

DEPARTMENT OF ZOOLOGY

Programme and Course Outcomes of Zoology

Course Outcomes of Zoology

Sr. No.	Class	Course	Course Outcome
1	F.Y.B.Sc.	(Course 1) Wonders Of Animal World, Biodiversity And Its Conservation	<ol style="list-style-type: none">1. Students would Know More About The Fascinating World Of Animals This Would Enhance Their Interest And Love For The Subject Of Zoology.2. Learners Would Appreciate Treasure Of Biodiversity, Its Importance And Hence and Contribute Their Best For Its Conservation3. Minds Of Learners Would Be Impulsed To Think Differently And Would Be Encouraged By That Act To Their Original Crude Ideas From The Field Of Biological Sciences.
2	F.Y.B.Sc.	(Course 2) Instrumentation And Animal Biotechnology	<ol style="list-style-type: none">1. Learners Would Work Safely In The Laboratory And Avoid Occurrence Of Accidents (Mishaps) Which Will Boost Their Scholastic Performance And Economy In Use Of Materials/Chemicals During Practical Sessions.2. Learners Would Understand Recent Advances In The Subject And Their Applications For The Betterment Of Mankind; And That The Young Minds Would Be Tuned To Think Out Of The Box.3. Students Will Be Skilled To Select And Operate Suitable Instruments For The Studies Of Different Components Of Zoology Of This Course And Also Of Higher Classes Including Research.
3	F.Y.B.Sc.	(Course: 3) Ecology And Wildlife Management	<ol style="list-style-type: none">1. This course will allow Learners o study about nature of Animal Population, Specific Factors Affecting Its Growth And Its Impact On The Population Of Other Life Form.2. Learners Will Grasp The Concept Of Interdependence And Interaction Of Physical, Chemical And Biological Factors In The Environment And Will Lead To Better Understanding About Implications Of Loss Of Fauna Specifically On Human Being, Erupting Spur Of Desire For Conservation Of All Flora And Fauna.3. Learners Would Be Inspired To Choose Career Options In The Field Of Wild Life Conservation, Research, Photography And Ecotourism.
4	F.Y.B.Sc.	Course: 4 Nutrition, Public Health And Hygiene	<ol style="list-style-type: none">1. Healthy Dietary Habits Would Be Inculcated In The Life Style Of Learners In Order To Prevent Risk Of Developing Health Hazards In Younger Generation Due To Faulty Eating Habits.2. Promoting Optimum Conservation Of Water, Encouragement For Maintaining Adequate Personal Hygiene, Optimum Use Of

Electronic Gadgets, Avoiding Addiction, Thus Facilitating Achievement Of The Goal Of Healthy Young India In True Sense.

3. Learners Will Be Able To Promptly Recognize Stress Related Problems At Initial Stages And Would Be Able To Adopt Relevant Solutions Which Would Lead To Psychologically Strong Mind Set Promoting Positive Attitude Important For Academics And Would Be Able To Acquire Knowledge Of Cause, Symptoms And Precautions Of Infectious Diseases.

5 S.Y.B.Sc. (Course-5) Fundamentals Of Genetics, Chromosomes And Heredity, Nucleic Acids

1. Learner Would Comprehend And Apply The Principles Of Inheritance To Study Heredity.
2. Learner Will Understand The Concept Of Multiple Alleles, Linkage And Crossing Over.
3. Learner Will Comprehend The Structure Of Chromosomes And Its Types.
4. Learner Will Understand The Mechanisms Of Sex Determination.
5. Learner Will Understand The Importance Of Nucleic Acids As Genetic Material.
6. Learner Would Comprehend And Appreciate The Regulation Of Gene Expressions.

6 S.Y.B.Sc. (Course-6) Nutrition And Excretion, Respiration And Circulation, Control And Coordination Of Life Processes, Locomotion And Reproduction

1. Learner Would Understand The Increasing Complexity Of Nutritional, Excretory And Osmoregulatory Physiology In Evolutionary Hierarchy.
2. Learner Would Be Able To Correlate The Habit And Habitat With Nutritional, Excretory And Osmoregulatory Structures.
3. Learner Would Understand The Increasing Complexity Of Respiratory And Circulatory Physiology In Evolutionary Hierarchy.
4. Learner Will Be Able To Correlate The Habit And Habitat Of Animals With Respiratory And Circulatory Organs.
5. Learner Would Understand The Process Of Control And Coordination By Nervous And Endocrine Regulation.
6. Learner Would Be Amazed By Various Locomotory Structures Found In The Animal Kingdom.
7. Learner Would Be Acquainted With Various Reproductive Strategies Present In Animals.

7 S.Y.B.Sc. (Course-7A) Elective Iethology, Parasitology, Economic Zoology

1. Learner Would Gain Insight Into Different Types Of Animal Behaviour And Their Role In Biological Adaptations.
2. Learner Would Be Sensitized To The Feelings Which Are Instrumental In Social Behaviour
3. Learner Would Understand The General Epidemiological Aspects Of Parasites That Affect Humans And Take Simple Preventive Measures For The Same.
4. Learner Would Comprehend The Life Cycle Of Specific Parasites, The Symptoms Of The Disease And Its Treatments.

		<ol style="list-style-type: none"> Learner Would Gain Knowledge On Animals Useful To Mankind And The Means To Make The Most Of It. Learner Would Learn The Modern Techniques In Animal Husbandry. Learner Would Pursue Entrepreneurship As A Career.
8	S.Y.B.Sc. (Course-7B) – Elective Maintenance Of Aquarium, Agricultural And Household Pests And Their Control , Amazing Animals	<ol style="list-style-type: none"> Learners will Develop Skills For Maintenance Of Aquarium And Budgeting For Setting Up An Aquarium And Ornamental Fish Farm. Learners will Study The Biology Of Ornamental Fishes, Its Food And Feeding And Their Transportation. Learner Will Gain Information On The Different Types Of Pests And Comprehend Various Aspects Of Agricultural And Household Pests And Its Economic Implications. Learner Will Derive Knowledge Of Pest Control Measures And Appliances Used For Plant Protection Against Pests. Learner Would Understand The Concept Of Life Time-Line. Learner Will Gain Knowledge Of And Develop Various Skills While Studying Amazing Animals.
9	S.Y.B.Sc. (Course-8) Origin And Evolution Of Life, Population Genetics And Evolution, Scientific Attitude, Methodology, Scientific Writing And Ethics In Scientific Research	<ol style="list-style-type: none"> Learner Will Gain Insights Into The Origin Of Life. Learner Will Analyse And Critically View The Different Theories Of Evolution. Learner Will Analyse And Critically View The Different Theories Of Evolution. 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
10	S.Y.B.Sc. (Course - 9) Cell Biology	<ol 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 Would Appreciate The Intricacy Of Endomembrane System. Learner Would Understand The Interlinking Of Endomembrane System For Functioning Of Cell The Learner Will Realize The Importance Of Biomolecules And Their Clinical Significance.
11	S.Y.B.Sc. (Course-10A) Elective Comparative Embryology, Aspects Of Human Reproduction, Pollution And Its Effect On Organisms	<ol style="list-style-type: none"> Learner Will Be Able To Understand And Compare The Different Types Of Eggs And Sperms Learner Will Be Able To Understand And Compare The Different Pre- Embryonic Stages

3. Learners Will Able To Understand Human Reproductive Physiology
4. Learners Will Become Familiar With Advances In Art And Related Ethical Issues.
5. The Learners Will Be Sensitized About The Adverse Effects Of Pollution And Measures To Control It.

12 S.Y.B.Sc. (Course-10B) Elective
2dairy Industry, Sericulture
And Aquaculture

1. Learner Would Gain Knowledge On The Functioning Of Various Aspects Of Dairy Industry, Indigenous, Exotic Cattle And Buffalo Breeds In India.
2. Learner Will Study Different Systems Of Breeding And Gain Information Regarding Various Aspects Pertaining To Housing Of Dairy Animals.
3. Learner Would Understand The Basics Of The Functioning Of Sericulture Industry And Its Scope In India.
4. Learner Shall Gain Knowledge On The Varieties Of Silkworms, Host-Plants And Aspects On Silk Extraction And The Diseases Afflicting Silk-Worms.
5. Learner Shall Understand The Aquaculture Practices And The Scope Of Fishery In India.
6. Learner Would Gain Knowledge Of Various Techniques Employed In Aquaculture Practices.

13 T.Y.B.Sc. Course 11 Taxonomy -
Invertebrates And Type
Study

- Learners Will Apprehend The Basis Of Classification And Modern Classification Up To Class Of The Lower Invertebrate Animals.
1. The Learners Will Be Familiarized With Classification Up To Phylum Nematoda Along With Their Examples.
 2. Learners Will Get An Idea Of Higher Groups Of Invertebrate Animal Life, Their Classification And Their Peculiar Aspects
 3. Learners Will Get An Idea Of General Characteristics And Details Of Invertebrate Animal Systems.

14 T.Y.B.Sc. Course 12 Haematology
And Immunology

1. The Learner Shall Comprehend Basic Haematology.
2. The Learner Will Be Able To Identify Various Components Of Haemostatic Systems.
3. The Learner Will Be Familiar With The Terminology Used And Diagnostic Tests Performed In A Pathological Laboratory.
4. The Learner Shall Be Acquainted With Diagnostic Approaches In Haematological Disorders.
5. The Learner Will Be Better Equipped For Further Pathological Course Or Working In A Diagnostic Laboratory.
6. The Learner Shall Comprehend The Types Of Immunity And The Components Of Immune System.
7. The Learner Will Realize The Significant Role Of Immune System In Giving Resistance Against Diseases.
8. The Learner Shall Understand Immunopathology And The Principles And Applications Of Vaccines.
9. The Learner Will Develop Basic Understanding Of Immunology Of Organ Transplantation

15 T.Y.B.Sc. Course 13 Histology, Toxicology, Pathology And Biostatistics	<ol style="list-style-type: none"> 1. Learner Would Appreciate The Well Planned Organization Of Tissues And Cells In The Organ Systems. 2. The Course Will Prepare Learner To Develop Broad Understanding Of The Different Areas Of Toxicology. 3. It Will Also Develop Critical Thinking And Assist Students In Preparation For Employment In Pharmaceutical Industry And Related Areas. 4. Learner Will Be Familiar With Various Medical Terminologies Pertaining To Pathological Condition Of The Body Caused Due To Diseases. 5. The Learner Will Be Able To Collect, Organize And Analyse Data Using Parametric And Non- Parametric Tests. 6. They Will Also Be Able To Set Up A Hypothesis And Verify The Same Using Limits Of Significance.
16 T.Y.B.Sc. Course 14 Anatomy And Developmental Biology	<ol style="list-style-type: none"> 1. Learner Will Be Able To Understand The Importance Of Various Types Of Epidermal And Dermal Derivatives Along With Their Functions. 2. Learner Will Be Able To Understand The Structure, Types And Functions Of Human Skeleton. 3. Learner Will Be Able To Understand The Types Of Long Limb Muscles, Its Arrangement And Their Role In Body Movements. 4. Learner Will Be Able To Understand The Processes Involved In Embryonic Development And Practical Applications Of Studying The Chick Embryology.
17 T.Y.B.Sc. Course 15 Taxonomy - Chordates And Type Study	<ol style="list-style-type: none"> 1. Learners Will Get An Idea Of Origin Of Chordates, Its Taxonomy Up To Class With Reference To Phylogeny And Their Special Features. 2. Learners Will Understand The Characteristic Features And Examples Of Class Of Reptilia, Aves And Mammalia. 3. Learners Will Get An Idea Of Vertebrate Animal Life After Studying One Representative Animal - Shark.
18 T.Y.B.Sc. Course 16 Physiology And Tissue Culture	<ol style="list-style-type: none"> 1. The Learner Shall Understand Fundamentals Of Enzyme Structure, Action And Kinetics. 2. The Learner Shall Appreciate The Enzyme Assay Procedures And The Therapeutic Applications Of Enzymes. 3. The Learner Shall Comprehend The Adaptive Responses Of Animals To Environmental Changes For Their Survival. 4. The Learner Shall Understand The Types And Secretions Of Endocrine Glands And Their Functions. 5. The Learner Shall Understand The Significance Of Tissue Culture As A Tool In Specialized Areas Of Research. 6. The Learner Will Appreciate Its Applications In Various Industries
19 T.Y.B.Sc. Course 17 Genetics And Bioinformatics	<ol style="list-style-type: none"> 1. Learner Shall Get An Insight Into The Intricacies Of Chemical And Molecular Processes That Affect Genetic Material.

2. The Course Shall Prepare Learner To Recognize The Significance Of Molecular Biology As A Basis For The Study Of Other Areas Of Biology And Biochemistry.
3. Learner Shall Also Understand Related Areas In Relatively New Fields Of Genetic Engineering And Biotechnology.
4. The Learner Shall Get Acquainted With The Vast Array Of Techniques Used To Manipulate Genes Which Can Be Applied In Numerous Fields Like Medicine, Research, Etc. For Human Benefit.
5. The Learner Shall Become Aware Of The Impact Of Changes Occurring At Gene Level On Human Health And Its Diagnosis.
6. Learner Shall Become Aware Of The Computational Point Of View Of Studying The Genomes

20 T.Y.B.Sc. Course 18 Environmental Biology And Zoopharmacognosy

1. Learner Will Understand The Different Factors Affecting Environment, Its Impact And Environment Management Laws.
2. Learner Will Be Able To Understand Various Methods For Wildlife Conservation.
3. Learner Will Be Able To Apply Knowledge To Overcome The Issues Related To Wildlife Conservation And Management.
4. Learner Will Understand The Paradigms Of Discovery And Commercialization Of Biological Resources And Knowledge Gained From Self-Medication Observed In Animals.
5. The Learners Will Become Acquainted With How And Why Different Animal Species Are Distributed Around The Globe.

21 T.Y.B.Sc. Course Code: USACEENT501 Applied Entomology

1. Learner Would Be Able To Classify Insect Up To Their Respective Orders.
2. Learner Would Understand Basis Of Classification.
3. Learner Would Understand The Basic Body Plan Of Insects.
4. Learner Would Be Able To Understand The Difference In The Life Cycles Of Insects.
5. Learner Would Understand Various Physiological Aspects In Insect With Their Speciality Of Usefulness And Harmfulness.
6. Learner Would Understand About Anatomy Of Typical Harmful Insects.
7. Learner Would Understand Life Processes Of Certain Harmful Insects.
8. Learner Would Understand The Various Ecological Importance Of Insects.
9. Learner Would Be Able To Construct Butterfly Gardens.
10. Learner Would Understand Need For Conservation Of Insects.
11. Learner Would Adopt Modern Rearing Techniques Of Honey Bees.
12. Learner Would Realize The Economic Scope Of Apiculture.
13. Learner Would Be Able To Correlate Growth Of Crop Production With The Pollinator Role Of Honey Bee.

14. Learner Would Be Introduced To Different Types Of Silkworms.
15. Learner Would Understand The Merit Of Modern Methods Of Sericulture.
16. Learner Would Understand Products Of Sericulture.

17. Learner Would Acquire Basic Knowledge Of Methodology Of Lac Culture
18. Learner Would Understand The Processing Techniques Of Stick Lac To Powder Lac.
19. Learner Would Understand The Commercial Uses Of Lac.

22 T.Y.B.Sc. Course Code:
USACEENT601
Commercial Entomology

1. Learner Would Be Introduced To The Merits And Demerits Of IPM.
2. Learner Would Be Able To Understand Different Methods Of Biological Control Of Insect Pest.
3. They Would Also Be Introduced The Insecticides Of Plant Origin
4. Learner Would Understand The Classification Of Insecticides On The Basis Of Mode Of Action Of Insecticides.
5. Learner Would Understand Specific Use Of Sprayer And Duster.
6. Lerner Would Understand The Feasibility Of Natural Insecticides Over Synthetic Insecticides.
7. Learner Would Be Made Aware About Economic Loss Caused By Insect Pest.
8. Learner Would Understand Type Of Urban And Domestic Insect Pest And Their Preventive Measures.
9. Learner Would Take More Interest In The Study Of Insects Due To Their Versatile Nature.
10. Learner Would Understand The Use Of Some Insects In The Investigation Of Crime (Forensic Science).
11. Learner Would Get Knowledge About Schemes To Avail Resources.
12. Learner Would Be Well Introduced About Various Funding Agencies And Guidelines To Apply For Subsidized Loan.
13. Learner Would Be Able To Understand Financial Entomology Based Projects.
14. Learner Would Familiarize With Basic Concepts In Accountancy.
15. Learner Would Understand And Apply Marketing Strategies.
16. Learner Would Learn To Manage And Distribute Products Upto The Satisfaction Of Market.

17. Learner Would Also Focus Attention On Branding Of Product.
