

Academic Year 2019-20

**B.P.H.E. Society's
Ahmednagar College, Ahmednagar
Internal Quality Assurance Cell
CO, PO, and PSO Attainment Sheet**

Department Name	Zoology
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Program Name	B.Sc.
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Program Outcomes(PO)

PO1	To provide thorough knowledge about various animal sciences from primitive to highlyevolved animal groups.
PO2	To make the students aware of applications of Zoology subject in various industries.
PO3	To highlight the potential of various branches of Zoology to become an entrepreneur.
PO4	To equip the students with skills related to laboratory as well as field based studies.
PO5	To make the students aware about conservation and sustainable use of biodivers
PO6	To inculcate interest and foundation for further studies in Zoology
PO7	To address the socio-economical challenges related to animal sciences.
PO8	To facilitate students for taking up and shaping a successful career in Zoology.
PO9	
PO10	
PO11	
PO12	

Program Specific Outcome(PSO)

PSO1	To provide thorough knowledge about various animal sciences from primitive to highlyevolved animal groups." To make the
PSO2	s. To make the students aware about conservation and sustainable use of biodiversity.To inculcate interest and foundation fo
PSO3	onomical challenges related to animal sciences. and , facilitate students for taking up and shaping a successful career in Zc

Academic Year :	2019-20
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Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	11151	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Animal Diversity - I	CO1	1	0	0	0	1	1	0	1	1	1	1	
Semester No	1	CO2	1	1	0	0	1	1	0	0	0	1	0	
Teacher Name	Dr. Rahul Gaikwad	CO3	1	1	0	1	1	1	0	0	0	1	0	
Course Outcomes		CO4	1	1	0	0	1	1	0	1	0	1	1	
	CO1	The student will be able to understand classify and identify the diversity of animals.	CO5	1	1	0	0	1	2	1	1	1	2	1
	CO2	The student understands the importance of classification of animals.	Average	1.00	0.80	0.00	0.20	1.00	1.20	0.20	0.60	0.40	1.20	0.60
	CO3	Students will understand the basic principles of classification.												
	CO4	The student will be able to classify animals effectively using the six levels of classification.												
	CO5	The student knows his role in nature as a protector, preserver and promoter of life which he has achieved by learning, observing and understanding life.												

Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	11152	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Animal Ecology	CO1	0	1	1	1	2	1	1	1	0	1	1	
Semester No	1	CO2	0	0	1	0	2	1	1	1	0	1	1	
Teacher Name	Ms. Anuja Bhalerao	CO3	0	0	0	0	1	1	1	1	0	1	1	
Course Outcomes		CO4	0	1	0	0	1	1	1	1	0	1	1	
	CO1	evaluate their own beliefs, values and actions in natural resource issues and act on a lifestyle that	CO5	0	1	1	1	1	1	1	0	1	1	
	CO2	diversity of ecosystems and applies beyond the food chains, food webs and link it with human life	Average	0.00	0.60	0.60	0.40	1.40	1.00	1.00	0.00	1.00	1.00	
	CO3	help development of leadership skills to promote												
	CO4													
	CO5													

Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	11153	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Practical Paper I	CO1	1	1	0	1	2	1	1	1	1	1	0	
Semester No	1	CO2	1	1	0	0	0	1	0	0	1	1	1	
Teacher Name	Dr. Rahul Gaikwad & Ms. Anuja Bhalerao	CO3	1	0	0	0	0	1	0	0	1	1	0	
Course Outcomes		CO4	0	1	0	1	1	1	1	2	1	1	1	
	CO1	and identify the diversity of animals.	CO5	0	1	1	1	1	1	2	1	1	1	
	CO2	classification of animals.	Average	0.60	0.80	0.20	0.60	0.80	1.00	0.60	1.00	1.00	0.60	
	CO3	identification key.												
	CO4	Titration to estimate dissolved oxygen, alkalinity and what preventive measures can be												
	CO5													

Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	12151	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Animal Diversity - II	CO1	1	0	0	0	1	1	0	1	1	1	1	
Semester No	2	CO2	1	1	0	0	1	1	0	0	0	1	0	
Teacher Name	Dr. Rahul Gaikwad	CO3	1	1	0	1	1	1	0	0	0	1	0	
Course Outcomes		CO4	1	1	0	0	1	1	0	1	0	1	1	
	CO1	and identify the diversity of animals.	CO5	1	1	0	0	1	2	1	1	2	1	
	CO2	of animals.	Average	1.00	0.80	0.00	0.20	1.00	1.20	0.20	0.60	0.40	1.20	0.60
	CO3	classification.												
	CO4	The student will be able to classify animals protector, preserver and promoter of life which												
	CO5													

Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	12152	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Cell Biology	CO1	0	1	0	1	0	1	0	1	0	0	1	
Semester No	2	CO2	0	1	0	1	0	1	0	1	0	0	1	
Teacher Name	Ms. Anuja Bhalerao	CO3	0	1	0	1	0	2	0	1	0	0	1	
Course Outcomes		CO4	0	1	1	1	0	1	0	1	0	0	1	
	CO1	cell as a structural and functional unit of life.	CO5	0	1	0	1	0	2	0	1	0	1	
	CO2	the prokaryotic and eukaryotic system and dynamism of life. Its working mechanism and depends on endo-membranes and structures.	Average	0.00	1.00	0.20	1.00	0.00	1.40	0.00	1.00	0.00	1.00	
	CO3	Overall functioning of cell at organelle level will be												
	CO4													
	CO5													

Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
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Subject Code	12153	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Practical Paper II	CO1	1	1	0	0	1	1	1	1	1	1	0	
Semester No	2	CO2	1	0	0	0	1	0	0	0	1	1	0	
Teacher Name	Dr. Rahul Gaikwad and Ms. Anuja Bhalerao	CO3	1	0	1	0	0	1	1	1	0	1	1	
Course Outcomes		CO4	0	1	1	1	0	1	0	1	0	0	0	
	CO1	The student will be able to understand classify and of animals. studied. microscopes and various stains used in cell Types of blood cells and mitosis mechanism will be	0	1	1	1	0	1	0	1	0	0	1	
	CO2		Average	0.60	0.60	0.60	0.40	0.40	0.80	0.40	0.80	0.40	0.60	0.40
	CO3													
	CO4													
	CO5													

Academic Year :	2019-20
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Class		SYBSc	Course Outcomes	Program Outcomes								PSOs			
Subject Code	81511	Subject Name		Animal Systematics and Diversity-III	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Semester No	1	Teacher Name	Dr. Avinash Vanjare	CO1	3	2	1	1	1	2	1	1	1	1	1
				CO2	3	2	1	1	1	2	1	1	1	1	1
				CO3	3	3	1	1	1	2	1	1	1	1	1
				CO4	3	3	2	2	2	3	2	2	2	2	2
				CO5	3	3	2	2	2	3	3	2	2	2	2
				Average	3.00	2.60	1.40	1.40	1.40	2.40	1.60	1.40	1.40	1.40	1.40
	CO1	Understanding the taxonomy of organisms													
	CO2	Understanding the diversity of organisms													
	CO3	Understand morphology, anatomy and physiology of organisms													
	CO4	Understand importance of organisms ecologically and economically													
	CO5	Understand the importance of conservation													

Class		SYBSc	Course Outcomes	Program Outcomes								PSOs			
Subject Code	81521	Subject Name		Applied Zoology -I	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Semester No	1	Teacher Name	Dr. Ivan Aranha	CO1	2	2	1	2	1	1	0	1	2	2	2
				CO2	1	1	2	2	0	1	1	1	1	1	1
				CO3	1	2	1	2	1	1	0	1	1	1	1
				CO4	1	1	2	1	0	2	1	1	1	1	1
				CO5	1	1	1	1	0	2	1	1	2	2	2
				Average	1.20	1.40	1.40	1.60	0.40	1.40	0.60	1.00	1.40	1.40	1.40
	CO1	Introduction to fisheries													
	CO2	Culture methods of freshwater fishes													
	CO3	Introduction to Pest													
	CO4	Pest control practices													
	CO5	Hazards of pesticides on human													

Class		SYBSc	Course Outcomes	Program Outcomes								PSOs			
Subject Code	81512	Subject Name		Animal Systematics and	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
				CO1	3	2	1	1	1	2	1	1	1	1	1

Semester No	2	CO2	3	2	1	1	1	2	1	1	1	1	1
Teacher Name	Dr. Avinash Vanjare	CO3	3	3	1	1	1	2	1	1	1	1	1
Course Outcomes		CO4	3	3	2	2	2	3	2	2	2	2	2
	CO1	Understanding the taxonomy of organisms	CO5	3	3	2	2	2	3	3	2	2	2
	CO2	Understanding the diversity of organisms	Average	3.00	2.60	1.40	1.40	1.40	2.40	1.60	1.40	1.40	1.40
	CO3	organisms											
	CO4	economically											
	CO5	Understand the importance of conservation											

Class	SYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	81522		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Applied Zoology -II	CO1	2	1	2	1	2	2	2	2	2	1	2
Semester No	2	CO2	1	1	0	1	2	1	1	2	1	2	1
Teacher Name	Dr. Ivan Aranha	CO3	1	2	0	1	2	1	1	1	1	1	1
Course Outcomes		CO4	1	1	2	1	1	1	2	1	1	1	1
	CO1	Introduction to Apiculture	CO5	1	2	0	1	1	1	1	2	2	2
	CO2	Bee keeping	Average	1.20	1.40	0.80	1.00	1.60	1.20	1.40	1.60	1.40	1.40
	CO3	Bee products											
	CO4	Introduction to sericulture											
	CO5	Silk worm rearing											

Class	SYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	81532		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Practical Course	CO1	2	2	1	1	2	1	1	2	PSO1	PSO2	PSO3
Semester No	2	CO2	1	1	2	1	2	1	1	1	2	1	1
Teacher Name	Dr. Ivan Aranha	CO3	1	1	2	1	2	2	1	1	1	2	1
Course Outcomes		CO4	1	1	2	1	2	2	1	2	1	1	1
	CO1	Study and classification Arthropoda, Mollusca, Echinodermata	CO5	1	1	1	1	1	1	1	2	2	2
	CO2	Economic importance of Crustacea, mollusk	Average	1.20	1.20	1.60	1.00	1.80	1.40	1.00	1.40	1.00	1.00
	CO3	Study of economic importance of freshwater fishes											
	CO4	Identification of Poisonous and non-poisonous snakes											
	CO5	Study of modifications of beaks and feet in birds											

Academic Year :	2019-20
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Class		TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91513			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Animal Systematics and Diversity-V		CO1	2	2	1	0	0	3	1	2	2	1	2
Semester No	3		CO2	2	1	1	0	0	3	1	2	2	0	1
Teacher Name	Ms. Geetanjali devdhe		CO3	2	1	1	0	0	3	1	2	2	0	1
Course Outcomes			CO4	2	1	1	0	0	3	1	2	2	0	1
	CO1	The student will be able to understand classify and identify the diversity of animals.	CO5	2	2	1	0	0	3	1	2	2	0	2
	CO2	Study of given model organism with respect to its habit, habitat, Morphology, physiology and various systems.	Average	2.00	1.40	1.00	0.00	0.00	3.00	1.00	2.00	2.00	0.20	1.40
	CO3	Comparative study of various organs in vertebrates.												
	CO4	Study of specialised organs in vertebrates.												
	CO5	Learning systems complexity at organism level to understand anatomical and physiological features.												

Class		TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91523			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Mammalian Histology		CO1	2	1	3	2	2	1	3	2	2	1	3
Semester No	3		CO2	3	2	1	3	2	3	1	2	1	3	2
Teacher Name	Mr. D. G. Bhalsing		CO3	1	2	2	1	3	2	2	1	2	2	1
Course Outcomes			CO4	2	3	2	2	1	1	1	3	2	1	2
	CO1	tissues.	CO5	3	1	1	2	2	3	2	1	1	2	3
	CO2	To understand the complexity of various tissues in an organ.	Average	2.20	1.80	1.80	2.00	2.00	2.00	1.80	1.80	1.60	1.80	2.20
	CO3	To learn structure and functions of various tissues.												
	CO4	To understand various diseases related to organs.												
	CO5	To know the role of glands in mammals.												

Class		TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91533			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Biological Chemistry		CO1	1	2	2	2	0	3	1	2	3	0	2

Semester No	3	CO2	1	3	3	2	0	3	1	2	3	0	2
Teacher Name	Dr. N. R. Somavanshi	CO3	1	2	2	2	0	3	1	2	3	0	2
Course Outcomes		CO4	1	3	3	3	1	3	2	3	3	1	2
	CO1	CO5	1	3	3	3	0	3	2	3	3	0	2
	CO2	Average	1.00	2.60	2.60	2.40	0.20	3.00	1.40	2.40	3.00	0.20	2.00
	CO3												
	CO4												
	CO5												

Class	TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91543		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Environmental Biology and Toxicology	CO1	3	2	3	2	2	3	2	3	3	2	3
Semester No	3	CO2	2	2	2	3	3	2	3	2	2	3	2
Teacher Name	Dr. Ivan Aranha	CO3	2	2	3	2	2	3	3	3	2	3	2
Course Outcomes		CO4	2	3	3	2	2	2	2	2	3	2	3
	CO1	CO5	2	3	2	3	3	2	2	3	3	2	2
	CO2	Average	2.20	2.40	2.60	2.40	2.40	2.40	2.40	2.60	2.60	2.40	2.40
	CO3												
	CO4												
	CO5												

Class	TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91553		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Parasitology	CO1	1	0	0	2	1	1	1	1	1	1	1
Semester No	3	CO2	1	0	0	2	1	1	1	1	1	1	1
Teacher Name	Dr. Pande GS	CO3	1	0	0	2	1	1	1	1	1	1	1
Course Outcomes		CO4	1	0	0	2	1	1	1	1	1	1	1
	CO1	CO5	1	0	0	2	1	1	1	1	1	1	1
	CO2	Average	1.00	0.00	0.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	CO3												
	CO4												
	CO5												

Class	TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	915B3		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Cell Biology	CO1	3	3	2	3	2	2	3	2	3	2	3
Semester No	3	CO2	3	3	3	2	3	2	3	2	2	3	3
Teacher Name	Dr. Balraj Khobragade	CO3	2	2	3	3	3	2	2	3	3	2	2

Course Outcomes			CO4	3	3	2	3	2	3	3	2	2	2	3
CO1	label various types of cells	CO5	2	2	3	3	3	2	3	2	3	3	2	
CO2	their ultrastructure and function	Average	2.60	2.60	2.60	2.80	2.60	2.20	2.80	2.20	2.60	2.40	2.60	
CO3	Explain cell cycle phases and cell division													
CO4	Illustrate the chemistry and organisation of cytoskeleton													
CO5	cancer													

Class	TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91514		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Biological Techniques	CO1	1	2	3	2	1	3	1	3	2	1	3
Semester No	4	CO2	1	3	3	2	1	3	1	3	3	1	3
Teacher Name	Dr. Rahul Gaikwad	CO3	1	2	3	2	1	3	1	3	2	1	3
Course Outcomes		CO4	1	2	3	2	1	3	1	3	2	1	3
CO1	of various biomolecules.	CO5	1	3	3	2	0	3	1	3	2	1	3
CO2	various biochemical techniques.	Average	1.00	2.40	3.00	2.00	0.80	3.00	1.00	3.00	2.20	1.00	3.00
CO3	techniques and their specific applications.												
CO4	specific biomolecule from a mixture.												
CO5	staining of biological samples.												

Class	TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91524		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Mammalian Physiology and Endocrinology	CO1	3	2	3	2	2	2	2	2	3	3	3
Semester No	4	CO2	2	2	2	2	2	2	1	3	2	2	2
Teacher Name	Dr. Ivan Aranha	CO3	3	2	2	2	2	2	1	2	3	3	3
Course Outcomes		CO4	2	2	3	2	2	2	1	2	2	2	2
CO1	Understanding Mammalian Physiology & Endocrinology	CO5	2	2	2	2	2	2	1	3	3	3	3
CO2	Studying Nutrition, Circulation, Respiration	Average	2.40	2.00	2.40	2.00	2.00	2.00	1.20	2.40	2.60	2.60	2.60
CO3	Study of Excretion, Muscle contraction												
CO4	Understanding the Nervous excitation												
CO5	Knowledge of the reproduction process and hormone roles												

Class	TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91534		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Genetics and Molecular Biology	CO1	1	3	3	3	0	3	2	3	1	0	2
Semester No	4	CO2	1	3	2	3	0	3	1	3	1	0	2
Teacher Name	Ms. Anuja Bhalerao	CO3	1	3	2	2	1	3	1	3	1	2	2
Course Outcomes		CO4	1	3	2	2	1	3	1	3	1	0	2
CO1	molecular and genetic events controlling the basic	CO5	1	3	2	2	1	3	2	3	1	0	2
CO2	its application	Average	1.00	3.00	2.20	2.40	0.60	3.00	1.40	3.00	1.00	0.40	2.00

CO3	To learn basics of population and human genetics along with its
CO4	To understand the structure and function of RNA, DNA.
CO5	To learn the central dogma of cell at molecular level.

Class		TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91544			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Organic Evolution		CO1	3	3	2	3	2	2	3	2	2	3	3
Semester No	4		CO2	2	2	2	3	3	3	2	2	3	3	2
Teacher Name	Dr. Balraj Khobragade		CO3	3	2	3	2	2	2	3	3	3	2	3
Course Outcomes			CO4	3	3	3	2	3	2	3	2	2	3	3
	CO1	Explain origin of life and eukaryotic cell	CO5	2	2	3	3	2	2	3	2	2	2	3
	CO2	Explain various theories of evolution	Average	2.60	2.40	2.60	2.60	2.40	2.20	2.80	2.20	2.40	2.60	2.80
	CO3	Understanding the evidences of organic evolution												
	CO4	scale and animal distribution												
	CO5	Information regarding origin and evolution of man												

Class		TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91554			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	General Embryology		CO1	1	2	3	1	1	3	2	3	3	1	3
Semester No	4		CO2	1	2	3	1	0	3	1	3	2	1	2
Teacher Name	Ms. Geetanjali Devdhe		CO3	1	2	3	2	1	3	1	2	2	1	3
Course Outcomes			CO4	1	2	3	1	0	3	1	3	3	1	2
	CO1	Understanding basic concepts of involved in development of cell communication and regeneration.	CO5	1	2	3	2	0	3	2	2	3	1	2
	CO2		Average	1.00	2.00	3.00	1.40	0.40	3.00	1.40	2.60	2.60	1.00	2.40
	CO3	Understanding the concepts of gametogenesis, fertilisation.												
	CO4	gastrulation.												
	CO5	Studying the chick embryology in detail.												

Class		TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91564			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Medical Entomology		CO1	1	0	0	2	1	1	1	1	1	1	1
Semester No	4		CO2	1	0	0	2	1	1	1	1	1	1	1
Teacher Name	Dr. Pande G S		CO3	1	0	0	2	1	1	1	1	1	1	1
Course Outcomes			CO4	1	0	0	2	1	1	1	1	1	1	1
	CO1	Agricultural, medical, forest and veterinary entomology	CO5	1	0	0	2	1	1	1	1	1	1	1
	CO2	in insects, and role of insects in disease spread	Average	1.00	0.00	0.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	CO3	insects and their relation to human health												

CO4	morphology, distribution, role as vector and control
CO5	anatomy of insects

Class		TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91574			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Practicals Paper -I (ZY-331 ,ZY-332,ZY-341 and ZY-342)		CO1	2	1	1	1	2	1	1	2	2	1	2
Semester No	4		CO2	2	1	3	2	1	2	3	2	3	2	1
Teacher Name	Dr. RR Gaikwad, DG Bhalsing, Dr. Ivan Aranha, Ms. Geetanjali Devdhe		CO3	1	2	2	1	3	1	2	1	2	1	3
Course Outcomes			CO4	2	2	2	2	2	2	2	1	2	2	2
	CO1	Studying external characters and various systems in model organism.	CO5	2	2	2	2	2	2	2	2	2	1	2
	CO2	Preparation of fibre.	Average	1.80	1.60	2.00	1.60	2.00	1.60	2.00	1.60	2.20	1.40	2.00
	CO3	Study permanent histological slides of various tissues.												
	CO4	Preparation of Haemin crystals, to estimate blood glucose												
	CO5	To estimate blood clotting and clotting time												

Class		TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91584			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Practicals Paper -II (ZY-333 ,ZY-334,ZY-343 and ZY-344)		CO1	1	3	2	3	1	3	1	3	2	1	3
Semester No	4		CO2	1	3	2	3	1	3	1	3	3	1	3
Teacher Name	Anuja Bhalerao		CO3	2	1	2	1	1	1	2	1	2	2	1
Course Outcomes			CO4	2	2	1	2	2	1	2	2	1	1	2
	CO1	estimating enzyme activity, preparation of acid and alkali	CO5	3	3	2	3	3	2	2	3	3	2	3
	CO2	DNA paper model.	Average	1.80	2.40	1.80	2.40	1.60	2.00	1.60	2.40	2.20	1.40	2.40
	CO3	water												
	CO4	To estimate dissolved oxygen and carbon dioxide												
	CO5	Understand morphology and evolution of man and ape, types of fossils and their distribution, evidence of evolution, descent of man.												

Class		TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91594			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
Subject Name	Practicals Paper -III (ZY-335 ,ZY-336,ZY-345 and ZY-346)		CO1	1	1	0	2	1	1	1	1	1	1	1
Semester No	4		CO2	2	2	3	3	3	2	3	2	3	2	2
Teacher Name	Dr. Balraj Khobragade & Ms. Geetanjali Devdhe..& Dr. Pande G S		CO3	1	2	1	2	1	2	1	3	2	1	3
Course Outcomes			CO4	1	1	0	2	1	1	1	1	1	1	1
	CO1	and control measures of common parasites. To study rectal	CO5											

	CO2	mitosis and meiosis.	Average	1.25	1.50	1.00	2.25	1.50	1.50	1.50	1.75	1.75	1.25	1.75
	CO3	studying types of eggs, different embryonic stages, whole mounts of												
	CO4	different embryonic stages in which learning to recognize structures												
	CO5	human health. They will practically learn about identification												

CO-PO Mapping

		Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	
FY	FY	1	11151	1.00	0.80	0.00	0.20	1.00	1.20	0.20	0.60
		2	11152	0.00	0.60	0.60	0.40	1.40	1.00	1.00	1.00
		3	11153	0.60	0.80	0.20	0.60	0.80	1.00	0.60	1.00
		4	12151	1.00	0.80	0.00	0.20	1.00	1.20	0.20	0.60
		5	12152	0.00	1.00	0.20	1.00	0.00	1.40	0.00	1.00
		6	12153	0.60	0.60	0.60	0.40	0.40	0.80	0.40	0.80
SY	SY	1	81511	3.00	2.60	1.40	1.40	1.40	2.40	1.60	1.40
		2	81521	1.20	1.40	1.40	1.60	0.40	1.40	0.60	1.00
		3	81512	3.00	2.60	1.40	1.40	1.40	2.40	1.60	1.40
		4	81522	1.20	1.40	0.80	1.00	1.60	1.20	1.40	1.60
		5	81532	1.20	1.20	1.60	1.00	1.80	1.40	1.00	1.40
TY	TY	1	91513	2.00	1.40	1.00	0.00	0.00	3.00	1.00	2.00
		2	91523	2.20	1.80	1.80	2.00	2.00	2.00	1.80	1.80
		3	91533	1.00	2.60	2.60	2.40	0.20	3.00	1.40	2.40
		4	91543	2.20	2.40	2.60	2.40	2.40	2.40	2.40	2.60
		5	91553	1.00	0.00	0.00	2.00	1.00	1.00	1.00	1.00
		6	915B3	2.60	2.60	2.60	2.80	2.60	2.20	2.80	2.20
		7	91514	1.00	2.40	3.00	2.00	0.80	3.00	1.00	3.00
		8	91524	2.40	2.00	2.40	2.00	2.00	2.00	1.20	2.40
		9	91534	1.00	3.00	2.20	2.40	0.60	3.00	1.40	3.00
		10	91544	2.60	2.40	2.60	2.60	2.40	2.20	2.80	2.20
		11	91554	1.00	2.00	3.00	1.40	0.40	3.00	1.40	2.60
		12	91564	1.00	0.00	0.00	2.00	1.00	1.00	1.00	1.00
		13	91574	1.80	1.60	2.00	1.60	2.00	1.60	2.00	1.60
		14	91584	1.80	2.40	1.80	2.40	1.60	2.00	1.60	2.40
		15	91594	1.25	1.50	1.00	2.25	1.50	1.50	1.50	1.75

CO-PO ATTAINMENT

Percentage CO-PO ATTAINMENT

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
0.306667	0.245333	0	0.061333333	0.306667	0.368	0.061333	0.184
0	0.248	0.248	0.165333333	0.578667	0.413333	0.413333	0.413333
0.312	0.416	0.104	0.312	0.416	0.52	0.312	0.52
0.52	0.416	0	0.104	0.52	0.624	0.104	0.312
0	0.52	0.104	0.52	0	0.728	0	0.52
0.312	0.312	0.312	0.208	0.208	0.416	0.208	0.416
2.04	1.768	0.952	0.952	0.952	1.632	1.088	0.952
0.816	0.952	0.952	1.088	0.272	0.952	0.408	0.68
2.52	2.184	1.176	1.176	1.176	2.016	1.344	1.176
0.816	0.952	0.544	0.68	1.088	0.816	0.952	1.088
1.2	1.2	1.6	1	1.8	1.4	1	1.4
1.36	0.952	0.68	0	0	2.04	0.68	1.36
1.496	1.224	1.224	1.36	1.36	1.36	1.224	1.224
0.68	1.768	1.768	1.632	0.136	2.04	0.952	1.632
1.496	1.632	1.768	1.632	1.632	1.632	1.632	1.768
0.84	0	0	1.68	0.84	0.84	0.84	0.84
2.184	2.184	2.184	2.352	2.184	1.848	2.352	1.848
0.84	2.016	2.52	1.68	0.672	2.52	0.84	2.52
2.016	1.68	2.016	1.68	1.68	1.68	1.008	2.016
0.84	2.52	1.848	2.016	0.504	2.52	1.176	2.52
1.352	1.248	1.352	1.352	1.248	1.144	1.456	1.144
0.68	1.36	2.04	0.952	0.272	2.04	0.952	1.768
0.68	0	0	1.36	0.68	0.68	0.68	0.68
1.224	1.088	1.36	1.088	1.36	1.088	1.36	1.088
1.224	1.632	1.224	1.632	1.088	1.36	1.088	1.632
0.85	1.02	0.68	1.53	1.02	1.02	1.02	1.19

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
30.66667	30.66667	#DIV/0!	30.66667	30.66667	30.66667	30.66667	30.66667
#DIV/0!	41.33333	41.33333	41.33333	41.33333	41.33333	41.33333	41.33333
52	52	52	52	52	52	52	52
52	52	#DIV/0!	52	52	52	52	52
#DIV/0!	52	52	52	#DIV/0!	52	#DIV/0!	52
52	52	52	52	52	52	52	52
68	68	68	68	68	68	68	68
68	68	68	68	68	68	68	68
84	84	84	84	84	84	84	84
68	68	68	68	68	68	68	68
100	100	100	100	100	100	100	100
68	68	68	#DIV/0!	#DIV/0!	68	68	68
68	68	68	68	68	68	68	68
68	68	68	68	68	68	68	68
68	68	68	68	68	68	68	68
84	#DIV/0!	#DIV/0!	84	84	84	84	84
84	84	84	84	84	84	84	84
84	84	84	84	84	84	84	84
84	84	84	84	84	84	84	84
52	52	52	52	52	52	52	52
68	68	68	68	68	68	68	68
68	#DIV/0!	#DIV/0!	68	68	68	68	68
68	68	68	68	68	68	68	68
68	68	68	68	68	68	68	68
68	68	68	68	68	68	68	68

FY
SY
TY

CO-PSO MAPPING

	Course	PSO1	PSO2	PSO3
1	11151	0.40	1.20	0.60
2	11152	0.00	1.00	1.00
3	11153	1.00	1.00	0.60
4	12151	0.40	1.20	0.60
5	12152	0.00	0.00	1.00
6	12153	0.40	0.60	0.40
1	81511	1.40	1.40	1.40
2	81521	1.40	1.40	1.40
3	81512	1.40	1.40	1.40
4	81522	1.40	1.40	1.40
5	81532	1.00	1.00	1.00
1	91513	2.00	0.20	1.40
2	91523	1.60	1.80	2.20
3	91533	3.00	0.20	2.00
4	91543	2.60	2.40	2.40
5	91553	1.00	1.00	1.00
6	915B3	2.60	2.40	2.60
7	91514	2.20	1.00	3.00
8	91524	2.60	2.60	2.60
9	91534	1.00	0.40	2.00
10	91544	2.40	2.60	2.80
11	91554	2.60	1.00	2.40
12	91564	1.00	1.00	1.00
13	91574	2.20	1.40	2.00
14	91584	2.20	1.40	2.40
15	91594	1.75	1.25	1.75

CO-PSO ATTAINMENT

	Course	PSO1	PSO2	PSO3
	11151	0.122667	0.368	0.184
	11152	0	0.413333	0.413333
	11153	0.52	0.52	0.312
	12151	0.208	0.624	0.312
	12152	0	0	0.52
	12153	0.208	0.312	0.208
	81511	0.952	0.952	0.952
	81521	0.952	0.952	0.952
	81512	1.176	1.176	1.176
	81522	0.952	0.952	0.952
	81532	1	1	1
	91513	1.36	0.136	0.952
	91523	1.088	1.224	1.496
	91533	2.04	0.136	1.36
	91543	1.768	1.632	1.632
	91553	0.84	0.84	0.84
	915B3	2.184	2.016	2.184
	91514	1.848	0.84	2.52
	91524	2.184	2.184	2.184
	91534	0.84	0.336	1.68
	91544	1.248	1.352	1.456
	91554	1.768	0.68	1.632
	91564	0.68	0.68	0.68
	91574	1.496	0.952	1.36
	91584	1.496	0.952	1.632
	91594	1.19	0.85	1.19

Percentage CO-PSO ATTAINMENT

	Course	PSO1	PSO2	PSO3
	11151	30.66667	30.66667	30.66667
	11152	#DIV/0!	41.33333	41.33333
	11153	52	52	52
	12151	52	52	52
	12152	#DIV/0!	#DIV/0!	52
	12153	52	52	52
	81511	68	68	68
	81521	68	68	68
	81512	84	84	84
	81522	68	68	68
	81532	100	100	100
	91513	68	68	68
	91523	68	68	68
	91533	68	68	68
	91543	68	68	68
	91553	84	84	84
	915B3	84	84	84
	91514	84	84	84
	91524	84	84	84
	91534	84	84	84
	91544	52	52	52
	91554	68	68	68
	91564	68	68	68
	91574	68	68	68
	91584	68	68	68
	91594	68	68	68