# MASTER OF SCIENCE IN ZOOLOGY

**Programme Code: ZLM** 

**Duration: 2 Years** 

**Teaching & Evaluation Scheme of Examination** 

FROM SESSION: 2019-2020 Onwards



**Faculty of Science** 

CHHATRAPATI SHIVAJI MAHARAJ UNIVERSITY PANVEL, NAVI MUMBAI

# **Semester-I**

Course Code Course Name		L	T	P	IA	UE	Total	Credits
							Marks	
ZOMC101	Structure and Function of Invertebrates		0	0	30	70	100	4
ZOMC102	General Physiology		0	0	30	70	100	4
ZOMC103	Cell Biology and Genetics		0	0	30	70	100	4
ZOMC104	Advanced Reproductive Biology		0	0	30	70	100	4
ZOMC191	Structure and Function of Invertebrates lab		0	4	15	35	50	2
ZOMC192	General Physiology lab		0	4	15	35	50	2
ZOMC193	Cell Biology and Genetics lab		0	4	15	35	50	2
ZOMC194	Advanced Reproductive Biology lab	0	0	4	15	35	50	2
	Total	16	0	16	180	420	600	24

# **Semester-II**

<b>Course Code</b>	Course Name		T	P	IA	UE	Total	Credits
							Marks	
ZOMC201	ZOMC201 Structure and Function of		0	0	30	70	100	4
	Vertebrates							
ZOMC202	Comparative Endocrinolog y		0	0	30	70	100	4
ZOMC203	Molecular Biology and	4	0	0	30	70	100	4
	Biotechnolog y							
ZOMC204	Advanced Development al	4	0	0	30	70	100	4
	Biology							
ZOMC291	Structure and Function of	0	0	4	15	35	50	2
	Vertebrates lab							
ZOMC292	Comparative Endocrinolog y	0	0	4	15	35	50	2
	lab							
ZOMC293	Molecular Biology and	0	0	4	15	35	50	2
	Biotechnolog y lab							
ZOMC294	Advanced Development al	0	0	4	15	35	50	2
	Biology lab							
	Total	16	0	16	180	420	600	24

#### Semester - III

Course	Course Name		T	P	IA	UE	Marks	Credits
Code								
ZOMC301	Parasitology and Immunology		-	-	30	70	100	4
ZOMC302	Cell Biology		-	-	30	70	100	4
ZOME303	Elective - I		-	-	30	70	100	4
ZOMS304	Special Paper – I		-	-	30	70	100	4
ZOMC391	Parasitology and Immunology lab			2	15	35	50	2
ZOMC392	Cell Biology lab			2	15	35	50	2
ZOME393	Elective - I lab			2	15	35	50	2
ZOME394	Special Paper – I lab			2	15	35	50	2
	Total	16	0	08	180	320	600	24

# **Semester-IV**

Course	Course Name		T	P	IA	UE	Marks	Credits
Code								
ZOMC401	Genomics and Proteomics		-	-	30	70	100	4
ZOME402	Elective – II		-	1	30	70	100	4
ZOMS403	Special Paper – II		-	-	30	70	100	4
ZOMC484	Project		-	-	40	140	200	8
ZOMC491	Genomics and Proteomics lab			2	15	35	50	2
ZOMS493	Special Paper – II lab			2	15	35	50	2
	Total	20	0	4	180	320	600	24

Total Marks: 2400 Total Credit: 96

# **List of Elective and Special Papers:**

Semester	Course Code (T+P)	Course Name	(L-T-P)	Credits					
Elective Papers									
III	ZOME301	Entomology	4-0-4	6					
III	ZOME302	Fish and Fisheries	4-0-4	6					
III	ZOME303	MRP	4-0-4	6					
III	ZOME304	Aquaculture	4-0-4	6					
IV	ZOME401	Sericulture	4-0-4	6					
IV	ZOME402	Frach water Zoology	4-0-4	6					
IV	ZOME403	Horticulture	4-0-4	6					
IV	ZOME404	Vermiculture	4-0-4	6					
	Special Papers								
III	ZOMS301+ZOMS 391	IPR & Biosafety	4-0-4	6					
III	ZOMS302+ZOMS	Bioprocess & Fermentation technology	4-0-4	6					
III	ZOMS303+ZOMS	Research and communication	4-0-4	6					
III	ZOMS304+ZOMS	Pharmacogenomics	4-0-4	6					
IV	ZOMS401+ZOMS	Biotech entrepreneurship	4-0-4	6					
IV	ZOMS402+ZOMS 492	Agriculture Biotechnology	4-0-4	6					
IV	ZOMS403+ZOMS	Animal Physiology	4-0-4	6					
IV	ZOMS404+ZOMS	Elementary Zoology	4-0-4	6					

**NOTE:** Students have to choose two elective subjects for Semesters III, one from each group Elective I and Special Paper-I. In Semester-IV, the students have to choose two elective subjects, one from each group Elective-II and Special Paper-II. The Special Paper course must be chose in continuation to the course chosen in the previous semester. This choice-based system shall facilitate in development of specialized expertise in thrust areas of Zoology. Departmental committee will approve the topic of the project selected by students.