

GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) KUMBAKONAM

(Curriculum – B.Sc., Zoology – 2021 - 2022)

Department: ZOOLOGY

Programme Code: USZO

SEMESTER – I

Part	Course Type	Course Code	Title of the Course	Hrs/Week	Credits	Exam Hrs	Marks		
							CIA	ESE	Total
I	LC	U211T1	Tamil	6	3	3	25	75	100
II	ELC	U211E1	English	6	3	3	25	75	100
III	CC – I	U21ZC101	Invertebrate	6	5	3	25	75	100
III	CC – II	U21ZC102P	Practical I: Invertebrata	3	2	3	40	60	100
III	AC - I	U211ACH1	Allied Chemistry – I	5	4	3	25	75	100
III	AC – II	U212ACH2P	Allied Chemistry Practical– II	2	--	--	--	--	---
IV	AEC	U211VE	Value Education	2	2	3	25	75	100
Total				30	19				600

SEMESTER – II

Part	Course Type	Course Code	Title of the Course	Hr s/Week	Cr edits	Exam Hrs	Marks		
							CIA	ESE	Total
I	LC	U212T2	Tamil	6	3	3	25	75	100
II	ELC	U212E2	English	6	3	3	25	75	100
III	CC – III	U21ZC203	Chordata	6	5	3	25	75	100
III	CC – IV	U21ZC204P	Practical II : Chordata	3	2	3	40	60	100
III	AC -II	U212ACH2P	Allied Chemistry Practical– II	2	4	3	40	60	100
III	AC - III	U212ACH3	Allied Chemistry – III	5	4	3	25	75	100
IV	NMC-IV	U23NM2LP	Language proficiency for employability	2	2	3			100

IV	AEC	U212ES	Environmental Studies	2	2	3	25	75	100
Total				30	23				700

SEMESTER – III

Part	Course Type	Course Code	Title of the Course	Hrs/ Week	Credits	Exam Hrs	Marks		
							CIA	ESE	Total
I	LC	U213T3	Tamil	6	3	3	25	75	100
II	ELC	U213E3	English	6	3	3	25	75	100
III	CC V	U21ZC305	Cell Biology	6	5	3	25	75	100
III	CC VI	U21ZC306P	Cell Biology Practical	3	2	3	40	60	100
III	AC – IV	U213AB1	Algae, Fungi, Bryophytes, Pteridophytes, Gymnosperms, Taxonomy and Horticulture	5	4	3	25	75	100
III	AC – V	U214AB2P	Allied Botany - Practical II	2	--	--	--	--	--
IV	NMEC – I	U21Z3NME1:1	Vermiculture	2	2	3	25	75	100
		U21Z3NME1:2	Basic medical knowledge						
Total				30	19				600
SSC – I		U213SS1	Mathematical Aptitude For Competitive Exam	-	2	2	-	100	100

SEMESTER – IV

Part	Course Type	Course Code	Title of the Course		Hrs/ Week	Credits	Exam Hrs	Marks		
								CIA	ESE	Total
I	LC	U214T4	Tamil		6	3	3	25	75	100
II	ELC	U214E4	English		6	3	3	25	75	100
III	CC -VII	U21ZC407	Environmental Biology		5	5	3	25	75	100
III	CC – VIII	U21ZC408P	Environmental Biology Practical		3	2	3	40	60	100
III	AC – V	U214AB2P	Allied Botany - Practical II		4	4	3	40	60	100
III	AC – VI	U214AB3	Anatomy, Embryology, Physiology and Phytotherapy		2	4	3	25	75	100
IV	NMEC– II	U21Z4NME2:1	Apiculture		2	2	3	25	75	100
		U21Z4NME2:2	Public health and hygiene							
IV	SEC – I	U214ZOSE1	Vermitechnology	Theory	1	1	1	15	45	60
				Practical	1	1	1	10	30	40
IV	NMC-IV	U23NM4DS	Digital skills for Employability	2	2	3		100	IV	
Total					30	25				800
SSC – II		U214SS2	Social Studies for Competitive Exam		--	2	2	-	100	100

SEMESTER – V

Part	Course Type	Course Code	Title of the Course		Hrs/ Week	Credits	Exam Hrs	Marks		
								CIA	ESE	Total
III	CC – IX	U21ZC509	Evolution		5	5	3	25	75	100
III	CC – X	U21ZC510	Developmental Biology and Immunology		5	5	3	25	75	100
III	CC – XI	U21ZC511	Animal Physiology		5	5	3	25	75	100
III	CC – XII	U21ZC512P	Evolution , Developmental Biology & Immunology and Animal Physiology Practical		6	4	3	40	60	100
III	MBEC–I	U21Z5MBE1:1	Biostatistics		5	5	3	25	75	100
		U21Z5MBE1:2	Agricultural Pest management							

		U21Z5MBE1:3	Apiculture							
IV	SEC – II	U215ZOSE2	Aquarium Fish Keeping	Theory	1	1	2	15	45	60
				Practical	1	1	2	10	30	40
IV	SEC –III	U215ZOSE3	Basic computer applications - Practical		2	2	2	40	60	100
Total					30	28				700

SEMESTER – VI

Part	Course Type	Course Code	Title of the Course	Hrs/ Week	Credits	Exam Hrs	Marks			
							CIA	ESE	Total	
III	CC – XIII	U21ZC613	Genetics and Molecular Biology	6	5	3	25	75	100	
III	CC – XIV	U21ZC614	Microbiology and Biotechnology	6	5	3	25	75	100	
III	CC – XV	U21ZC615P	Genetics and Molecular Biology, Microbiology And Biotechnology Practical	6	4	3	40	60	100	
III	MBEC – II	U21Z6MBE2:1	Biochemistry	6	5	3	25	75	100	
		U21Z6MBE2:2	Endocrinology							
		U21Z6MBE2:3	Value addition of Fish products and processing							
III	MBEC– III	U21Z6MBE3:1	Human Nutrition	5	5	3	25	75	100	
		U21Z6MBE3:2	Poultry farming							
		U21Z6MBE3:3	Economic Entomology							
V	AEC	U216GS	Gender Studies	1	1	3	25	75	100	
V		U21EA	NSS /YRC/ SPORTS	--	1	-	-	-	-	
Total					30	26				600

COURSE OFFERED BY THE DEPARTMENT OF ZOOLOGY

Part	Course Type	Course Code	Title of the Course	Hrs/ Week	Credits	Exam Hrs	Marks		
							CIA	ESE	Total
III	AC - I	U211AZ1	Biology of Invertebrates and Chordates	5	4	3	25	75	100
III	AC -II	U212AZ2P	Allied Zoology practical	2	4	3	40	60	100
III	AC - III	U212AZ3	General Principles and Applied Zoology	5	4	3	25	75	100

COURSE STRUCTURE ABSTRACT FOR

B.SC., PROGRAMME 2021-2022 ONWARDS

Part	Course		Total No. of Papers	Hours	Credit	Mark
I	Language Course (LC)		4	24	12	400
II	English Language Course (ELC)		4	24	12	400
III	Core Course (CC)		15	74	61	1500
III	Allied Course (AC)		6	27	24	600
III	Major Based Elective Course (MBEC)		3	16	15	300
IV	Non Major Elective Course (NMEC)		2	4	4	200
IV	Skill Enhancement (SEC)		3	6	6	300
IV	Ability Enhancement Course (AEC)	Value Education	1	2	2	100
IV		Environmental Studies	1	2	2	100
V		Gender Studies	1	1	1	100
V	Extension Activities		--	-	1	---
Total			40	180	140	4000
Extra Credit Courses						
Self Study Course (SSC)			2		4	200
Total			42		144	4200

GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) KUMBAKONAM

(Curriculum – M.Sc., ZOOLOGY – 2021 - 2022)

DEPARTMENT: ZOOLOGY

PROGRAMME CODE : PSZO

Course Type	Course Code	Title of the Course	Hrs/Week	Credits	Exam Hrs	Marks		
						CIA	ESE	Total
SEMESTER – I								
CC I	P21ZC101	Functional Morphology and Phylogeny of Invertebrates and Chordates	6	5	3	25	75	100
CC II	P21ZC102	Cell and Molecular Biology	5	5	3	25	75	100
CC III	P21ZC103	Genetics	6	5	3	25	75	100
CC IV	P21ZC104P	Practical I	6	3	3	40	60	100
MBEC- I	P21Z1MBE1:1	Fisheries and Aquaculture	5	4	3	25	75	100
	P21Z1MBE1:2	Reproductive Endocrinology						
	P21Z1MBE1:3	Bee keeping						
SEC - I	P21Z1SE1	English Grammar for Communication & Scientific writing	2	2	2	25	75	100
Total			30	24				600
SEMESTER – II								
CC V	P21ZC205	Biochemistry	5	5	3	25	75	100
CC VI	P21ZC206	Animal Physiology	5	5	3	25	75	100
CC VII	P21ZC207	Immunology	5	5	3	25	75	100
CC VIII	P21ZC208P	Practical II	6	3	3	40	60	100
MBEC -II	P21Z2MBE2:1	Entomology	5	4	3	25	75	100
	P21Z2MBE2:2	Computer application in biology						
	P21Z2MBE2:3	Fish processing technology						
EDC	P21Z2ED	Diet for healthy Life	2	2	3	25	75	100
SEC - II	P21Z2SE2	Taxonomy of Fishes	Theory	1	2	15	45	100
			Practical	1		2	10	
Total			30	25				700
SSC -I	P212SS1	General Studies for Research Fellowships and Lectureship	-	2	2	-	100	100
NCGPA (Internship)	INT	Internship		2		-	-	-
SEMESTER – III								
CC – IX	P21ZC309	Developmental Biology and Evolution	6	5	3	25	75	100
CC – X	P21ZC310	Biotechnology and Bioinformatics	6	5	3	25	75	100
CC – XI	P21ZC311	Microbiology	6	5	3	25	75	100
CC – XII	P21ZC312P	Practical III	6	3	3	40	60	100
MBEC– III	P21Z3MBE3:1	Biostatistics and Research Methodology	6	4	3	25	75	100
	P21Z3MBE3:2	Nutrition & Dietics						
	P21Z3MBE3:3	Dairy Science						
Total			30	22				500
SSC- II	P21Z3SS2	Life Sciences for SET/CSIR Examination		2	2	-	100	100

SEMESTER – IV								
CC – XIII	P21ZC413	Ecology and Ethology	6	5	3	25	75	100
CC – XIV	P21ZC414P	Practical - IV	6	4	3	40	60	100
CC – XV (Project)	P21ZPW415	Dissertation	12	6	-	-	100	100
MBEC –IV	P21Z4MBE4:1	Biodiversity and Conservation	6	4	3	25	75	100
	P21Z4MBE4:2	Silkworm culture techniques and marketing						
	P21Z4MBE4:3	Management Tools and techniques in Biology						
Total			30	19				400

**Course Structure Abstract for
M.Sc., Programme 2021-2022 onwards**

Part	Course	Total No courses	Hours	Credit	Mark
III	Core Course (CC)	14	80	63	1400
III	Core Project	1	12	6	100
III	Major Based Elective Course (MBEC)	4	22	16	400
III	Extra Disciplinary Course (EDC)	1	2	2	100
III	Skill Enhancement course (SEC)	2	4	3	200
Total		22	120	90	2200
Extra Credit Courses					
	Self Study Course (SSC)	2	-	4	200
	Internship (NCGPA Courses)	--	-	2	---
	Value Added Course	1	-	2	100
Total		3		98	2500

GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS), KUMBAKONAM
PG & RESEARCH DEPARTMENT OF ZOOLOGY
B.SC., ZOOLOGY-REVISED COURSE STRUCTURE UNDER CBCS

(For the candidates admitted from the Academic year 2018-19 onwards)

Revised

Sem	Course code	Course Title	Hrs/Week	Credits	Marks
I	17GT1	Part - I - Language Tamil	6	3	100
	17GE1	Part - II - Language English	6	3	100
	18ZC101	Part - III - Core Course I - Invertebrate Theory	6	5	100
	18ZCB02P1	Part - III – Core Course II – Invertebrata and Chordata Practical	3	-	-
	181AZ1	Part - III – Allied Course I – Biology of Invertebrate and Chordata Theory	6	4	100
	182AZ2P	Part - III – Allied Course II - Practical	3	-	-
	Total			30	15
II	17GT2	Part - I – Language Tamil	6	3	100
	17GE2	Part - II – Language English	6	3	100
	18ZC203	Part - III - Core Course II – Invertebrate and Chordata Practical	3	5	100
	18ZC202P1	Part - III – Core Course III – Chordata Theory	5	5	100
	182AZ2P	Part - III – Allied Course II - Practical	2	3	100
	182AZ3	Part - III- Allied Course III – General Principles of Zoology and Commercial Zoology.	4	3	100
	18UVE	Part - IV – Value Education Yoga	2	2	100
	UGCES	Part - IV- Environmental Studies	2	2	100
	Total			30	26
III	17GT3	Part - I - Language Tamil	6	3	100
	17GE3	Part - II – Language English	6	3	100
	18ZC304	Part - III - Core Course IV - Cell Biology Theory	6	5	100
	18ZC405P2	Part - III - Core Course V – Cell Biology And Ecology Practical	3	-	-
	184AB3	Part - III – Allied Course V – Botany Theory	5	4	100
	184AB2P	Part - III – Allied Course II - Botany Practical	2	-	-
	18Z3NMEC	Part - IV- Non-Vermiculture	2	2	100

Sem	Course code	Course Title	Inst, Hrs/Week	Credits	Marks
IV	17GT4	Part - I – Language Tamil	6	3	100
	17GE4	Part – II - Language English	6	3	100
	18ZC405P2	Part – III- Core Course V-Cell Biology, Ecology Practical	2	5	100
	18ZC406	Part – III- Core Course VI - Ecology Theory	5	4	100
	184AB2P	Part – III –Allied Course II - Botany Practical	3	4	100
	184AB3	Part – III –Allied Course III-Botany Theory	4	3	100
	SBSC	Part – IV-Skill Based 1.Sericulture	2	2	100
	18Z4NMEC 2	Part –IV Non–Major Elective course I- Apiculture	2	2	100
		Total	30	26	800
V	18ZC507	Part- III-Core Course – VII - Evolution	6	6	100
	18ZC508	Part –III – Core Course VIII –Developmental Biology and Immunology	5	5	100
	18ZC509	Part - III - Core Course IX – Animal Physiology	5	5	100
	18ZC510P3	Part – III – Core Course -X-Evolution, Developmental Biology & Immunology and Animal Physiology Practical	5	5	100
	18ZC5EC3:	Part – III - Elective Course I – Biostatistics			
	1				
	18ZC5EC3:2	2.AgriculturalPestmanagement	5	5	100
	18ZC5EC3:3	3.OrnamentalFishculture			
SBAC	Part – IV Skill Based - II 1.Aquaculture	2	2	100	
SBVC	Part – IV- Skill Based III– 1.Vermitechnology	2	2	100	
		Total	30	30	700
VI	18ZC611	Part – III - Core Course XI - Genetics And Molecular Biology	6	5	100
	18ZC612	Part- III Core Course XII - Microbiology And Biotechnology	6	5	100
	18ZC613P4	Part – III – Core Course XIII-Genetics and Molecular Biology, Microbiology And Biotechnology Practical	6	5	100

18Z6EC4:1	Part – III – Elective Course II –				
		1.Biochemistry	5	5	100
	18Z6EC4:2	2.Endocrinology			
18Z6EC4:3	3.Fish Processing Technology				
18Z6EC5:1	1.Poultry science	6	4	100	
18Z6EC5:2	2.Economic Entomology				
18Z6EC5:3	Employability readiness	2	2	100	
U23NM6ER	Extension Activities		-	1	-
GS	Gender Studies		1	1	100
	Total		30	26	600

GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS), KUMBAKONAM
DEPARTMENT OF ZOOLOGY

M.Sc.,Zoology–Revised Course Structure under CBCS(for2018-2019 batch onwards)

Sem	Course	Course code	Course Title		Inst, Hrs /Week	Credit	Exam Hrs	Marks		Total
								Int	Ext	
I	Core Course-I(CC)	P18ZC101	Functional Morphology and Paleontology of Invertebrates And Chordates		6	5	3	25	75	100
	Core Course-II(CC)	P18ZC102	Immunology		6	5	3	25	75	100
	Core Course-III(CC)	P18ZC103	Genetics		6	5	3	25	75	100
	Core Course-IV(CC)	P18ZC104P1	Practical I		6	4	5	40	60	100
	Elective-I(EC)	P18Z1EC10	Aquaculture		6	4	3	25	75	100
					30	23				
II	Core Course-V(CC)	P18ZC205	Biochemistry		6	5	3	25	75	100
	Core Course-VI(CC)	P18ZC206	Animal Physiology		6	5	3	25	75	100
	Core Course-VII(CC)	P18ZC207	Immunology		6	5	3	25	75	100
	Core Course-VIII(CC)	P18ZC208P2	Practical II		6	5	5	40	60	100
	Elective-II(EC)	P18Z2EC2	Bio informatics and Computer Applications		6	4	3	25	75	100
					30	24				

III	Core Course-IX(CC)	P18ZC309	Developmental Biology and Evolution	6	5	3	25	75	100
	Core Course-X(CC)	P18ZC310	Biotechnology	6	5	3	25	75	100
	Core Course-XI(CC)	P18ZC311	Microbiology	6	5	3	25	75	100
	Core Course-XII(CC)	P18ZC312P3	Practical III	6	4	5	40	60	100
	Elective-III(EC)	P18Z3EC3	Biostatistics and Research Methodology	6	4	3	25	75	100
				30	23				
IV	Core Course-XIII(CC)	P18ZC413	Ecology and Ethology	6	5	3	25	75	100
	Core Course-XIV(CC)	P18ZC414P4	Practical IV	6	5	5	40	60	100
	Core Course-XV(CC)	P18PWZO415	Dissertation 80Marks (2Reviews-20+20=40marks Report Valuation 40 Marks) Viva 20Marks	12	6	-	-	-	100
	Elective-IV(EC)	P18Z4EC4	Biodiversity and Conservation	6	4	3	25	75	100
			Total	30	20				
			Grand Total	120	90				1900