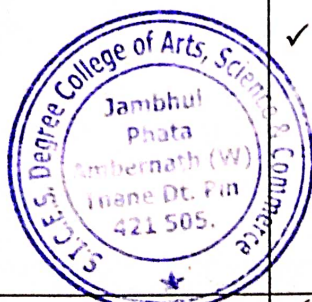


SICES DEGREE COLLEGE OF ARTS, SCIENCE & COMMERCE,
AMBERNATH(W)

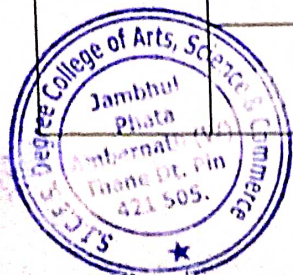
DEPARTMENT OF ZOOLOGY

PROGRAM OUTCOMES AND COURSE OUTCOMES

Programme BSc. Zoology (FY & SY)			
<u>Programme Specific Outcomes</u>			
<ul style="list-style-type: none"> ✓ Apply the knowledge of various branches of Zoology at FY & SY BSc and learner will enhance their interest and love for the fauna and its protection ✓ Develop positive attitude towards sustainable development of Nature ✓ Understand the unity of life with the rich diversity of organisms, their ecological, Genetic and evolutionary significance ✓ Develop skill to handle laboratory instruments, specimens, chemicals and acquire the basis of research. ✓ Acquire the scientific attitude of solving problems with critical thinking 			
Class	Semester	Course Name	Course outcomes
FYBSc	I	USZO101 Wonders of Animal World, Biodiversity and its Conservation	<ul style="list-style-type: none"> ✓ Acquire basic skills in the observation and study of nature, biological techniques, experimental skills and scientific investigation ✓ Identify and list out common animals and their wonders
		USZO102 Instrumentation and Animal biotechnology	<ul style="list-style-type: none"> ✓ Identify various potential risk factors to health of humans ✓ Explain the importance of genetic engineering ✓ Use tools of information technology for all activities related to zoology
		USZOP1(Practical of both courses)	<ul style="list-style-type: none"> ✓ Students will understand and identify the wonders of animal kingdom and inculcate observation habit ✓ Students will be skilled to select and operate suitable instruments for the studies. ✓ learners aware of risks involved in handling of different hazardous chemicals, sensitive (electrical/electronic) instruments and infectious biological specimens especially during practical sessions in the laboratory and
	II	USZO201 Ecology and	<ul style="list-style-type: none"> ✓ Explain the role and impact of different environmental conservation



		Wildlife Management	<ul style="list-style-type: none"> programmes ✓ Identify animals beneficial to humans
		USZO02 Nutrition, public health and hygiene	<ul style="list-style-type: none"> ✓ Students will develop character for Promoting optimum conservation of water ✓ encouragement for maintaining adequate personal hygiene, ✓ optimum use of electronic gadgets, avoiding addiction
		USZOP2Practical of both courses	<ul style="list-style-type: none"> ✓ Learner will able to identify common human parasite and pathogens ✓ Develop skill to Estimate environmental parameters like water CO2 and Salinity and also Biomolecule content of the food and realise the importance of them in diet ✓ Develop skill for histology
SYBSC	III	USZO301 Genetics	<ul style="list-style-type: none"> ✓ understand the importance of heredity, chromosome, nucleic acids ✓ sex-determination mechanisms and appreciate the regulation of gene expressions
		USZO302 Comparative Physiology	<ul style="list-style-type: none"> ✓ Explain various physiological changes in our bodies in evolutionary hierarchy ✓ Able to correlate with habit and habitat ✓ Analyze the impact of environment on our bodies
		USZOE303A ELECTIVE 1 Ethology, Parasitology and Economic Zoology	<ul style="list-style-type: none"> ✓ Realise the behaviour of person is under control of stimulus and understand the difference in behaviours of organism ✓ Aware about economically important animals ✓ Identify various methodology and perspectives of applied branches of zoology for the possibilities of self-employment.
		USZOP3 (Practical based on 3papers)	<ul style="list-style-type: none"> ✓ Develop skill to extract DNA & RNA from the given tissue ✓ Ability to carry out routine clinical analysis of blood and urine ✓ Hands on experience of smearing method of slide preparation and using micrometer for measurement of microbes
	IV	USZO401 Evolution, Population	<ul style="list-style-type: none"> ✓ Learner will gain insights into the origin of life and will analyse and critically view the different theories of evolution.



		Genetics and Scientific Attitude and Scientific Research	<ul style="list-style-type: none"> ✓ Student will know how the change in the gene pool leads to evolution of species ✓ The learner would develop qualities such as critical thinking and analysis ✓ The learner will imbibe the skills of scientific communication and he/she will understand the ethical aspects of research
		USZO402 Cell Biology	<ul style="list-style-type: none"> ✓ Learner would acquire insight into the composition of the transport mechanisms adopted by the cell and its organelles for its maintenance and composition of cell ✓ Learner will get insight into the structure of biomolecules and their role in sustenance of life
		USZOE1403 Elective 1 Comparative Embryology, Aspects of Human Reproduction, Pollution and its effect on organisms	<ul style="list-style-type: none"> ✓ Student will understand the concepts of Embryology and fertilization ✓ Learners will be able to understand human reproductive physiology → Learners will become familiar with advances in ART and related ethical issues. ✓ The learners will be sensitized about the adverse effects of pollution and measures to control it. ✓ Understand various genetic abnormalities and genetics control ✓ Aware about stem cell research and prenatal diagnostic techniques
		USZOP4((Practical based on 3papers)	<ul style="list-style-type: none"> ✓ Hands own experience for calculation of population density, WBC cell by smear preparation, Environmental parameters like DO , Soil parameters, Sound meter, refractometer, conductometer etc ✓ Students will learn to write abstract and bibliography and develop presentation skill by preparing and presenting by using PPT. ✓ Develop review writing skills from documentaries and programmes ✓ Develop skill for biochemical analysis and identify human genetic disorder by seeing symptoms ✓ Gain knowledge to Identify different development stages of organism in larval stages

