101 guidelines LRNGM-
0.000	Biotechnology	
3	Diolection	
	er or unglitted in simbage on ribbios delatar minimisse au any establich in a semi-	
and the same of th		dahimat
		blotting 4 UV I romsimum nator course
		are included under spotters. Teachers
8.	19 Z6ME4	
	Clinical	included - Unit II - Analysis of As per the
-	Laboratory	
-	Techniques	Bence Jones Protein test 4 of Academic P
		Nitroprusside Test; Unit III- Deans 4
	-2-4 O	Hematology, Enythrocyte recommen
		Sedimentation Rate; Unit-I course
121		- Semen analysis, Conjopreser- Teachers
17		vation, Chorion villus sampling,
	r	Foetoscopy

.			NEW C	LOUP	SE	2	ent	RODO	CEI	>	V
300	S.	C	COURSE TITLE	REI	EU	ANC	E	Sco	PE I	FOR	NEED FOR
Miranja ar	No	CODE	COURSU 1212-	L	R	N	G	Emp	ENT	SD	INTRODUCTION
	1.	22Z6SB6	Poultry Farming	L	R	7	G	EMP	451	S D	To enhance the entrepreneurial aspects of the
	2.	21Z4SLN1	Public Health & Hygiene	L	R	7	G	WZQ	_	93 D	programme offered to the advanced
			00	-	At No prepara	Ballacona, ja. S.					Learners

CiNIO	course CODE	COURSE	SKILLS &	HARPENED	COURSE OUTCOME
2 110	CODE	NIL NIL			
	0 . 0		1	1	
Appr	oval of P	h.D Convise	work_syu	abus, NI	
. D L .	ice las D	miack: NA	1		
Nuor	103 401 1	project: NA			
S.No	CI	C2 20 MKs	CIA 1	OTAL	EXTERNAL 60 MKS
-		ZO MINS	Tangari ing	-D MKS	-
255		4.15- 14.45			
DETAI	ls of Si	GNED MOU): NIL		
				2 / L. C. S. C.	
	OUTER				
		Suggest1	ONS	COMI	MENDATIONS
1. }					
1. +		training no the Studen			
	lands-on provided to	training no the Studen	nay be	· Change contents	s made in the conv of revised convies
h	lands-on rovided to whenever	training no the Student possible.	nay be	· Change contents are use	s made in the conv of revised convises ful and relevant
2. E	tands-on provided to whenever Biostatistic	training no the Student possible.	nay be	· Change contents are use the cw	s made in the conv of revised convies ful and relevant went need.
2. [tands-on rovided to whenever Biostatistic fiver wi	training no the Student possible. s problems ng real-time	nay be its can be re data.	· Change contents are use the cur 2. Inhode	s made in the convoices of revised convices ful and relevant went need.
2. [tands-on provided to whenever Biostatistic given with collected	training no the student possible. It problems ng real-time from the f	can be re data.	change contents are use the cure. Introdu	s made in the convicts of revised convicts ful and relevant went need. uchion of the new based course on
2. E	lands-on rovided to whenever Biostatistic given with collected Internship	training no the student possible . s problems ng real-time from the formay be in	can be re data.	change contents are use the cure. Introdu	s made in the convocation of revised convocation of the new cased course on
2. E	lands-on rovided to whenever Biostatistic given with collected Internship	training no the student possible. It problems ng real-time from the f	can be re data.	change contents are use the cure. Introdu	s made in the convicts of revised convicts ful and relevant went need. uchion of the new based course on
2. [2. [3.]	tands-on rovided to whenever Biostatistic given uni- collected Enternship for all 1	training no the Student possible. Is problems ng real-time from the formay be in 169 program	can be re data.	· Change contents are use the cw ? Introdu Skill ! Poultry employ	of revised convies ful and relevant went need. uction of the new cased course on Farming improves pubility of Students
2. [3.]	tands-on rovided to whenever Biostatistic given uni- collected Enternship for all 1	training no the Student possible. It problems ng real-time from the formay be in 161 program	nay be its can be ne data field ncluded mes.	Change contents are use the cure skill ke poultry employ	s made in the convoises of revised convises ful and relevant went need. uction of the new pased course on Farming improves pability of students
2. E	tands-on rovided to whenever Biostatistic given uni- collected Internship or all 1	training no the Student possible. Is problems ng real-time from the formay be in 169 program	nay be nots can be ne data field ncluded mes.	Change contents are use the cure skill k Poultry employ	of revised convies ful and relevant went need. uction of the new cased course on Farming improves pubility of students

Head of the Department	Signature
Dr. A. Tamil Selvi	Deen 15/03/2022
. University Nominee	
Dr. Capt. N. Anun Nagendran	An 15/3/22
s. Subject Expert	· managara Canada and and and and and and and and an
5. Subject Expert Dr. F. Brisca Renuga	Bor 15/3/2022
Subject Expert	
Dr. R. Uma Maheswari	R. On Nuty 15/3/22
5. Dr.A. Vanniarajan (Scientist)	A Nannor (15/03/2022
. Miss.s. Susaritha (Alumna)	J. Jusasitha 15/03/22
. Dr. N. Malathi (Dean of Acade)	1
Dr. Antony Amala Jayaseeli	String Anala Tayorala 15/05/
Dr. N. Malathi	Abstitly 15/3/22
Dr. Sr. Biji cyriac	(absent)
	N-861/2/3122
1. Dr. V. Bharathy	
1. Dr. V. Bharathy	15.16g 15/3/22
Dr. V. Bharathy Dr. N. Nagarani Dr. S. Barathy	16.169 15/3/22
Dr. V. Bharathy Dr. N. Nagarani Dr. S. Barathy	16.169 15/3/22 802e. Sey 15/3/22
Dr. V. Bharathy Dr. N. Nagarani Dr. S. Barathy Mrs. J. Thelma	16.169 15/3/22 802e. Sey 15/3/22
Dr. V. Bharathy Dr. N. Nagarani Dr. S. Barathy	16.169 15/3/22
Dr. V. Bharathy Dr. N. Nagarani Dr. S. Barathy Mrs. J. Thelma	16.169 15/3/22 Soze. Sey 15/3/22 Telul 5/3/22 C. Il ff 15/3/22

VISION OF THE DEPARTMENT

Women Empowerment through Biological Education for the Betterment of Environment and Mankind

MISSION OF THE DEPARTMENT

- To ensure quality education offering skill based program
- To render entrepreneurial training to make students employable
- To create awareness on the conservation of Biodiversity
- To give ultimate insight into the correlation of various branches of biology that has overwhelming applications
- To facilitate Higher education & research (for the advanced learners)

PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

PEO 1	Our graduates will be academic, digital and information literates; creative, inquisitive, innovative and desirous for the "more" in all aspects
PEO 2	They will be efficient individual and team performers, exhibiting progress, flexibility, transparency and accountability in their professional work
PEO 3	The graduates will be effective managers of all sorts of real – life and professional circumstances, making ethical decisions, pursuing excellence within the time framework and demonstrating apt leadership skills
PEO 4	They will engage locally and globally ,evincing social and environmental stewardship demonstrating civic responsibilities and employing right skills at the right moment.

GRADUATE ATTRIBUTES (GA)

Fatima College empowers her women graduates holistically. A Fatimite achieves all-round empowerment by acquiring Social,

Professional and Ethical competencies. A graduate would sustain and nurture the following attributes:

	I. SOCIAL COMPETENCE
GA 1	Deep disciplinary expertise with a wide range of academic and digital literacy
GA 2	Hone creativity, passion for innovation and aspire excellence
GA 3	Enthusiasm towards emancipation and empowerment of humanity
GA 4	Potentials of being independent
GA 5	Intellectual competence and inquisitiveness with problem solving abilities befitting the field of research
GA 6	Effectiveness in different forms of communications to be employed in personal and professional environments through varied platforms
GA 7	Communicative competence with civic, professional and cyber dignity and decorum
GA 8	Integrity respecting the diversity and pluralism in societies, cultures and religions
GA 9	All – inclusive skill - sets to interpret, analyse and solve social and environmental issues in diverse environments
GA 10	Self-awareness that would enable them to recognise their uniqueness through continuous self-assessment in order to face and make changes building their strengths and improving on their weaknesses
GA 11	Finesse to co-operate exhibiting team-spirit while working in groups to achieve goals
GA 12	Dexterity in self-management to control their selves in attaining the kind of life that they dream for

GA 13	Resilience to rise up instantly from their intimidating setbacks
GA 14	Virtuosity to use their personal and intellectual autonomy in being life-long learners
GA 15	Digital learning and research attributes
GA 16	Cyber security competence reflecting compassion, care and concern towards the marginalised
GA 17	Rectitude to use digital technology reflecting civic and social responsibilities in local, national and global scenario
	II. PROFESSIONAL COMPETENCE
GA 18	Optimism, flexibility and diligence that would make them professionally competent
GA 19	Prowess to be successful entrepreneursand employees of trans-national societies
GA 20	Excellence in Local and Global Job Markets
GA 21	Effectiveness in Time Management
GA 22	Efficiency in taking up Initiatives
GA 23	Eagerness to deliver excellent service
GA 24	Managerial Skills to Identify, Commend and tap Potentials
	III. ETHICAL COMPETENCE
GA 25	Integrity and disciplinein bringing stability leading a systematic life promoting good human behaviour to build better society
GA 26	Honesty in words and deeds
GA 27	Transparency revealing one's own character as well as self-esteem to lead a genuine and authentic life

GA 28	Social and Environmental Stewardship
GA 29	Readiness to make ethical decisions consistently from the galore of conflicting choices paying heed to their conscience
GA 30	Right life skills at the right moment

PROGRAMME OUTCOMES (PO)

On completion of B.Sc. ZOOLOGYprogramme, the graduates would be able to

PO 1	Apply acquired scientific knowledge to solve complex issues.
PO 2	Attain Analytical skills to solve complex cultural, societal and environmental issues.
РО 3	Employ latest and updated tools and technologies to analyse complex issue.
PO 4	Demonstrated Professional Ethics that foster community, Nation and Environment Building Initiatives.
PO 5	Apply the knowledge and skill to take up higher education, entrepreneurship and employment in government and private sectors.

PROGRAMME SPECIFIC OUTCOMES (PSO)

On completion of B.Sc.ZOOLOGY programme, the graduates would be able to

	Gain comprehensive knowledge in different branches						
	of Zoology–Invertebrata, Chordata, Cell biology,						
PSO 1	Physiology, Environmental Biology, Biochemistry,						
	Microbiology, Immunology, Embryology, Entomology,						

Biostatistics, Bioinformatics and Evolution. Acquire technical skills in performing experiments the field of Microbiology, Cell Biology, Biochemist Plant Physiology, Human Physiology, Molecu Biology, Environmental Biology, Development Biology, Biostatistics, Immunology, Evolution	ry, lar						
the field of Microbiology, Cell Biology, Biochemist Plant Physiology, Human Physiology, Molecu Biology, Environmental Biology, Development Biology, Biostatistics, Immunology, Evolution	ry, lar						
Plant Physiology, Human Physiology, Molecu Biology, Environmental Biology, Developmental Biology, Biostatistics, Immunology, Evolution	lar						
Plant Physiology, Human Physiology, Molecu Biology, Environmental Biology, Developmental Biology, Biostatistics, Immunology, Evolution	lar						
Biology, Biostatistics, Immunology, Evolution	tal						
Biology, Biostatistics, Immunology, Evolution							
	n,						
Genetics, Clinical Laboratory Techniqu	es,						
Biotechnology and Bioinformatics.							
Develop empathy and instil love towards conserved							
PSO 3 plants and animals.							
Express ideas and concept through seminar a							
PSO 4 assignments.							
Solve the environmental problems by applying to	he						
PSO 5 biological principles for minimizing pollutants in a	biological principles for minimizing pollutants in air,						
water and land.							
Develop environmental concern towards value	of						
economically important plants, Biodiversity prom-	ote						
PSO 6 Bioremediation, Bio fertilizer and vegetat	ive						
propagation.							
Adopt Good Laboratory Practice, bioethics a	nd						
PSO 7 biosafety guidelines to ensure minimal use of anim	biosafety guidelines to ensure minimal use of animals						
during experiments.							
Exhibit the holistic growth by developing subj	ect						
proficiency, interpersonal skills, and show verti	cal						
PSO 8 mobility in taking up PG courses and horizon	tal						
mobility by enrolling in B.Ed institution, clini	_						

	laboratory course and seek employment in schools,						
	Medical coding and IT companies.						
	Make them self employed/ Entrepreneur in the field of						
	Sericulture, Vermitechnology, Ornamental fish						
PSO 9	culture, Dairy farming, Apiculture, Mushroom						
	cultivation and Horticulture.						
	Use of computers for Power point presentation, Virtual						
PSO 10	Dissection, analysis of bio- molecules using						
	bioinformatics tools and computing biological data.						
PSO 11	Healthy diet pattern for combat life style disorder.						

FATIMA COLLEGE (AUTONOMOUS), MADURAI-18 DEPARTMENT OF ZOOLOGY

For those who joined in June 2019 onwards

PROGRAMME CODE: UAZO

PART – I – TAMIL / FRENCH / HINDI– 12 CREDITS

PART – I – TAMIL

Offered by The Research Centre of Tamil

S. NO	SEM.	COURSE CODE	COURSE TITLE	HRS	CRE DITS	CIA Mks	ESE Mks	TOT. MKs
1.	I	19TL1C1	General Tamil – Ikaala Ilakiyam	5	3	40	60	100
2.	п	19TL2C2	General Tamil - Bakthi Illakiyam	5	3	40	60	100
3.	Ш	19TL3C3	General Tamil – Kaapiya Illakiyam	5	3	40	60	100
4.	IV	19TL4C4	General Tamil - Sangam Illakiyam	5	3	40	60	100
	Total			20	12			

PART - I -FRENCH

Offered by TheDepartment of French

S. NO	SEM.	COURSE CODE	COURSE TITLE	HRS	CRE DITS	CIA Mks	ESE Mks	TOT. MKs
1.	I	19RL1C 1	PART 1 LANGUAGE FRENCH - LE NIVEAU INTRODUCTIF	5	3	40	60	100
2.	II	19RL2C	PART 1 LANGUAGE	5	3	40	60	100

S. NO	SEM.	COURSE CODE	COURSE TITLE	HRS	CRE DITS	CIA Mks	ESE Mks	TOT. MKs
		2	FRENCH - LE NIVEAU DÉCOUVERTE					
3.	Ш	19RL3C 3	PART 1 LANGUAGE FRENCH - LE NIVEAU INTERMEDIAIRE	5	3	40	60	100
4.	IV	19RL4C 4	PART 1 LANGUAGE FRENCH - LE NIVEAU DE SUIVRE	5	3	40	60	100
	Total			20	12			

PART – I – HINDI

Offered by TheDepartment of Hindi

S. NO	SE M.	COURSEC ODE	COURSE TITLE	HRS	CRE DITS	CIA Mks	ESE Mks	TOT. MKs
1.	I	19DL1C1	PART 1 LANGUAGE HINDI - Vyakaran aur Karyalyeen Hindi	5	3	40	60	100
2.	II	19DL2C2	PART 1 LANGUAGE HINDI –Srijanatmak Hindi aur Gadhya	5	3	40	60	100
3.	Ш	19DL3C3	PART 1 LANGUAGE HINDI –Hindi Sahithya Ka Aadhikaal aur Bhakthikaal	5	3	40	60	100
4.	IV	19DL4C4	PART 1 LANGUAGE	5	3	40	60	100

S. NO	SE M.	COURSEC ODE	COURSE TITLE	HRS	CRE DITS	CIA Mks	ESE Mks	TOT. MKs
			HINDI –Reetikaleen Hindi					
			Sahithya aur Aadhunik					
			Kaal					
	Total			20	12			

PART - II -ENGLISH - 12 CREDITS

Offered by The Research Centre of English

S. NO	SEM.	COURSE CODE	COURSE TITLE	HRS	CRE DITS	CIA Mks	ESE Mks	TO T. MK s
1.		19EL1LB	BASIC COMMUNICATIVE ENGLISH					
2.	I	19EL1LI	INTERMEDIATE COMMUNICATIVE ENGLISH	5	3	40	60	100
3.		191EL1L A	ADVANCED COMMUNICATIVE ENGLISH					
4.		19EL2LB	ENGLISH FOR EFFECTIVE COMMUNICATION (BASIC)					
5.	11	19EL2LI	ENGLISH FOR EMPOWERMENT (INTERMEDIATE)	5	3	40	60	100
6.		19EL2LA	ENGLISH FOR CREATIVE WRITING (ADVANCED)					
7.	III	19EL3LN	ENGLISH FOR THE DIGITAL ERA	5	3	40	60	100

S. NO	SEM.	COURSE CODE	COURSE TITLE	HRS	CRE DITS	CIA Mks	ESE Mks	TO T. MK s
8.	IV	19EL4LN	ENGLISH FOR INTEGRATED DEVELOPMENT	5	3	40	60	100
			Total	20	12			

PART – III -MAJOR, ALLIED & ELECTIVES – 95 CREDITS

MAJOR CORE COURSES INCLUDING PRACTICALS: 60 CREDITS

S.N O	SEM.	COURSEC	COURSE TITLE	HR S	CRE DITS	CIA Mks	ES E Mk s	TOT Mks
1.		19Z1CC1	INVERTEBRATA	5	4	40	60	100
2.	т	19Z1CC2	CELL BIOLOGY	4	3	40	60	100
3.	I	19Z1 <mark>CC3</mark>	LAB - INVERTEBRATA & CELL BIOLOGY	3	2	40	60	100
4.		19Z2CC4	CHORDATA	5	4	40	60	100
5.	II	19Z2CC5	GENETICS	4	3	40	60	100
6.		19Z2C <mark>C6</mark>	LAB - CHORDATA & GENETICS	3	2	40	60	100
7.		19Z3CC7	HUMAN PHYSIOLOGY	5	4	40	60	100
8.	,,,,	19Z3CC8	ENVIRONMENTAL BIOLOGY	4	3	40	60	100
9.	III	19Z3 <mark>CC9</mark>	LAB - HUMAN PHYSIOLOGY & ENVIRONMENTAL BIOLOGY	3	2	40	60	100
10.		19Z4CC10	MICROBIOLOGY	5	4	40	60	100
11.	IV	19Z4CC11	EVOLUTION	4	3	40	60	100

S.N O	SEM.	COURSEC	COURSE TITLE	HR S	CRE DITS	CIA Mks	ES E Mk s	TOT Mks
12.		19Z4C <mark>C12</mark>	LAB - MICROBIOLOGY& EVOLUTION	3	2	40	60	100
13.		19Z5CC13	FUNDAMENTALS OF BIOCHEMISTRY	6	4	40	60	100
14.		19Z5CC14	MOLECULAR BIOLOGY	6	4	40	60	100
15.	V	19Z5C <mark>C15</mark>	LAB - BIOCHEMICAL ANALYSIS	4	2	40	60	100
16.		19Z5CC16	<mark>LAB -</mark> MOLECULAR BIOLOGY	4	2	40	60	100
17.		19Z6CC17	BASIC IMMUNOLOGY	5	4	40	60	100
18.	VI	19Z6CC18	PRINCIPLES OF BIOTECHNOLOGY	5	4	40	60	100
19.		19Z6C <mark>C19</mark>	LAB - IMMUNOLOGY	3	2	40	60	100
20.		19Z6C <mark>C20</mark>	LAB - BIOTEC <mark>HNOLOGY</mark>	3	2	40	60	100
			Total	84	60			

ALLIEDCOURSES- 20 CREDITS

S.N O	SE M.	COURSE	COURSE TITLE	HR S	CREDI T	CIA Mk s	ES E Mk s	TOT . MK s
1.	T	19C1ACZ1	ALLIED CHEMISTRY - I	3	3	40	60	100
2.	l	19C1ACZ2	LAB IN VOLUMETRIC ANALYSIS	2	2	40	60	100

S.N O	SE M.	COURSE	COURSE TITLE	HR S	CREDI T	CIA Mk s	ES E Mk s	TOT . MK s
3.		19C2ACZ3	ALLIED CHEMISTRY - II	3	3	40	60	100
4.	II	19C2ACZ4	LAB IN QUALITATIVE ORGANIC ANALYSIS	2	2	40	60	100
5.		21Q3AC <mark>Z1</mark>	PLANT DIVERSITY & PATHOLOGY	3	3	40	60	100
6.	III	21Q3AC <mark>72</mark>	LAB - PLANT DIVERSITY & P <mark>ATHOLOGY</mark>	2	2	40	60	100
7.		21Q4A <mark>C7/3</mark>	DEVELOPMENTA L BOTANY & PLANT BREEDING	3	3	40	60	100
8.	IV	21Q4 <mark>ACZ4</mark>	LAB -DEVELOPMENTA L BOTANY & PLANT BREEDING	2	2	40	60	100
			Total	20	20			

ELECTIVES-15 CREDITS

S.N o	SEM	COURSECOD E	COURSE TITLE	HR S	CREDI T	CIA Mk s	ES E Mk s	TOT Mks
1.	V	19Z5 <mark>MD1</mark> / 19Z5ME2	BIOSTAT <mark>ISTICS</mark> / ANIMAL BEHAVIOUR	5	5	40	60	100
2.	VI	19Z6M <mark>D3</mark> / 19Z6M D4	EMBRYOLOGY / CLINICAL LABORATORY TECHNIQUES	5	5	40	60	100

S.N o	SEM .	COURSECOD E	COURSE TITLE	HR S	CREDI T	CIA Mk s	ES E Mk s	TOT Mks
3.		19Z6M <mark>E5</mark> / 19Z6ME6	BIOINFORMATI CS / ENTOMOLOGY	5	5	40	60	100
			Total	15	15			

PART – IV – 20 CREDITS

- VALUE EDUCATION
- ENVIRONMENTAL AWARENESS
- NON MAJOR ELECTIVE
- SKILL BASED COURSES

S. No	SEM.	COURSEC ODE	COURSE TITLE	H RS	CRE DITS	CIA Mks	ESE Mks	TOT. Mks
1.		21G1VE1	Personal Values	1	1	40	60	100
2.	I	19Z1NME	Non-Major Elective – Maternity and Child Health (Offered to other major Students)	2	2	40	60	100
3.		21G2VE2	Values for Life	1	1	40	60	100
4.	II	19Z2NME	Non-Major Elective – Maternity and Child Health (Offered to other major Students)	2	2	40	60	100
5.	III	19G3EE1	Environmental Education	1	1	40	60	100
6.	111	<mark>19</mark> 73SB1	<mark>Vermi<mark>techn</mark>ology</mark>	2	2	40	60	100
7.	IV	19G4EE2	Gender Studies	1	1	40	60	100
8.	1 V	<mark>19</mark> Z4SB2	Mushroom Cultivation	2	2	40	60	100
9.	V	19 <mark>75</mark> SB3	Ornamental Fish Culture	2	2	40	60	100

S. No	SEM.	COURSEC ODE	COURSE TITLE	H RS	CRE DITS	CIA Mks	ESE Mks	TOT. Mks
10.		<mark>19</mark> 25SB4	<mark>Seri<mark>cul</mark>ture</mark>	2	2	40	60	100
11.	7 77	19 <mark>%6</mark> SB5	<mark>Api<mark>cul</mark>ture</mark>	2	2	40	60	100
12.	VI	19Z6 <mark>SB</mark> 6	Dairy <mark>Far</mark> ming	2	2	40	60	100
			TOTAL	20	20			

PART – V – 1 CREDIT

OFF-CLASS PROGRAMMES - ALL PART-V

SHIFT - I

S. No	SEM.	COURSECO DE	COURSE TITLE	HRS	CRE DIT	TOT. Mks
1.		21A4PED	Physical Education			
2.		21A4NSS	NSS			
3.	I - IV	21A4NCC	NCC	30/ SEM	1	100
4.		21A4WEC	Women Empowerment Cell			
5.		21A4ACUF	AICUF			

OFF-CLASS PROGRAMMES

ADD-ON COURSES

COURSE	COURSE TITLE	HR S.	CRE DITS	SEMES TER IN WHICH THE COURS E IS OFFER ED	CIA Mks	ESE Mks	TOT AL Mks
21UAD1CA	COMPUTER APPLICATIONS (offere d by the department of PGDCA for Shift I)	40	2	I&II	40	60	100
21UADFCS	ONLINE SELF LEARNING COURSE-Foundation Course for Science	40	2	II	40	60	100
21UAD3ES	Professional Ethics	15	1	III	40	60	100
21UAD4ES	Personality Development	15	1	IV	40	60	100
21UAD5ES	Family Life Education	15	1	V	40	60	100
21UAD6ES	Life Skills	15	1	VI	40	60	100
19UAD5HR	HUMAN RIGHTS	15	2	V	100	-	100
21UAD6RS	OUTREACH PROGRAMME- Reach Out to Society through ActionROSA	100	3	V & VI	100	-	100
21UAD6PR	PROJECT	30	4	VI	40	60	100
21UAD6RC	READING CULTURE	10/ Sem este r	1	II-VI	-	-	-
	TOTAL		20				

EXTRA CREDIT COURSES

COURSE	COURSE	HR S.	CREDIT S	SEMES TER IN WHICH THE COURS E IS OFFER ED	CIA MK S	ESE MK S	TOTA L MARK S
21 <mark>22</mark> SL1	SELF LEARNING COURSES for ADVANCED LEARNERS SingleCell Protein Culture	-	2	II	40	60	100
	MOOC COURSES / International Certified online Courses (Department Specific Courses/any other courses) * Students can opt other than the listed course from UGC-SWAYAM UGC / CEC	_	Minimu m 2 Credits	I – VI	-	_	

OFF CLASS PROGRAMMES

19UGVACZ1 - Value Added Certificate Course (Herbalism in Health Care)

21UGVACZ1 - Skill - Embedded Value Added Certificate Course (Livestock Farming)

III B.Sc. Zoology SEMESTER - VI

For those who joined in 2022 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAZO	22Z6SB6	PoultryFar ming	Skill Based	2	2

COURSE DESCRIPTION

This course provides comprehensive knowledge on the management of various breeds of poultry fowls. The course also highlights the formulations of poultry feed, poultry products and the economics of poultry.

COURSE OBJECTIVES

- To foster self-employment opportunities after their graduation.
- To understand the nutritive value of poultry products.
- To manage fowl diseases in poultry farms.

UNITS

UNIT I INTRODUCTION AND POULTRY BREEDS

Introduction and scope of poultry keeping –Poultry industry in India – Indian breeds- Aseel, Chittagong - Exotic breeds –Plymouth Rock, Brahma, Leghorn-selection of commercial laying stock, sexing in day-old chicks.

UNIT II HOUSING AND MANAGEMENT

Poultry housing – General principles of building poultry house - Deep litter system- Management of fowls – Growers, Layers, and Broilers – Lighting for chicks – Debeaking. Growth management – summer and wintermanagement.

UNIT III POULTRY FEED

Energy- proteins and amino acids, vitamins, essential inorganic elements. Non-nutritive feed additives- feedstuffs and formulations for poultry, Nutrient requirements for different stages of Layers and Broilers.

UNIT IV POULTRY DISEASES

Viral diseases- Ranikhet, Fowlpox.Bacterial disease - Salmonellosis, Fowl Cholera.Fungal Diseases - Aspergillosis, Aflatoxicosis.Parasitic- Coccidiosis, Ticks, and Mites.Vaccination program.

UNIT V POULTRY PRODUCTS & MARKETING STRATEGIES

Poultry egg production – composition and nutritive value of egg. Use of feathers and poultry manure - Recycling of poultry waste. Economics of poultry - Role of NABARD in poultry farming.

REFERENCES:

TEXTBOOK:

1. Gnanamani MR (1998), Modern aspects of Commercial Poultry Keeping, Giri Publications, Madurai, 1998.

REFERENCE BOOKS:

- 1. Shukla G S, Upadhyay V B (2011). *Economic Zoology*. Rastogi Publications,India.
- 2. Jawaid, A. and Sinha, S. P. (2008) A Handbook of Economic Zoology. S. Chand & Company, New Delhi.

DIGITAL OPEN EDUCATIONAL RESOURCES

- 1. http://www.asciindia.com/BooksPDF/Small%20Poultry%20Farmer.p df
- 2. https://nsdcindia.org/sites/default/files/MC_AGR-Q4306_Small-poultry-farmer-.pdf
- 3. http://ecoursesonline.iasri.res.in/course/view.php?id=335
- 4. https://swayam.gov.in/nd2_nou19_ag09/preview

	C 1	C2	СЗ	C4	Total Scholast ic Marks	Non- Scholas tic Marks C5	CIA Total	% of Asse
Levels	Sessio n -wise Averag e	Bett er of W1, W2	M1+M 2	MID- SEM TEST				ssm ent
	5 Mks.	5 Mks	5+5=1 0 Mks.	15 Mks	35 Mks.	5 Mks.	40Mk s.	
K1	5	-	-	2 ½	7.5	-	7.5	18.7 5 %
K2	-	5	4	2 ½	11.5	-	11.5	28.7 5 %
К3	-	-	3	5	8	-	8	20 %
К4	-	-	3	5	8	-	8	20 %
Non- Scholas tic	-	-	-	-		5	5	12.5 %
Total	5	5	10	15	35	5	40	100 %

CIA				
Scholastic	35			
Non-Scholastic	5			
	40			

EVALUATION PATTERN

	SCHOLASTIC NON - SCHOLASTIC				NON - SCHOLASTIC		MARKS	
C1	C2	СЗ	C4	С5	C6	CIA ESE Tot		Total
10	10	5	5	5	5	40	60	100

UG CIA Components

			Nos		
C1	-	Test (CIA 1)	1	-	10 Mks
C2	-	Test (CIA 2)	1	-	10 Mks
C 3	-	Assignment	1	-	5 Mks
C4	-	Open Book Test/PPT	2 *	-	5 Mks
C 5	-	Quiz	2 *	-	5 Mks
C6	_	Attendance		_	5 Mks

^{*} The best out of two will be taken into account

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Inspect the features of various indigenous and exotic breeds of poultry breeds.	K4	PSO1,PSO4, PSO6 &PSO9
CO 2	Summarize the management of growers, layers, and broilers	K2	PSO1, PSO4 PSO6, &

			PSO9
CO 3	Examine the significance of feed additives and nutritional requirements for different stages oflayers and broilers	K 1	PSO2, PSO4 PSO8, PSO9 &PSO11
CO 4	Relate the causative organism, mode of infection, symptoms, treatment, and control measures of poultry diseases.	K2	PSO2, PSO4, PSO9 & PSO11
CO 5	Develop an idea regarding the poultry products and strategies of marketing.	К3	PSO4, PSO6, PSO8, & PSO9

Mapping of COs with PSOs

CO/	PS	PS	PS	PS	PS	PS	PS	PS	PS	PSO1	PSO1	PSO1
PSO	01	02	03	04	O 5	06	07	08	09	0	1	2
CO1	3	2	2	3	2	3	2	2	3	2	2	2
CO2	3	2	2	3	2	3	2	2	3	2	2	2
соз	2	3	2	3	2	2	2	3	3	2	3	2
CO4	2	3	2	3	2	2	2	2	3	2	3	2
CO5	2	2	2	3	2	3	2	3	3	2	2	2

Mapping of COs with POs

CO/ PSO	PO1	PO2	РО3	PO4	PO5
CO1	3	3	2	2	3

CO2	3	3	3	2	3
CO3	3	3	3	2	3
CO4	3	3	3	2	3
CO5	3	3	3	2	3

- **Note**: ♦ Strongly Correlated **3** ♦ Moderately Correlated **2**
 - ♦ Weakly Correlated -1

COURSE DESIGNER:

- 1. Dr.S. Barathy
- 2. Mrs.J.Thelma

Forwarded By

Dr. A. TAMIL SELVI Head, Dept. of Zoology FATIMA COLLEGE (AUTONOMOUS) MADURAI-625 018

HOD'S Signature

& Name

III B.Sc.

SEMESTER - III

For those who joined in 2021 onwards (Offered as Interdisciplinary Course with Home Science)

PROGRAMM	COURSE	COURSE	CATEGOR	HRS/WEE	CREDIT
E CODE	CODE	TITLE	Y	K	S
UAZO	21Z4SLN1	PUBLIC HEALT H & HYGIE NE	Self Learning	-	2

COURSE DESCRIPTION

The course is designed to introduce life threatening medical scenarios and to instruct the student how to recognize and respond appropriately to each given situation.

COURSE OBJECTIVES

- To recognize and avoid hazards within her or environment.
- To develop skills necessary for immediate and temporary care of victims of various cases.

UNITS

UNIT I - NUTRITION AND HEALTH

Role of international health organization: WHO – UNICEF. Concept of health, Indicators of health. Importance of Nutrition. Nutritional requirements for the special groups (pregnant mother, lactating mother and children). Protein calorie Malnutrition (PCM), National nutrition programme.

UNIT II: ENVIRONMENT AND HEALTH

Water borne diseases – types, symptoms and treatment. Purification of water – large scale for drinking purpose (slow sand and rapid sand filtration methods). Chlorination of well water. Sanitation. Excreta – Methods of disposal – -types of latrines. National health programmes in India.

UNIT III: COMMUNICABLE AND NON COMMUNICABLE DISEASE

CBCS Curriculum for B.Sc ZOOLOGY1

Epidemiology of Communicable disease- prevention and control -Diarrhoeal diseases- Zoonoses -Viral hemorrhagic fevers - Primary infections of the brain- Mycobacterial infections- Emerging disease threats- Severe Acute Respiratory Syndrome (SARS) and Avian flu- Dengue, Swine, Flu, Chikungunya. Epidemiology, prevention and control of noncommunicable diseases- Rheumatic heart disease- Infective endocarditis- Ischaemic heart disease- Respiratory diseases - Program related to Communicable and Non Communicable diseases

UNIT IV: FAMILY PLANNING, MATERNAL AND CHILD HEALTH

Family Planning - Objectives and methods - temporary and permanent methods. Maternal Mortality Rate (MMR) - Causes and prevention. Infant Mortality Rate (IMR) - Causes and prevention. Problems of the aged Geriatrics.Immunization schedule for children.

UNIT V: FIRST AID

Heart attack - Fire accident -Accident - Injuries- Fractures - Stroke- Poison-Electric Shock - Gas leakage - Snake bite and Dog bite

REFERENCE BOOKS

- 1. Park J.E., (2017). *Textbook Of Preventive Social Medicine* 24 Th Edition. BanarsidasBhanot Publishers.
- 2. Vidhya R., (2002). *Hand Book of Preventive and SocialMedicine*. **Publisher:** JPB; Nineth edition
- 3. Sudhar R., Wagh P., Vinod B., Kakade, Jiwan P.S., (2015). *Public Health And Hygiene* Paperback 2015. Success Publications; First Edition edition (2015).
- 4. Kumaresan, V., Sorna Raj R., Public Health and Hygiene. Saras Publication
- Paho, Padro N.A., (2003). Zoonoses and Communicable DiseasesCommon to Man and Animals (PAHO Scientific Publications S.) 2003. World Health Organization; 3rd Revised edition edition.

Digital Open Educational Resources

- 1. https://www.healthline.com/health/food-nutrition
- 2. https://www.who.int/health-topics/nutrition
- 3. https://www.healthline.com/health/first-aid

CBCS Curriculum for B.Sc ZOOLOGY2

EVALUATION

Internal		External	
Assignme	ent – 20 Marks	Objective – 20 Marks	
Test	- 20Marks	Essay Type Qns. – 40 Marks	
Total	– 40Marks	Total – 60Marks	

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Discuss the importance, requirement	K2	PSO1,PSO4
	of nutrition for Mother and children		&PSO11
CO 2	Summarizes about types water borne	K2	PSO1, PSO4
CO 2	disease and its remedies		
	Explain the temporary and	K2	PSO1, PSO4
CO 3	permanent methods of family		&PSO8
	planning		
CO 4	Outlines the types of maternity	K2	PSO1 &PSO8
CO 4	problems and child health		
CO 5	Explain the first aid for major health	K2	PSO1, PSO3&
CO 5	problems		PSO4

Mapping COs Consistency with PSOs

CO/ PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	3			3							1	
CO2	3			3								

CBCS Curriculum for B.Sc ZOOLOGY3

	3		3		1		
CO4	1				1		
CO5	2	2	3				

Note: lacktriangle Strongly Correlated -3

lacktriangle Moderately Correlated -2

♦ WeaklyCorrelated -1

1. Dr. N.Nagarani (Zoology)

2. Mrs. C. Helen (Home Science)

Forwarded By

Dr. A. TAMIL SELVI

Head, Dept. of Zoology

FATIMA COLLEGE (AUTONOMOUS)

MADURAI-625 018

HOD'S Signature & Name