

Department of Zoology

Rajeev Gandhi Govt. P.G. College, Ambikapur

CROSS CUTTING ISSUES

Crosscutting issues relevant to Gender Equity, Human Value, Professional Ethics, Environmental Sustainable, any other into the curriculum.

Class/ paper	Course Type	Course Name	Course Content/relevant	GE	HV	PE	ES	other
M.Sc. I Sem/ paper -I	CCC (11)	Systematics, Biodiversity and Evolution	Unit IV-Biodiversity & their conservation and management- By understanding the particular aspects student will understand that each and every component of ecosystem is important, hence, develop essence of sustainable development.				✓	
I Sem/ paper -II	CCC (12)	Principle of Ecology	II unit- In this paper we study about all the Environmental Hazards and management, global warming, atmospheric Ozone, Acid rain and relationships between living organism and the physical , chemical and biological factor that are affecting our Earth and to get the solution at local level of all this complexities of environment.				✓	
I Sem/ paper -IV	OSC (14)	Social Outreach and Internship	By studying this paper student develop sense of responsibility towards society, become aware of ground level problems of society. Internship program enables them to become entrepreneur.		✓	✓		
I Sem/ paper -V	ECC (15)	Constitutionalism & Indian Political system	In this paper we get knowledge about constitution of our country and other countries too. It protects people's rights and liberty which is essential for a democratic democracy. Make people aware of their rights and laws, also shows the importance good governance. V unit-controller & account general, solicitor general, advocate, public service commission, finance commission are career making courses			✓		✓
	ECC	Entomology-Insect diversity, Society and Evolution Theory	In this paper we get knowledge about insect vector biology, diversity of insects, and economic importance of insects. Students get idea of forensic entomology which is a useful technique used in crime investigation.				✓	✓
	ECC	Entomology-Insect physiology, Toxicology &Vector Biology	Students get detailed understanding of pesticides like different classes of pesticides and pesticides' impact on health, so, they can learn pest management in agriculture in a sustainable manner.				✓	✓
M.Sc. II Sem/ paper -I	CCC (21)	Genetics and Cytogenetics	Unit-IV This paper provides knowledge about sex determination which explains that how offspring's gender is decided. So, it brings awareness in the society.	✓	✓			

II Sem/ paper -II	CCC (22)	Principle of gene Manipulation structure, function of gene	Unit-V Gene therapy helps in treatment of various chronic diseases like cancer		✓			
II Sem/ paper -III	CCC (23)	Tools and Techniques	Unit-IV & V Through this paper students can get knowledge about cryopreservation of cell, tissue, organ and various surgical techniques like ovariectomy, adrenalectomy, Indwelling of catheter which is useful in some human disease.		✓			
II Sem/ paper -IV	OSC (24)	Research Methodology & Computer Application: Basic	Through research student received information in general social welfare and issues relevant and can find solution of it knowledge of computer gives opportunities for job.			✓		
II Sem/ -	ECC	Environmental and forest Law	This paper reveals knowledge about the status of environmental education and public awareness and natural resources conservation.				✓	
II Sem/ Paper -V	ECC	Aquatic resources and their Conservation	Aquatic pollution, Waste management, explores knowledge about sustainable environment.				✓	
II Sem/ Paper -V	ECC	Aquaculture	Unit-V Knowledge of technology of aquaculture for fresh water and marine water provides job offer and opportunities for trade, also understanding of environmental consequences of aquaculture.			✓	✓	
M.Sc. III Sem/ Paper -I	CCC (31)	Animal Physiology	By learning physiological process in human being we can understand different abnormalities in our body.		✓			
III Sem/ Paper -II	CCC (32)	Developmental Biology	Unit-V This course gives knowledge about reproductive health in human and contraceptive methods which is very useful for controlling human population and In-vitro fertilization treats infertility in human.		✓			
III Sem/ Paper -III	CCC (33)	Immunology	By learning immunology we can understand Immune system and related disease. Study of ADIS clear the confusion related to this disease improvement of various vaccines and immune-therapeutic strategies.		✓	✓		
III Sem/ Paper IV	OSC (34)	Intellectual Property Rights	This particular paper illustrates the basic concept of IPR , Law of copyright, Patent and Trademark Which will be useful in the enrichment of professional ethics and human values.		✓	✓		
III Sem/ Paper -V	ECC (35)	Tribal studies	Tribal study is very important for understanding many issues like social, cultural and demographical. Many tribes in India are below poverty line/Unemployed. So by understanding their issues, we can bring them into main stream population.		✓			
III Sem/ paper -V	ECC	Molecular Endocrinology and Reproduction	By understanding the relation between environment and reproduction, impact of endocrine disruptors on human health and environment, they will learn the importance of sustainable development.				✓	
III Sem/ -	ECC	Molecular Endocrinology	By learning the concept of hormones & therapeutic agents students will be able to understand that how		✓			

Paper -V			many diseases can be controlled by hormone therapy. Hormones are also useful in assisted reproductive technology.					
M.Sc. IV Sem/ Paper -I	CCC (41)	Animal behavior	By learning the concept of motivation, learning, communication, social organization, and social behaviors of animal will develop sense of curiosity and empathy towards every living being.		✓			
IV Sem/ Paper -II	CCC (42)	Biology of Parasitism	In this paper illustrates various kind of pathogens and their respective diseases which aware people to take precaution and proper treatment.		✓			
IV Sem/ Paper III	CCC (43)	Molecular Cell Biology	Unit V provides knowledge of apoptosis, cancer and ageing which improve the understanding towards life.		✓			
IV Sem/ Paper -V	ECC (45)	Bio-molecules and Metabolic Regulation	This paper illustrates about bio-molecules like protein, lipid, and carbohydrates etc. that are essential constituents of our food system. These are helpful in understanding of molecular logics of life processes.		✓			
B.Sc. I Sem	DSC	Cell biology and Non-chordata	Unit II of this paper provide knowledge of cancer biology and elementary idea of immunity which is essential for understanding of life processes. Unit III-V describes about various life forms of invertebrates which shows tremendous animal diversity.		✓		✓	
B.Sc. II Sem	DSC	Chordata and Embryology	Unit-II Taxonomy and classification of chordates gives knowledge about evolutionary history. Study of poisonous and nonpoisonous snakes venom is helpful to identify types of poisonous snake.		✓		✓	
B.Sc. II Sem	GE	Food Nutrition & Health	This course covers the basic knowledge of balanced diet for people and role of food and nutrient in human health and deficiency diseases.		✓			
B.Sc. III Sem	DSC	Anatomy and Physiology	Comparative study of anatomy & physiology of vertebrates provides knowledge about evolution of vertebrate.		✓		✓	
B.Sc. III Sem	DSE	Fish & Fisheries	This course explains inland fisheries management and sustainable aquaculture. Knowledge of fisheries provides opportunities for making carrier. Sustainable aquaculture provides understanding towards sustainable development.		✓	✓	✓	
B.Sc. IV Sem	DSC	Vertebrate Endocrinology, Reproductive Biology, Behavior, Evolution and Applied Zoology	Unit-II Learning the mechanism of menstrual cycle & parturition help them to understand that womens undergo physiological changes so we should take care of that. Study of behavior of various animals promotes animal conservation. Methods of pest control are very helpful for farmers in agriculture.	✓	✓		✓	
B.Sc. IV Sem	DSE	Economic Zoology	Unit -I,II,III . Study of Sericulture, Apiculture, Poultry Keeping, Lac culture, Pisciculture, Pearl Culture is very beneficial to provide employment in different aspects.			✓	✓	

			Unit-IV .Environmental management system reveals knowledge about issues regarding environment and conservation and environmental protection.					
B.Sc. V Sem	DSC	Ecology, Environmental Biology, Toxicology, Microbiology and Medical Zoology	Unit-II Study of Ecology and environmental biology provides knowledge of conservation of natural resources and environmental impact assessment. Unit-III By learning toxicology and food poisoning, we get knowledge to prevent or reduce negative health outcomes. Unit-IV Industrial microbiology provides opportunities for employment.		✓	✓	✓	
B.Sc. V Sem	GEC	Biodiversity Conservation & Sustainable Development	Study of biodiversity conservation & sustainable development helps to understand importance of biodiversity and eco-friendly practices &also concept of green technology which promote sustainable environment.		✓		✓	
B.Sc. VI Sem	DSC	Genetics, Cell physiology, Biochemistry, Biotechnology and Biotechniques	Unit-I Study of sex determination and sex linkage helps to clear the concept of birth of girl or boy, which is very helpful fact of gender equity. Unit-IV Study of human genetics helps to understand various disorder and diseases related to chromosomal alternation which is beneficial for finding their treatment.	✓	✓			