Poona District Education Association's

Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc Zoology

Name of Department: Zoology

Sr.No.	PO Number	Contents
1	PO1	Understand and be aware of relevant theories, paradigms, concepts and principles of Zoology.
2	PO2	Acquire the skills in handling scientific instruments, planning and performing in laboratory experiments.
3	PO3	Compare and contrast the characteristics of animals that differentiate them from other forms of life.
4	PO4	Apply the knowledge of Zoology to understand the complex life Processes and phenomena.
5	PO5	Explain the role of various biomolecules in living systems
6	PO6	Communicate scientific information through effective formal and informal methods generally used in sciences.
7	PO7	Understand the structure and functions of cell types
8	PO8	Acquire time management and self-management skills.
9	PO9	Relate the various abiotic factors with health of living forms and ecosystems.
10	PO10	Conduct basic scientific research and provide inputs for societal benefits.
11	PO11	Develop competence in basic sciences and in the content of the specific courses that constitute the principal knowledge of their degree.
12	PO12	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning.

Poona District Education Association's

Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: F. Y. B. Sc. Sem-I
Name of Subject: Animal Diversity I
Subject Code: ZO-111

Sr.No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Understand the importance of diverse group of animals.
2	CO2	Understands the importance of classification of animals and classifies them effectively using the six levels of classification.
3	CO3	Study of morphology, habit and habitat, and detail study of *Paramecium*.
4	CO4	Demonstrate anatomical and physiological attributes of each animal group and why these have led to their success.
5	CO5	Knows his crucial role in nature as a protector, preserver and promoter of life, which he has achieved by learning, observing and understanding life.

Poona District Education Association's

Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: F. Y. B. Sc. Sem-I
Name of Subject: Animal Ecology
Subject Code: ZO-112

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Identify and critically evaluate their own beliefs, values and actions in relation to professional and societal standards of ethics and its impact on ecosystem and biosphere due to the dynamics in population.
2	CO2	Understands and appreciates the diversity of ecosystems and applies beyond the syllabi to understand the local lifestyle and problems of the community.
3	CO3	To link the details of food chains, food webs and links it with human life for its betterment and for non-exploitation of the biotic and abiotic components.
4	CO4	Working in nature to save environment will help development of leadership skills to promote betterment of environment.
5	CO5	To Identify and critically evaluate their own beliefs, values and actions in relation to professional and societal standards of ethics and its impact on ecosystem and biosphere due to the dynamics in population.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: F. Y. B. Sc. Sem-I
Name of Subject: Zoology Practical Paper
Subject Code: ZO-113

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Understands the importance of classification of animals and classifies them effectively using the six levels of classification
2	CO2	To understand the differences and similarities in the various aspects of classification.
3	CO3	Explain various modifications in Invertebrate groups.
4	CO4	The study of relationship between living organisms and their environment.
5	CO5	To understand and evaluate natural resource issues and act on a lifestyle that conserves nature.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: F. Y. B. Sc. Sem-II
Name of Subject: Animal Diversity II
Subject Code: ZO-121

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	State the outline of animal classification of non-chordates
2	CO2	Categorize the diversity found in the invertebrate groups of animals like Arthropoda, Mollusca and Echinodermata.
3	CO3	Explain various adaptations in insects including mimicry and metamorphosis
4	CO4	Describe the morphology, habit and habitat, systematic position and various systems in Star fish.
5	CO5	Classify the higher invertebrate groups.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: F. Y. B. Sc. Sem-II
Name of Subject: Cell Biology
Subject Code: ZO-122

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Differentiate prokaryotic and Eukaryotic cells.
2	CO2	Describe the structure and functions of cell organelles.
3	CO3	Explain the principles of staining.
4	CO4	Explain the cell division process and its significance.
5	CO5	The cellular mechanisms and its functioning depend on endo-membranes and structures. They are best studied with microscopy.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: F. Y. B. Sc. Sem-II
Name of Subject: Zoology Practical Paper
Subject Code: ZO-123

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Identify various animals based on morphological features.
2	CO2	Prepare stained slides of mitosis and identify the cell division phases
3	CO3	Detect human blood group
4	CO4	Understand economic importance of vermicomposting unit
5	CO5	Experience the field visit and insect pest collection

Poona District Education Association's

Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: S. Y. B. Sc. Sem-III
Name of Subject: Animal Systematics and Diversity III
Subject Code: ZO-231

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	List the various animals in a given phylum and state the outline of animal classification of non-chordates and higher invertebrate groups.
2	CO2	The students will able to understand the complexity and understand different life functions of higher vertebrates
3	CO3	Explain various modifications in these groups and the need of the modification for survival.
4	CO4	The students will be able to understand the linkage among different groups of higher vertebrates.
5	CO5	Categorize the diversity found in the invertebrate groups of animals like Arthropoda, Mollusca and Echinodermata.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: S. Y. B. Sc. Sem-III
Name of Subject: Applied Zoology I
Subject Code: ZO-232

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Define the concepts of the applied subjects like Agricultural pest and Sericulture.
2	CO2	Identify different species of pests and species of silkworm.
3	CO3	Explain the tools and techniques used in Agricultural pest control and sericulture.
4	CO4	Explain the importance of Agricultural pest, their control and sericulture.
5	CO5	Describe the economic importance of silkworm.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: S. Y. B. Sc. Sem-III
Name of Subject: Zoology Practical Paper
Subject Code: ZO-233

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	The students will be able to understand, classify and identify the diversity and the complexity of higher vertebrates.
2	CO2	The students will be able to understand the linkage among different groups of higher vertebrates.
3	CO3	Identify different species of silkworm and types of agricultural pests, Major insect pests of agricultural importance and Pest control practices.
4	CO4	Understand sericulture management and economically important species of silkworms.
5	CO5	Describe the common agricultural pests from nearby area.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: S. Y. B. Sc. Sem-IV
Name of Subject: Animal Diversity IV
Subject Code: ZO-241

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	List the various vertebrate animals in a given class and the outline of chordate classification.
2	CO2	Identify poisonous and non-poisonous snakes.
3	CO3	Explain various modifications in the given group of animals and in avian group as well as migration and flight in birds.
4	CO4	Describe the morphology, habit and habitat. Systematic position and various systems in Scoliodon.
5	CO5	Categorize the diversity found in the vertebrate groups of animals like reptiles, birds and mammals.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: S. Y. B. Sc. Sem-IV
Name of Subject: Applied Zoology II
Subject Code: ZO-242

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Define the concepts of the applied subjects like Apiculture and Fisheries.
2	CO2	Explain the tools and techniques used in aquaculture and agricultural practices.
3	CO3	Describe the economic importance of honeybee and fish species commonly used in Apiculture, fishery business.
4	CO4	Select economically important species of *Apis* for honey production.
5	CO5	Illustrate management of the apiary and fisheries units.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: S. Y. B. Sc. Sem-IV
Name of Subject: Zoology Practical Paper
Subject Code: ZO-243

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Identify animals of higher groups in Invertebrates and Vertebrates.
2	CO2	Distinguish between poisonous and non-poisonous snakes
3	CO3	Explain the modifications and adaptations in animals.
4	CO4	Observe the various tools, crafts and gears used in Apiary and Fishery.
5	CO5	Illustrate management of the apiary and fisheries units
6	CO6	Describe External features and economic importance of freshwater and Marine water fishes and other aquaculture organisms
7	CO7	Experience the field visit at Fishery centre

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Pest Management
Subject Code: ZO-351

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Define pest management and describe the economic, ecological, and sociological benefits of IPM.
2	CO2	Understand problems resulting from misuse, overuse, and abuse of chemical pesticides and describe pesticide resistance and how it develops.
3	CO3	Identify ecological and biological characteristics important in development of pest populations.
4	CO4	Analyses and compare management tactics to determine the best approach to reducing pest populations, weeds, and disease presence.
5	CO5	Locate appropriate, scientifically valid sources of information on specific tactics to manage insect pests and diseases.
6	CO6	Describe different groups of pests and compare them to weeds and plant pathogens and know and how to develop an IPM program

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Histology
Subject Code: ZO-352

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Define the basic terms in histology.
2	CO2	List the various types of tissues.
3	CO3	Identify the histological peculiarities in various organs.
4	CO4	Explain the location, structure and functions of various organs.
5	CO5	Illustrate the histology of endocrine glands.
6	CO6	Diagrammatically represent the various organs.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Biological Chemistry
Subject Code: ZO-353

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Define the basic terms in biochemistry.
2	CO2	Basic concepts pH and Buffers and basic terms solution preparation.
3	CO3	To understand the chemical structures of carbohydrate, proteins, lipids and their biological and clinical significance.
4	CO4	Able to understand, interpret structure and importance of proteins, carbohydrates and lipids
5	CO5	Able to comprehend variations in enzyme activity and kinetics.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Genetics
Subject Code: ZO-354

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Define the terminologies in genetics.
2	CO2	Explain the concept of mutation.
3	CO3	Explain Mendel's principle, its extension and chromosomal basis and determination of gene action from genotype to phenotype and concepts of inheritance.
4	CO4	Basic Concepts in population genetics Mandolin population, gene pool, gene / allele, Frequency, chance mating (Panmictic mating). Hardy Weinberg law and its equilibrium.
5	CO5	Know Sex linked inheritance in human Colour – blindness. Hemophilia. Hypertrichosis.
6	CO6	Describe the chromosome anomalies and associated disorders

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Developmental Biology
Subject Code: ZO-355

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Identify the developmental stages
2	CO2	Describe the key events in early and systematic embryological development.
3	CO3	Describe the process of gametogenesis and chick development up to 96 hours of incubation and extra embryonic membranes.
4	CO4	Explain the theories of reformation, and concepts like growth, differentiation and reproduction.
5	CO5	Explain the principles and process of fertilization and cleavage.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Parasitology
Subject Code: ZO-356

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	The students will be able to learn about basics and scope of parasitology.
2	CO2	The students will be able to learn the types of host and parasite with examples.
3	CO3	The students will be able to learn about the morphology, life cycle, pathogenicity and treatment of common parasites (Protists and Platyhelminthes).
4	CO4	The students will be able to learn about host -parasite relationships and their effects on host body.
5	CO5	The students will be able to learn about the arthropod parasites and their role as vector.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Practicals in Zoology
Subject Code: ZO-357

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Describe different groups of pests and plant pathogens.
2	CO2	Describe different pests and diseases of honeybees. Detection of damage caused by pests.
3	CO3	Describe the beneficial insects, detection of damage caused by pests, plant disease and its intensity.
4	CO4	Explain and identify the histological peculiarities in various organs.
5	CO5	Explain the location, structure and functions of various organs.
6	CO6	Explain and illustrate the histology of endocrine and exocrine glands.
7	CO7	Illustrate the toxic effects of chemicals in the environment on human and his livestock.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Zoology Practical Paper 2
Subject Code: ZO-358

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Explain the enzyme activity and specific activity of an enzyme.
2	CO2	Detection of carbohydrates (monosaccharide's, disaccharides and polysaccharides) with the help of suitable tests.
3	CO3	The students will be able to understand, interpret structure and importance of proteins, carbohydrates and lipids.
4	CO4	Explain Mendel's principle, its extension and chromosomal basis of inheritance. Determination of gene action from genotype to phenotype and concepts of inheritance.
5	CO5	Detect human blood group and identify the human genetic traits.
6	CO6	Genetic disorders, structural & numerical alterations of chromosomes (chromosomal aneuploidy - Down, Patau, Edward, Turner and Klinefelter syndromes).

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Zoology Practical Paper – III
Subject Code: ZO-359

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Understands the basics about growth, differentiation, dedifferentiation, cell determination, cell communication, morphogenesis, induction and regeneration.
2	CO2	Describe the key events in early and systematic embryological development.
3	CO3	Describe the chick development up to 96 hours of incubation and extra embryonic membranes.
4	CO4	Describe the life cycle, pathogenicity, diagnosis and treatment of *Entamoeba histolytica* and *Plasmodium vivax* through permanent slides or microphotographs.
5	CO5	Describe the life cycle, pathogenicity, diagnosis and treatment of *Ascaris lumbricoides* and *Taenia solium* through specimen, permanent slides or microphotographs.
6	CO6	Convince the importance of hygiene with respect to epidemic diseases.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Aquarium Management

Subject Code: ZO-3510

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Explain exotic and endemic species of Aquarium Fishes and nutritional value of fish.
2	CO2	Describe characters and sexual dimorphism of Aquarium fishes - Guppy, Molly, Sword tail, Gold fish, Angel fish, Blue morph, Anemone fish, Butterfly fish and Fighter fish.
3	CO3	Describe Maintenance of Aquarium, common diseases of Aquarium fish and budget for setting up an Aquarium
4	CO4	Understand Physico-chemical parameters of water for fish culture, Fish preservation and Fish breeding techniques
5	CO5	The potential scope of Aquarium Fish Industry as a Cottage Industry.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-V
Name of Subject: Poultry Management

Subject Code: ZO-3511

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Explain exotic and endemic species of pultry and its nutritional value.
2	CO2	To understand the poultry breeding techniques.
3	CO3	To understand poultry rearing techniques
4	CO4	To understand feeding requirement and food ingredients.
5	CO5	To understand the poultry disease and their pathogens.
6	CO6	To understand market value of poultry products.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Medical & Forensic Zoology

Subject Code: ZO-361

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	To understand the basics principles of Medical and Forensic Zoology.
2	CO2	To understand the advancements in the field of Medical and Forensic Zoology.
3	CO3	To understand scientific methods in crime detection.
4	CO4	To understand modern tools, techniques and skills in forensic investigations.
5	CO5	To describe the fundamental principles and functions of forensic science and its significance to human society.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Animal Physiology
Subject Code: ZO-362

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	To describe various physiological organ-systems and their importance to the integrative functions of the human body.
2	CO2	Understand Concept of energy requirements and various aspects of digestive physiology.
3	CO3	Explain circulatory system with medical conditions
4	CO4	Understand Respiratory mechanism and gases transport and eliminations of waste materials from the body.
5	CO5	Understand structure, functions of muscles, formation of gametes and function of endocrine glands.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Molecular Biology

Subject Code: ZO-363

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Understand the Structure of DNA and RNA, as genetic material
2	CO2	Understand the Central Dogma of Molecular Biology
3	CO3	Explain the concept of gene regulation
4	CO4	Understand the DNA Damage and Repair
5	CO5	Develop basic understanding of structure-function relationships of nucleic acids and proteins.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Entomology

Subject Code: ZO-364

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Understand basic concepts in Entomology and its scope.
2	CO2	Learn morphology and anatomy and development process of Insects.
3	CO3	Explain various adaptations in insects including mimicry and metamorphosis
4	CO4	Identify disease causing insect vectors.
5	CO5	Know economically important insects and Pest management of harmful insects, design and implement pest controlling methods against pests.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Techniques in Biology

Subject Code: ZO-365

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Define the basic terms solution preparation
2	CO2	List the separation techniques.
3	CO3	Describe the techniques used in hematology.
4	CO4	Explain the principle of separation techniques.
5	CO5	Explain the procedure of preparing permanent histological slides.
6	CO6	Illustrate the working of microscopes.
7	CO7	Analyze the dimensions of the biological samples.
8	CO8	Justify the selection of fixatives for histological procedures.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Evolutionary Biology

Subject Code: ZO-366

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Define organic evolution and evolution of man.
2	CO2	Explain the theories of organic evolution.
3	CO3	Describe the concept of origin of life and theories of origin of life
4	CO4	Describe evolution of man.
5	CO5	Illustrate the presence of organisms at various geological time scales.
6	CO6	Apply the knowledge in relevant experimentations.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Zoology Practical Paper – I

Subject Code: ZO-367

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	To understand modern tools, techniques and skills in forensic investigations.
2	CO2	To describe the fundamental principles and functions of forensic science and its significance to human society.
3	CO3	Carry out routine analysis of given urine sample, determine serum urea, uric acid calcium
4	CO4	To examine hair morphology and determine the species to which the hair belongs and prepare slides of scale pattern of human hair.
5	CO5	Estimate haemoglobin, blood glucose level, differential count of blood.
6	CO6	Estimation of bleeding and clotting time.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Zoology Practical Paper – II

Subject Code: ZO-368

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Isolation of DNA from Bacteria / liver / Onion and staining of DNA and RNA
2	CO2	Able to study absorption spectra of isolated DNA
3	CO3	Describe principle & application of Spectrophotometer & PCR.
4	CO4	Illustrate the role of household insects in relation to human health.
5	CO5	Estimate hemoglobin, blood glucose level, differential count of blood cells.
6	CO6	Classify medically important insects.
7	CO7	Justify the significance of social organization in insects and choose the control measures of medically important insects.

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Zoology Practical Paper – II

Subject Code: ZO-369

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Use techniques like chromatography, spectrophotometry in biological experiments.
2	CO2	Observe different kind of cells under compound microscope and its measurement using micrometer scale or by image analysis software.
3	CO3	Tissue collection, fixation & block preparation
4	CO4	Sectioning, staining & mounting of animal tissues. Submission of any three permanent slides from three different organs
5	CO5	Identify the fossil types/ adaptations in animals, explain the stages of human evolution.
6	CO6	Elucidate the difference between ape and man.
7	CO7	Explain the evidences of evolution

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Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Environmental Impact Assessment.

Subject Code: ZO-3610

Sr. No.	CO Number	Contents
After successfully completing this course, students will be able to:		
1	CO1	Understand Importance of environment and explain definition and divisions of environment.
2	CO2	Describe types pollution and its impact on wildlife, natural resources, development.
3	CO3	Explain sustainable development, exploitation of natural resources, Concept of carrying capacity, Three pillars of Sustainability, UN 17 Sustainable Development Goals (SDGs)
4	CO4	Create awareness of Environmental Protection acts.
5	CO5	Understand Environmental Impact Assessment (EIA) and Stakeholders in EIA process.
6	CO6	Knows Overview of Scheme for Accreditation of EIA Consultant Organizations (NABET / QCI)

Poona District Education Association's

Annasaheb Magar College, Hadapsar, Pune - 28.

Name of Programme: B. Sc. (Zoology)
Name of Department: Zoology
Class: T. Y. B. Sc. Sem-VI
Name of Subject: Project

Subject Code: ZO-3611

Sr. No.	CO Number	Contents
Students should be encouraged to take up laboratory work, hands-on practical investigation and design experimental setup. Field work to be carried out under proper supervision and permissions from the concerned authorities.		
Possible key aspects of the project work -		
1.		Planning the project.
2.		Selecting a suitable title.
3.		Significance of the work.
4.		Hypothesis, Objectives.
5.		Reviewing the available literature.
6.		Methodology to be used and Outcomes of the Project work.
7.		Conclusion and Discussion and Future plans.
8.		Conclusion and Discussion and Future plans.
		Students should be made aware of plagiarism and research ethics.