Dr.V.S.KRISHNA GOVT. DEGREE COLLEGE
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NODAL RESOURCE CENTRE & AU CENTRE FOR RESEARCH
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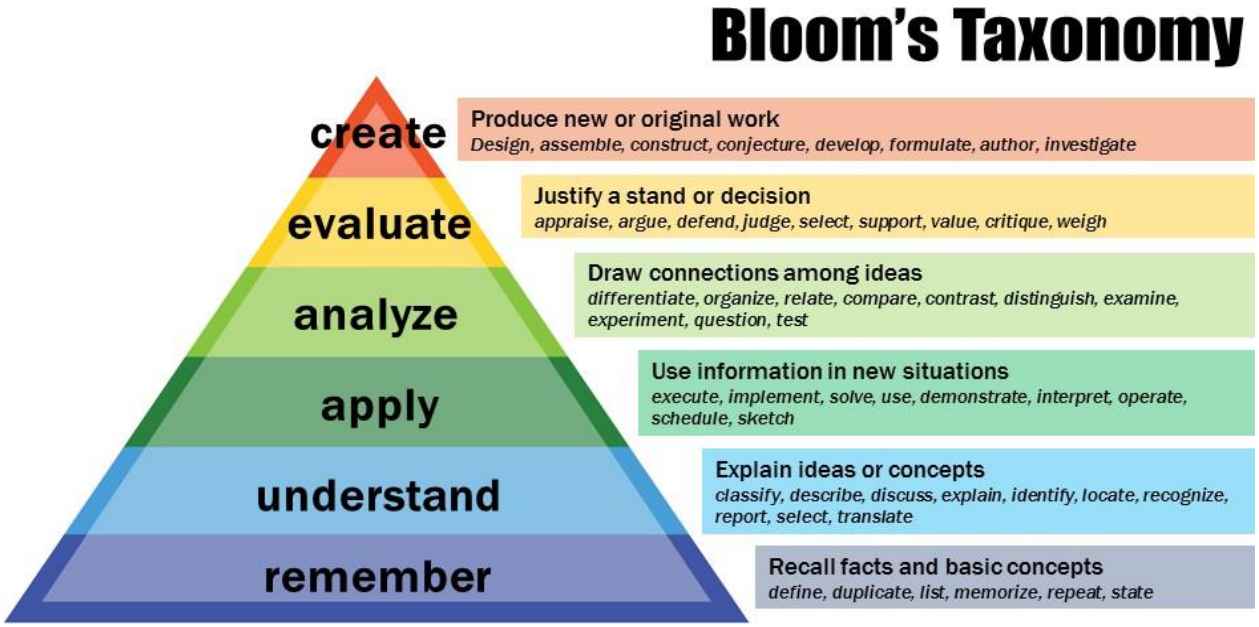
DEPARTMENT OF ZOOLOGY

2018-2019
POs & COs

Department of Zoology 0
Programme Name: **BSc. CBZ**

Levels of Bloom's Taxonomoy

Level01	**Knowlede/Remember**
Level02	**Understand**
Level03	**Application**
Level04	**Analyze**
Level05	**Evaluation**
Level06	**Create**



POs	Programme Outcomes
PO1	**Critical Thinking:** Ability to take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid,and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.
PO2	**Effective Communication:** Ability to speak, read, write, and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media, and technology.
PO3	**Social Interaction:** Ability to elicit views of others, mediate disagreements and help reach conclusions in group settings.
PO4	**Effective Citizenship:** Ability to demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
PO5	**Ethics:** Ability to recognize different value systems includingy our own, understand the moral dimensions of your decisions, and accept responsibility for them.
PO6	**Environment and Sustainability:** Ability to understand the issues of environmental contexts and sustainable Development.
PO7	**Employabilityskills:** Equipping graduates with the essential abilities and knowledge to excel in their choosen careers.
PO8	**Entrepreneurships kills:** Seeks to empower students with the competencies needed to be successful entrepreneours, enabling themto launch, operate,and innovate in their own businesses or entrepreneurial ventures.
PO9	**Self0directed and Life0long Learning:** Acquire the ability to engage in independent and life0long learning in the broadest context socio0technological changes.

Program Specific Outcomes (PSOs)

PSOs	Program Specific Outcomes (PSOs)
PSO1	Ability to apply the knowledge of Chemistry, Botany and Zoology in addressing the real0time problems of the world
PSO2	Understanding the key aspects of structure, physiology, reproduction and developmental aspects of plant and animal communities and Show empathy towards animals and consider them as his/her fellow0beings
PSO3	A step forward for the sustainable development of the nation by understanding the values embedded in studying the environment and ecology
PSO4	Life long learning in the broadest context of technological advancements in various fields such as bioinformatics, biotechnology, immunology, biochemistry etc.
PSO5	Understand the concepts of elective courses to create start-ups and apply the knowledge to get self-employed

SEMESTER – I :: Course Outcomes

Animal Diversity I - Biology of Non0chordates

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: Understand different levels of biological diversity through the systematic classification of invertebrate fauna	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Familiarize the student with the distinguishing characters of various phyla of Non0chordates by type studies and the study of specialized systems like canal system, water vascular system, torsion etc.	Level 1 (Knowledge) Level 3 (Application)	**2**
CO3: Understand the evolutionary relationships of different Invertebrate phyla with the study of connecting links like *Peripatus*, *Balanoglossus* and larval forms	Level 1 (Knowledge) Level 2 (Understanding) Level 4 (Analysing)	**2.7**
CO4: Knowledge on the economic importance of sponges, corals, coral reefs, pearl oysters etc.	Level 3 (Application) Level 5 (Evaluation)	**4**
CO5: Application of knowledge for the preservation of animals and taxa – level identification of invertebrates	Level 1 (Understanding) Level 3 (Applying) Level 4 (Analysing) Level 5 (Evaluation)	3.25

SEMESTER – 2 :: Course Outcomes

ANIMAL DIVERSITY II – BIOLOGY OF CHORDATES

Learning Outcomes: On Completion of the course, the students will be able to		Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1:	Acquire in - depth knowledge on the diversity of chordates and their systematic position.	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2:	Understand the characteristics and evolutionary importance of Prochordates	Level 1 (Knowledge) Level 2 (Understanding) Level 4 (Analyzing)	**3.5**
CO3:	Understanding the external features, internal anatomy and physiology of various classes of chordates by type studies	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2**
CO4:	Study and analyze the specialized features of various chordates such as types of scales and migration in fishes, identification of snakes, flight adaptations and migration in birds, Dentition in mammals etc.	Level 3 (Understanding) Level 4 (Analyzing)	**3.5**
CO5:	Taxonomic identification of chordates by observing preserved and taxidermic specimens of chordates	Level 2 (Understanding) Level 3 (Applying) Level 5 (Evaluation)	**3.3**

SEMESTER - 3

Paper - III : Cytology, Genetics and Evolution

Learning Outcomes: On Completion of the course, the students will be able to		Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1:	Understand the importance of cell as a structural and functional unit of life, differences between prokaryotic and eukaryotic cells and Viruses as connecting links between life and non0life	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2:	Thorough understanding of the structure and functions of various cell organelles and the role of nucleus and chromosomes in heredity	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO3:	Understanding the origin and evolution of the concept of heredity & variations by Mendelian experiments and Non0Mendelian principles of gene interactions	Level 1 (Knowledge), Level 2 (Understanding) Level 3 (Application)	**2**
CO4:	Study and analyze the importance of linkage and crossing over in bringing about variations and the role of cytoplasm and sex in inheritance	Level 3 (Application), Level 4 (Analysing)	**3.5**
CO5:	Understand and acquire knowledge on the origin of life and critical evaluation of various theories of evolution, forces of evolution and Origin of new species	Level 2 (Understanding) Level 4 (Analysing) Level 5 (Evaluation)	**3.7**

SEMESTER – 4

Paper IV : Embryology, Physiology and Ecology

Learning Outcomes: On Completion of the course, the students will be able to		Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1:	Understanding the key events in embryonic development from gametes to gastrulation	Level 1 (Knowledge) Level 2 (Understanding) Level 4 (Analyzing)	3.5
CO2:	Acquisition of knowledge on functioning of various physiological aspects of the body	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	2
CO3:	Critical analysis of various endocrine glands and associated disorders and role of hormones in controlling the reproduction in mammals	Level 1 (Knowledge) Level 2 (Understanding) Level 4 (Analysing)	2.3
CO4:	Understand and evaluate the key concepts in ecology with emphasis on role of biotic and abiotic factors, interactions among different species, concept of ecosystem, food chain and food web and community interactions and application of the concepts for a sustainable environment	Level 1 (Knowledge) Level 4 (Analysing) Level 5 (Evaluation)	3.3
CO5:	Critical study and evaluation of the underlying concept of distribution of animals on earth	Level 1 (Knowledge) Level 4 (Analysing) Level 5 (Evaluation)	3.3

Dr. V.S. KRISHNA GOVERNMENT DEGREE COLLEGE (A)
ZOOLOGY SYLLABUS FOR V SEMESTER
(w.e.f. 2018-19)

ZOOLOGY - PAPER - V

ANIMAL BIOTECHNOLOGY

Periods:60 **Max. Marks:100**

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: Understand the Principles of Cloning strategies, gain knowledge on enzymes and cloning vectors and their uses in gene cloning technologies	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Understand the gene delivery mechanisms, to acquire skills in PCR, Sanger's sequencing methods, blotting techniques	Level 1 (Knowledge) Level 2 (Understanding) Level 4 (Analysing)	**2.3**
CO3: To acquaint students with latest biotechnology techniques like cell culture, tissue culture, stem cell technology and hyridoma technology to foster a spirit of inquiry and orientation to research	Level 1 (Knowledge) Level 2 (Understanding) Level 4 (Analysing)	**2.3**
CO4: Understanding the assistive reproductive technologies and production of transgenic animals	Level 3 (Application) Level 4 (Analysing) Level 5 (Evaluation)	**4**
CO5: Understanding the applications of bio0technology in fields of Industry and Agriculture including animal cell and tissue culture.	Level 2 (Knowledge) Level 3 (Application) Level 4 (Analysing) Level 5 (Evaluation)	**3.5**

Dr. V.S. KRISHNA GOVERNMENT DEGREE COLLEGE (A)
ZOOLOGY SYLLABUS FOR V SEMESTER
(w.e.f. 2018-19)

ZOOLOGY - PAPER - VI

ANIMAL HUSBANDRY

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: Understanding the key concepts of poultry farming with reference to poultry housing and management of poultry chicken which makes the student self0employable	Level1(Knowledge) Level2(Understanding)	**1.5**
CO2: Knowledge on poultry feed and poultry diseases which helps the student to take up a start0up with a minimum investment for producing and supplying poultry feed	Level1(Knowledge) Level2(Understanding) Level3(Application) Level4(Analysing)	**2.5**
CO3: Knowledge on hatching, selection, testing of poultry eggs and sexing of chicken	Level1(Knowledge), Level2(Understanding)	**2.3**
CO4: Empower the student with the principles of dairy farming in terms of selection of site, dairy housing, identification of breeds and techniques involved in breeding so that he/she can get an employment in dairy industry	Level4(Analysing) Level5(Evaluation)	**4.5**
CO5: Understand and acquire knowledge on the care and management of dairy animals	Level2(Understanding) Level3(Application), Level4(Analysing) Level5(Evaluation)	**3.5**

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ZOOLOGY SYLLABUS FOR VI SEMESTER
(w.e.f. 2018-19)

ZOOLOGY –ELECTIVE PAPER:VII-(A)

IMMUNOLOGY

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: Overview of the immune system including organs, cells and types of Immunity	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Understand the concept of foreignness of antigen and receptors and factors associated with immunogenicity	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**1.5**
CO3: Understanding the role of antibodies (immunoglobulins) in immunity and applications of monoclonal antibodies	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO4: Understand and analyze the role of Major histocompatibility complexes and cytokines in controlling the growth and activity of other immune system cells and blood cells	Level 2 (Understanding) Level 4 (Analyzing)	**3.0**
CO5: Knowledge on the key concepts of immune disorders associated with autoimmunity and hypersensitivity, apply the knowledge in combating various diseases through vaccines and evaluate the health benefits thereof	**Level 1 (Knowledge)** Level 3 (Application) Level 5 (Evaluation)	**3.0**

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ZOOLOGY SYLLABUS FOR VI SEMESTER
(w.e.f. 2018-19)

ZOOLOGY – ELECTIVE PAPER: VII-(B)

CELLULAR METABOLISM AND MOLECULAR BIOLOGY

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: To understand the importance, basic structure and configuration of biomolecules of living organisms	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Understand the role of enzymes as biocatalysts in various metabolic activities and bioenergetics of carbohydrate metabolism	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO3: Appreciate the metabolic fate of lipids and proteins and transport properties of plasma membrane	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO4: Knowledge on the molecular concepts of cell physiology	Level 2 (Understanding) Level 4 (Analyzing)	**3.0**
CO5: Understand and evaluate the molecular basis of expression of genes in prokaryotes and eukaryotes and the key concepts of transcription and translation	**Level 1 (Knowledge)** Level 3 (Application) Level 5 (Evaluation)	**3.0**

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ZOOLOGY SYLLABUS FOR VI SEMESTER

(w.e.f. 2018-19)

ZOOLOGY - ELECTIVE PAPER: VII-(C)

BIOINFORMATICS

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: To understand the evolution of the concept of bioinformatics	Level 1 (Knowledge) Level 2 (Understanding)	1.5
CO2: Demonstrate different biological databases and tools	Level 1 (Knowledge) Level 2 (Understanding)	1.5
CO3: Knowledge on sequence alignment methods and application of the tools on biological samples	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	2.0
CO4: Analyze the phylogenetic tree algorithms and predict gene and protein structure	Level 2 (Understanding) Level 4 (Analyzing)	3.0
CO5: Apply the concepts of bioinformatics in drug discovery	Level 1 (Knowledge) Level 3 (Application)	2.0

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ZOOLOGY SYLLABUS FOR CLUSTER ELECTIVE VIII-A: VI SEMESTER

(w.e.f. 2018-19)

MEDICAL DIAGNOSTICS

Cluster Elective Paper: VIII-A-1

CLINICAL BIOCHEMISTRY

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: Knowledge on the preparation of different types of solutions and usage of different equipment	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Understand the clinical aspects of carbohydrates, proteins and lipids	Level1(Knowledge) Level2(Understanding)	**1.5**
CO3: Analysis of enzymes of clinical importance and diagnosis	Level 1 (Knowledge) Level 3 (Application) Level 4 (Analysing)	**2.7**
CO4: Understand the core concepts of importance of minerals and acid0base balance in health	Level 2 (Understand) Level 4 (Analysing)	**3.0**
CO5: Analysis and evaluation of stomach, kidney and heart related clinical parameters	Level 2 (Understanding) Level 4 (Analysing) Level 5 (Evaluation)	**3.7**

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ZOOLOGY SYLLABUS FOR CLUSTER ELECTIVE VIII-A: VI SEMESTER

(w.e.f. 2018-19)

MEDICAL DIAGNOSTICS

Cluster Elective Paper: VIII-A-2

HAEMATOLOGY

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	**Knowledge level (Bloom's Taxonomy)**	**Average level weightage**
CO1: Understanding the basic requirements for the conduct of laboratory preparation of blood	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Analysis of blood components and complete blood picture	Level 1 (Knowledge) Level 4 (Analysing)	**2.5**
CO3: Understand and Analyze the blood clotting mechanism and various haemotological disorders	Level 2 (Understanding) Level 3 (Application) Level 4 (Analysing)	**3.3**
CO4: Analyze the blood parameters using automation	Level 3 (Application) Level 4 (Analysing)	**3.5**
CO5: Understand the significance of blood donation and transfusion	Level 2 (Understanding) Level 3 (Application)	**2.5**

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ZOOLOGY SYLLABUS FOR CLUSTER ELECTIVE VIII-A: VI SEMESTER

(w.e.f. 2018-19)

MEDICAL DIAGNOSTICS

Cluster Elective Paper: VIII-A-3

CLINICAL MICROBIOLOGY

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	**Knowledge level (Bloom's Taxonomy)**	**Average level weightage**
CO1: Understanding the microenvironment around us	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Application of techniques of safety disposal of microorganisms and analyse the bacterial samples by staining methods	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO3: Application of techniques for identifying the microorganisms	Level 2 (Understanding) Level 3 (Application) Level 4 (Analysing)	**3.0**
CO4: Knowledge on fungi, viruses and associated diseases	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO5: Application and evaluation of antigen0antibody reactions by employing various serological tests	Level 2 (Understanding) Level 3 (Application) Level 5 (Evaluation)	**3.3**

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ZOOLOGY SYLLABUS FOR CLUSTER ELECTIVE VIII-B: VI SEMESTER

(w.e.f. 2018-19)

AQUACULTURE

Cluster Elective Paper: VIII-B-1

PRINCIPLES OF AQUACULTURE

Periods: 60 **Max. Marks: 100**

Learning Outcomes:On Completion of the course, the students will be able to	**Knowledge level (Bloom's Taxonomy)**	**Average level weightage**
CO1: Understanding the basics and history of aquaculture, identification of cultivable species and selection of site for aquaculture practices	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO2: Application of the knowledge of different types of aquaculture in various culture systems and practices	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO3: Create knowledge ecosystem in designing, construction and maintenance of aquafarms and appreciate the seed resources and nutritional requirements	Level 2 (Understanding) Level 3 (Application)	**2.5**
CO4: Understand the culture of carps and shrimps and application of the knowledge in starting bio start0ups and make students self0employable	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application) Level 6 (Create)	**3.0**
CO5: Application of culture aspects in cultivating sea weeds, shrimps, pearl oysters and ornamental fishes for aesthetic and economical purposes	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application) Level 6 (Create)	**3.0**

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ZOOLOGY SYLLABUS FOR CLUSTER ELECTIVE VIII-B: VI SEMESTER

(w.e.f. 2018-19)

AQUACULTURE

Cluster Elective Paper: VIII-B-2

AQUACULTURE MANAGEMENT

Periods: 60 **Max. Marks: 100**

Learning Outcomes:On Completion of the course, the students will be able to	**Knowledge level (Bloom's Taxonomy)**	**Average level weightage**
CO1: Understanding the concept of breeding of shrimps and management of shrimp hatchery	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Understanding the importance of water quality and soil quality in culture ponds and application of aeration and liming principles for improving the quality respectively	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO3: Knowledge on Live feeds used in aquafarms and application of the knowledge in feed formulation and preparation	Level 2 (Understanding) Level 3 (Application)	**2.5**
CO4: Understanding the health management of aqua farms, immunization and vaccination	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO5: Understanding economics, extension and marketing aspects of aquaculture application of genetics to fish reproduction and preservation of gametes	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**

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ZOOLOGY SYLLABUS FOR CLUSTER ELECTIVE VIII-B: VI SEMESTER

(w.e.f. 2018-19)

AQUACULTURE

Cluster Elective Paper: VIII-B-3

POST HARVEST TECHNOLOGY

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	**Knowledge level (Bloom's Taxonomy)**	**Average level weightage**
CO1: Understanding the importance of handling, temperature, radiation and spoilage in fish preservation	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Understanding the different types of traditional and advanced methods of fish preservation and application of the technology for self0employment	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO3: Application of the knowledge on the consumptive, economic and therapeutic value of fish products, fish byproducts and sea weed products	Level 2 (Understanding) Level 3 (Application) Level 5 (Evaluation)	**3.3**
CO4: Understanding the significance of sanitation at personal and industry level and quality control of fishery products	Level 1 (Knowledge) Level 2 (Understanding) Level 5 (Evaluation)	**2.7**
CO5: Evaluation of processing industries based on national and international standards and understanding the maintenance of quality in industries	Level 1 (Knowledge) Level 2 (Understanding) Level 5 (Evaluation)	**2.7**

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ZOOLOGY SYLLABUS FOR CLUSTER ELECTIVE VIII-C: VI SEMESTER

(w.e.f. 2018-19)

SERICULTURE

Cluster Elective Paper: VIII-C-1

GENERAL SERICULTURE, MULBERRY CULTIVATION AND MANAGEMENT

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: Understanding the history, status and prospects of Sericulture in India	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Understanding the morphology of mulberry plant in view of feeding the silk worm larvae	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO3: Analysis of physico0chemical properties of soil for mulberry cultivation	Level 2 (Understanding) Level 3 (Application) Level 4 (Analysing)	**3.0**
CO4: Application of irrigation, land farming, manuring and harvesting principles in mulberry management	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO5: Evaluation of diseases and pests of mulberry	Level 1 (Knowledge) Level 2 (Understanding) Level 5 (Evaluation)	**2.7**

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ZOOLOGY SYLLABUS FOR CLUSTER ELECTIVE VIII-C: VI SEMESTER

(w.e.f. 2018-19)

SERICULTURE

Cluster Elective Paper: VIII-C-2

BIOLOGY OF MULBERRY SILK WORM AND SILKWORM REARING TECHNOLOGY

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: Knowledge about the structure of and reproductive system of silk worm	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Understanding the physiology of silk worm, role of pheromones in mating and of hormones in development	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO3: Application aspects in the development of various silk worm rearing appliances	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO4: Knowledge about various races of silk worms, conditions of rearing and technology of silk worm rearing	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO5: Analysis of various disease causing agents and disease management in silk worm rearing technology	Level 1 (Knowledge) Level 2 (Understanding) Level 4 (Analhysing)	**2.3**

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ZOOLOGY SYLLABUS FOR CLUSTER ELECTIVE VIII-C: VI SEMESTER

(w.e.f. 2018-19)

SERICULTURE

Cluster Elective Paper: VIII-C-3

SILK TECHNOLOGY, SILK MARKETING AND EXTENSION

Periods: 60 **Max. Marks: 100**

Learning Outcomes: On Completion of the course, the students will be able to	Knowledge level (Bloom's Taxonomy)	Average level weightage
CO1: Knowledge about the properties of cocoon and processing cocoon	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO2: Understanding the applied aspects involved in reeling, silk throwing and weaving technology	Level 1 (Knowledge) Level 2 (Understanding) Level 3 (Application)	**2.0**
CO3: Knowledge and Understanding the policies, research aspects, sericulture network centres and financial agencies involved in sericulture management	Level 1 (Knowledge) Level 2 (Understanding) Level 4 (Analysing)	**2.7**
CO4: Understanding and analyzing the regulations and legislations related to the market aspects of sericulture	Level 1 (Knowledge) Level 2 (Understanding)	**1.5**
CO5: Analysis and Evaluation of cocoon and yarn marketing India and abroad	Level 1 (Knowledge) Level 2 (Understanding) Level 4 (Analysis) Level 5 (Evaluation)	**3.0**