

Academic Year	2020-21
----------------------	----------------

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

Department Name	Zoology
------------------------	----------------

Program Name	B.Sc.
---------------------	--------------

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 :	2020-21
------------------------	----------------

Class		F.Y.B.Sc.	Course Outcomes	Program Outcomes					PSOs		
Subject Code	11151	PO1		PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	
Subject Name	Animal Diversity - I	CO1	1	0	0	0	1	1	1	1	
Semester No	1	CO2	1	1	0	0	1	0	1	0	
Teacher Name	Dr. Rahul Gaikwad	CO3	1	1	0	1	1	0	1	0	
Course Outcomes		CO4	1	1	0	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	1	2	1
	CO2	The student understands the importance of classification of animals.	Average	1.00	0.80	0.00	0.20	1.00	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	PSO1	PSO2	PSO3	
Subject Name	Animal Ecology	CO1	0	1	1	1	2	0	1	1	
Semester No	1	CO2	0	0	1	0	2	0	1	1	
Teacher Name	Ms. Anuja Bhalerao	CO3	0	0	0	0	1	0	1	1	
Course Outcomes		CO4	0	1	0	0	1	0	1	1	
	CO1	beliefs, values and actions in relation to professional and societal and act on a lifestyle that conserves nature.	CO5	0	1	1	1	1	0	1	1
	CO2	and applies beyond the syllabi to understand the local lifestyle and and link it with human life for its betterment and for non-exploitation of leadership skills to promote betterment of environment.	Average	0.00	0.60	0.60	0.40	1.40	0.00	1.00	1.00
	CO3										
	CO4										
	CO5										

Class	F.Y.B.Sc.	Course Outcomes	Program Outcomes	PSOs
-------	-----------	-----------------	------------------	------

Subject Code	11153	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	
Subject Name	Practical Paper I	CO1	1	1	0	1	2	1	1	0	
Semester No	1	CO2	1	1	0	0	0	1	1	1	
Teacher Name	Dr. Rahul Gaikwad and Ms. Anuja Bhalerao	CO3	1	0	0	0	0	1	1	0	
Course Outcomes		CO4	0	1	0	1	1	1	1	1	
	CO1		0	1	1	1	1	1	1	1	
	CO2	of animals.	Average	0.60	0.80	0.20	0.60	0.80	1.00	1.00	0.60
	CO3	The student understands the importance of classification of animals.									
	CO4	Students will learn to classify animals using identification key.									
	CO5	Titration to estimate freshwater parameters such as dissolved oxygen, measures can be undertaken to resolve it will be studied.									

Class	F.Y.B.Sc.	Course Outcomes	Program Outcomes					PSOs			
Subject Code	12151		PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	
Subject Name	Animal Diversity - II	CO1	1	0	0	0	1	1	1	1	
Semester No	2	CO2	1	1	0	0	1	0	1	0	
Teacher Name	Dr. Rahul Gaikwad	CO3	1	1	0	1	1	0	1	0	
Course Outcomes		CO4	1	1	0	0	1	0	1	1	
	CO1	of animals.	CO5	1	1	0	0	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	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 promoter of life which he has achieved by learning, observing and									
	CO5										

Class	F.Y.B.Sc.	Course Outcomes	Program Outcomes					PSOs		
Subject Code	12152		PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
Subject Name	Cell Biology	CO1	0	1	0	1	0	0	0	1
Semester No	2	CO2	0	1	0	1	0	0	0	1
Teacher Name	Ms. Anuja Bhalerao	CO3	0	1	0	1	0	0	0	1
Course Outcomes		CO4	0	1	1	1	0	0	0	1
	CO1	functional unit of life.	CO5	0	1	0	1	0	0	1
	CO2	eukaryotic system and extrapolates the life to the aspect of	Average	0.00	1.00	0.20	1.00	0.00	0.00	1.00
	CO3	working mechanism and precision are responsible for our performance								
	CO4	membranes and structures. They are best studied with microscopy.								
	CO5	Overall functioning of cell at organelle level will be understood.								

Class	F.Y.B.Sc.	Course Outcomes	Program Outcomes					PSOs		
Subject Code	12153		PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
Subject Name	Practical Paper II	CO1	1	1	0	1	0	1	1	0

Semester No	2		CO2	1	1	0	1	0	1	0	0
Teacher Name	Dr. Rahul Gaikwad and Ms. Anuja Bhalerao		CO3	1	1	1	0	0	1	1	0
Course Outcomes			CO4	1	1	1	0	1	1	0	1
	CO1	The student will be able to understand classify and identify the diversity of	CO5	1	1	1	0	1	1	0	1
	CO2	The student understands the importance of classification of animals.	Average	1.00	1.00	0.60	0.40	0.40	1.00	0.40	0.40
	CO3	Economic importance of various insects will be studied.									
	CO4	stains used in cell biology.									
	CO5	Types of blood cells and mitosis mechanism will be visualised and studied.									

Academic Year :	2020-21
------------------------	----------------

Class		S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	23151	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Animal Diversity III	CO1	3	1	1	2	3	2	2	1	2	3	1	
Semester No	3	CO2	3	1	1	2	3	2	2	1	2	3	1	
Teacher Name	Dr. Avinash Vanjare	CO3	3	1	1	2	3	2	2	1	2	3	2	
Course Outcomes		CO4	3	1	1	2	3	2	2	1	2	3	3	
	CO1	Understanding the taxonomy of chordates	CO5	3	3	3	3	3	3	2	3	3	3	
	CO2	Understanding the diversity of chordates	Average	3.00	1.40	1.40	2.20	3.00	2.20	2.20	1.20	2.20	2.00	
	CO3	Understand morphology, anatomy and physiology of organisms												
	CO4	Understand ecology, economic importance and conservation of animals												
	CO5	Study in detail a model organism (Scoliodon)												

Class		S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	23152	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Applied Zoology I	CO1	2	2	2	3	2	3	1	2	2	2	2	
Semester No	3	CO2	2	2	2	3	2	3	1	2	2	2	2	
Teacher Name	Dr. Ivan Aranha	CO3	2	2	2	3	2	3	1	2	2	2	2	
Course Outcomes		CO4	2	2	2	3	2	3	1	2	2	2	2	
	CO1	To understand the basic life cycle of the honeybees, beekeeping tools and equipment. To learn about managing beehives for honey production and pollination.	CO5	2	2	2	3	2	3	1	2	2	2	
	CO2	To understand the basic information about fishery, cultural, and harvesting methods of fishes. To understand fish preservation techniques.	Average	2.00	2.00	2.00	3.00	2.00	3.00	1.00	2.00	2.00	2.00	
	CO3	To understand the biology, varieties of silkworms and the basic techniques of silk production and harvesting of cocoons.												
	CO4	To learn the different silkworm species and their host plants.												

CO5	To study types of agricultural pests and Major insect pests of agricultural importance. To study Pest control practices.
-----	--------------------------------------------------------------------------------------------------------------------------

Class		S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	23153	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Practical Paper I	CO1	2	2	2	3	2	3	1	2	3	2	2	
Semester No	3	CO2	2	2	2	3	2	3	1	2	3	2	2	
Teacher Name	Dr. Ivan Aranha	CO3	1	2	2	3	2	3	1	2	3	2	2	
Course Outcomes		CO4	2	2	2	3	2	3	1	2	3	2	2	
	CO1	To understand the origin and advancement of higher vertebrates (tetrapoda).	CO5	2	2	2	3	2	3	1	2	3	2	2
	CO2	To understand general characters of different groups of higher vertebrates.	Average	1.80	2.00	2.00	3.00	2.00	3.00	1.00	2.00	3.00	2.00	2.00
	CO3	The learner understands the biology, varieties of silkworms and the basic techniques of silk production.												
	CO4	The learner understands the types of agricultural pests												
	CO5	Major insect pests of agricultural importance and Pest control practices.												

Class		S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	24151	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Animal Diversity IV	CO1	3	1	1	2	3	2	2	1	2	3	1	
Semester No	4	CO2	3	1	1	2	3	2	2	1	2	3	1	
Teacher Name	Dr. Avinash Vanjare	CO3	3	1	1	2	3	2	2	1	2	3	2	
Course Outcomes		CO4	3	1	1	2	3	2	2	1	2	3	3	
	CO1	Understanding the taxonomy of chordates	CO5	3	3	3	3	3	3	2	3	3	3	
	CO2	Understanding the diversity of chordates	Average	3.00	1.40	1.40	2.20	3.00	2.20	2.20	1.20	2.20	3.00	2.00
	CO3	Understand morphology, anatomy and physiology of organisms												
	CO4	Understand ecology, economic importance and conservation of animals												
	CO5	Study in detail a model organism (Rat)												

Class		S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs		
Subject Code	24152	PO1		PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Applied Zoology II	CO1	2	2	2	3	2	3	1	2	3	2	2	

Semester No	4	CO2	2	2	2	3	2	3	1	2	3	2	2	
Teacher Name	Dr. Ivan Aranha	CO3	1	2	2	3	2	3	1	2	3	2	2	
Course Outcomes		CO4	2	2	2	3	2	3	1	2	3	2	2	
	CO1	The learner understands the basics of beekeeping tools, equipment, and managing beehives.	CO5	2	2	2	3	2	3	1	2	3	2	2
	CO2	The learner understands the basic information about fishery, cultural and harvesting methods of fish, and fish preservation techniques.	Average	1.80	2.00	2.00	3.00	2.00	3.00	1.00	2.00	3.00	2.00	2.00
	CO3	The learner understands the biology, varieties of silkworms, and the basic techniques of silk production.												
	CO4	The learner understands the types of agricultural pests												
	CO5	The learner understands the major insect pests of agricultural and control practices.												

Class	S.Y.B.Sc.	Course Outcomes	Program Outcomes								PSOs			
Subject Code	24153		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	
Subject Name	Practical Paper II	CO1	2	3	3	2	3	2	3	2	3	3	3	
Semester No	4	CO2	3	2	1	2	3	1	1	1	3	2	2	
Teacher Name	Dr. Avinash Vanjare	CO3	2	2	2	2	2	1	1	2	3	2	3	
Course Outcomes		CO4	2	3	3	3	2	3	3	3	3	2	3	
	CO1	Study snakes and venom	CO5	2	2	2	3	3	3	3	3	3	3	
	CO2	Museum study of birds, reptiles and mammals	Average	2.20	2.40	2.20	2.40	2.60	2.00	2.20	2.20	3.00	2.40	2.80
	CO3	Morphology, anatomical and physiological study of Rat												
	CO4	Study of aquaculture and Apiculture												
	CO5	Conduct of field visits/ Study tours												

Academic Year :	2020-21
------------------------	----------------

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	Dr. Rahul Gaikwad		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	To understand, classify and identify different types of 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	Learning the basic concepts of chemistry and its application in biological systems.	CO5	1	3	3	3	0	3	2	3	3	0	2
	CO2	Understanding the types of macromolecules essential for biological systems.	Average	1.00	2.60	2.60	2.40	0.20	3.00	1.40	2.40	3.00	0.20	2.00
	CO3	Studying the properties of water, concept of buffer and types of natural buffer systems present in living organisms.												
	CO4	Understanding the clinical and biological significance of essential biomolecules.												
	CO5	Learning the functional aspects of cell at biochemical level.												

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	Understanding Concepts of Environmental Biology	CO5	2	3	2	3	3	2	2	3	3	2	2
	CO2	Studying types of pollution	Average	2.20	2.40	2.60	2.40	2.40	2.40	2.40	2.60	2.60	2.40	2.40
	CO3	Study of Bioindicators												
	CO4	Understanding the Importance and causes of wildlife depletion												
	CO5	Knowledge of Toxicants of Public Health like Pesticides, fertilizers, food additives etc												

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 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
CO1	The students will be able to learn basics and scope of parasitology	CO5	1	0	0	2	1	1	1	1	1	1	1
CO2	The students will be able to learn types of parasites and hosts	Average	1.00	0.00	0.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CO3	The students will be able to learn morphology, life cycle, pathogenecity, and treatment of common parasites												
CO4	The students will be able to learn about host parasite relationship												
CO5	The students will be able to learn about arthropod parasites and their role as vector												

Class	TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	915B3	Course Outcomes	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	Understand general organisation of a typical cell; sketch and label various types of cells	CO5	2	2	3	3	3	2	3	2	3	3	2
CO2	Sketch and label various types of cell organelles and explain 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	explain the characteristics of cancer cell and theories of cancer												

Class	TYBSc	Course Outcomes	Program Outcomes								PSOs		
Subject Code	91514	Course Outcomes	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	To learn various types of techniques involved in assessment of various biomolecules.	CO5	1	3	3	2	0	3	1	3	2	1	3
CO2	To understand the basic principle and working mechanism of 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	To learn variations in all the different types of biochemical techniques and their specific applications.												

	CO4	To learn the separation techniques used for purification of specific biomolecule from a mixture.
	CO5	To study haematological techniques and histochemical 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	Dr. N.R. Somavanshi		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	This course aims to provide basic introduction regarding molecular and genetic events controlling the basic functioning of cell.	CO5	1	3	2	2	1	3	2	3	1	0	2
	CO2	To understand the basic principle of genetic inheritance and 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 application.												
	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	CO5	2	2	3	3	2	2	3	2	2	2	3
	CO2	Average	2.60	2.40	2.60	2.60	2.40	2.20	2.80	2.20	2.40	2.60	2.80
	CO3												
	CO4												
	CO5												

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	Dr. G. S. Pande	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	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												
	CO4												
	CO5												

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	CO5	1	0	0	2	1	1	1	1	1	1	1

	CO2	The students will be able to learn about Social organization 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	The students will be able to learn about common household insects and their relation to human health												
	CO4	The students will be able to learn about classification, morpholpogy, distribution, role as vector and control measure ofmedically important insects												
	CO5	The students will be able to learn about morphology and 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		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	Mount tissues like medulated nerve fibre and striated muscle 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 bleeding 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	Dr. N. R. Somavanshi, Dr. Ivan Aranha & Dr. Balraj Khobragade		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	Learning biochemical estimation of carbohydrates, estimating enzyme activity, preparation of acid and alkali solutions.	CO5	3	3	2	3	3	2	2	3	3	2	3
CO2	Biochemical estimation of DNA and RNA, preparation of 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	To study fresh water plankton and study physico chemical property of water												
CO4	To estimate dissolved oxygen and carbon dioxide												
CO5	Understand morphology and evolution of man and ape; types of fossils; animal adaptations; evidences of evolution and record zoogeographical distribution of animals.												

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. RR Gaikwad, Dr. Balraj Khobragade & 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	Students will be able to understand Life cycle, morphology and control measures of common parasites. To study rectal parasites of cockroach	CO5											
CO2	Detect mitochondria by staining; study different stages of 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 different embryonic stages in chick, learning temporary mounting of chick embryo.												
CO4	Students will be able to understand relation of insects to human health. They will practically learn about identification of vectors and also prepare their mouth parts												
CO5													

CO-PO Mapping

		Course	PO1	PO2	PO3	PO4	PO5	
FY	FY	1	11151	1.00	0.80	0.00	0.20	1.00
		2	11152	0.00	0.60	0.60	0.40	1.40
		3	11153	0.60	0.80	0.20	0.60	0.80
		4	12151	1.00	0.80	0.00	0.20	1.00
		5	12152	0.00	1.00	0.20	1.00	0.00
		6	12153	1.00	1.00	0.60	0.40	0.40
SY	SY	1	23151	3.00	1.40	1.40	2.20	3.00
		2	23152	2.00	2.00	2.00	3.00	2.00
		3	23153	1.80	2.00	2.00	3.00	2.00
		4	24151	3.00	1.40	1.40	2.20	3.00
		5	24152	1.80	2.00	2.00	3.00	2.00
		6	24153	2.20	2.40	2.20	2.40	2.60
TY	TY	1	91513	2.00	1.40	1.00	0.00	0.00
		2	91523	2.20	1.80	1.80	2.00	2.00
		3	91533	1.00	2.60	2.60	2.40	0.20
		4	91543	2.20	2.40	2.60	2.40	2.40
		5	91553	1.00	0.00	0.00	2.00	1.00
		6	915B3	2.60	2.60	2.60	2.80	2.60
		7	91514	1.00	2.40	3.00	2.00	0.80
		8	91524	2.40	2.00	2.40	2.00	2.00
		9	91534	1.00	3.00	2.20	2.40	0.60
		10	91544	2.60	2.40	2.60	2.60	2.40
		11	91554	1.00	2.00	3.00	1.40	0.40
		12	91564	1.00	0.00	0.00	2.00	1.00
		13	91574	1.80	1.60	2.00	1.60	2.00
		14	91584	1.80	2.40	1.80	2.40	1.60
		15	91594	1.25	1.50	1.00	2.25	1.50

CO-PO ATTAINMENT

Percentage CO-PO ATTAINMENT

PO1	PO2	PO3	PO4	PO5
1	0.8	0	0.2	1
0	0.6	0.6	0.4	1.4
0.6	0.8	0.2	0.6	0.8
1	0.8	0	0.2	1
0	1	0.2	1	0
1	1	0.6	0.4	0.4
2.52	1.176	1.176	1.848	2.52
1.68	1.68	1.68	2.52	1.68
1.8	2	2	3	2
2.52	1.176	1.176	1.848	2.52
1.512	1.68	1.68	2.52	1.68
2.2	2.4	2.2	2.4	2.6
1.36	0.952	0.68	0	0
1.496	1.224	1.224	1.36	1.36
0.84	2.184	2.184	2.016	0.168
1.848	2.016	2.184	2.016	2.016
0.68	0	0	1.36	0.68
2.184	2.184	2.184	2.352	2.184
1	2.4	3	2	0.8
2.4	2	2.4	2	2
1	3	2.2	2.4	0.6
2.184	2.016	2.184	2.184	2.016
0.68	1.36	2.04	0.952	0.272
0.68	0	0	1.36	0.68
1.8	1.6	2	1.6	2
1.8	2.4	1.8	2.4	1.6
1.25	1.5	1	2.25	1.5

PO1	PO2	PO3	PO4	PO5
100	100	#DIV/0!	100	100
#DIV/0!	100	100	100	100
100	100	100	100	100
100	100	#DIV/0!	100	100
#DIV/0!	100	100	100	#DIV/0!
100	100	100	100	100
84	84	84	84	84
84	84	84	84	84
100	100	100	100	100
84	84	84	84	84
84	84	84	84	84
100	100	100	100	100
68	68	68	#DIV/0!	#DIV/0!
68	68	68	68	68
84	84	84	84	84
84	84	84	84	84
68	#DIV/0!	#DIV/0!	68	68
84	84	84	84	84
100	100	100	100	100
100	100	100	100	100
100	100	100	100	100
84	84	84	84	84
68	68	68	68	68
68	#DIV/0!	#DIV/0!	68	68
100	100	100	100	100
100	100	100	100	100
100	100	100	100	100

CO-PSO MAPPING

CO-PSO ATTAINMENT

Percentage CO-PSO ATTAINMENT

FY
SY
TY

	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	1.00	0.40	0.40
1	23151	2.20	3.00	2.00
2	23152	2.00	2.00	2.00
3	23153	3.00	2.00	2.00
4	24151	2.20	3.00	2.00
5	24152	3.00	2.00	2.00
6	24153	3.00	2.40	2.80
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

	Course	PSO1	PSO2	PSO3
	11151	0.4	1.2	0.6
	11152	0	1	1
	11153	1	1	0.6
	12151	0.4	1.2	0.6
	12152	0	0	1
	12153	1	0.4	0.4
	23151	1.848	2.52	1.68
	23152	1.68	1.68	1.68
	23153	3	2	2
	24151	1.848	2.52	1.68
	24152	2.52	1.68	1.68
	24153	3	2.4	2.8
	91513	1.36	0.136	0.952
	91523	1.088	1.224	1.496
	91533	2.52	0.168	1.68
	91543	2.184	2.016	2.016
	91553	0.68	0.68	0.68
	915B3	2.184	2.016	2.184
	91514	2.2	1	3
	91524	2.6	2.6	2.6
	91534	1	0.4	2
	91544	2.016	2.184	2.352
	91554	1.768	0.68	1.632
	91564	0.68	0.68	0.68
	91574	2.2	1.4	2
	91584	2.2	1.4	2.4
	91594	1.75	1.25	1.75

	Course	PSO1	PSO2	PSO3
	11151	100	100	100
	11152	#DIV/0!	100	100
	11153	100	100	100
	12151	100	100	100
	12152	#DIV/0!	#DIV/0!	100
	12153	100	100	100
	23151	84	84	84
	23152	84	84	84
	23153	100	100	100
	24151	84	84	84
	24152	84	84	84
	24153	100	100	100
	91513	68	68	68
	91523	68	68	68
	91533	84	84	84
	91543	84	84	84
	91553	68	68	68
	915B3	84	84	84
	91514	100	100	100
	91524	100	100	100
	91534	100	100	100
	91544	84	84	84
	91554	68	68	68
	91564	68	68	68
	91574	100	100	100
	91584	100	100	100
	91594	100	100	100