

MARIS STELLA COLLEGE (AUTONOMOUS), VIJAYAWADA

A College with Potential for Excellence

NAAC Accredited & ISO 9001: 2015 Certified



PROGRAMME REGISTER

2020- 2023

DEPARTMENT OF ZOOLOGY

INDEX

S. No.	Content	Page No.
1.	UG Programmes Offered	3
2.	Programme Outcomes (POs): 2020-23	4
3.	Programme Specific Outcomes (PSOs): 2020-23	5
4.	Course Outcomes (COs): 2020-23	6
5.	Mapping of COs with PSOs &POs	11
6.	Mapping of Courses with PSOs	17
7.	Mapping of Courses with POs	19

UG PROGRAMMES OFFERED

S.No.	Programme	Combination offered	Programme Code
1	B.Sc	Botany, zoology and Chemistry (CBZ)	3

PROGRAMME OUTCOMES (POs) 2020-2023

At the end of the programme students will have:

PO1: Essential Knowledge:

Comprehensive discipline knowledge and understanding, the ability to engage with different schools of thought and to apply their knowledge in practice including in multi-disciplinary or multi-professional contexts.

PO2: Creative and critical thinking and problem solving abilities:

Be effective problem solvers, able to apply critical and evidence-based thinking to conceive innovative responses to future challenges.

PO3: Teamwork and communication skills:

Be able to convey ideas and information effectively to a range of audiences for a variety of purposes and contribute in a positive and collaborative manner to achieving common goals.

PO4: Motivation and preparation in life-long learning:

Exhibit life-long skills; broad based multiple career oriented general skills; self and field based learning skills; digital skills; social responsibility and compassionate commitment; preparedness for living, learning and working in any environment

PO5: Professionalism and leadership readiness:

Be able to engage in professional behaviour and have the potential to be entrepreneurial and take leadership roles in their chosen occupations and communities.

PO6: Intercultural and ethical competency:

Be responsible and effective global citizens whose personal values and practices are consistent with their roles as responsible members of society.

PO7: Self-awareness and emotional intelligence:

Be self-aware and reflective, flexible and resilient and act with integrity and take responsibility for their actions as empowered women.

PO8: Social responsibility:

Be sensitive to and demonstrate agency in matters of environment, gender and other social issues to promote an equitable society.

PROGRAMME SPECIFIC OUTCOMES (PSOs) 2020-2023

At the end of the programme students will be able to:

- PSO1:** Summarize the concepts, principles, classifications, theories and mechanisms.
- PSO2:** Discuss hypothesis, procedures and results to draw conclusions.
- PSO3:** Apply tools and techniques in solving problems, sample analysis and production.
- PSO4:** Develop communicative competence, creative and critical thinking, practical, technical and employability skills, social sensibility and responsibility.

Course Outcomes (COs) 2020-2023

COURSE OUTCOMES (COs)

1	I	20ZLCCA N13	Animal Diversity- Biology of Non- chordates	CO1: Demonstrate the taxonomic position of non-chordates in an animal Kingdom.
				CO2: Classify the invertebrates up to class level based on their unique characters.
				CO3: Appreciate the process of evolution from phylum Protozoa to Phylum Echinodermata.
				CO4: Comprehend the advanced phyla Annelida to Hemichordate on the basis of life processes.
				CO5: Develop skills in identification of the beneficial and non-beneficial organisms, culturing methods of beneficial organisms (Vermiculture, Sericulture, shellfish cultures) and to get employment
2	I	20ZLP1S N12	Study of Non- chordates - Practical	CO1: Identify animals based on special identifying characters
				CO2: Identify animals based on special identifying characters
				CO3: Maintain a neat, labeled record of identified museum specimens
3	II	20ZLCCA C23	Animal diversity- Biology of Chordate s	CO1: The difference between various species and the evolution of complexity in each system & strong foundation on systematics and phylogeny of various vertebrate phyla.
				CO2: critical understanding how endoskeleton changed from a notochord to vertebral column
				CO3: Examine the diversity and Physiological activities of higher animals.
				CO4: The economic importance of commercially important animals and their rearing methodologies –Aquaculture and acquire skill through Fishery by-products and preservation methods.
				CO5: Develop Skills and employment required in aquaculture (Fisheries and fish farms).
4	II	20ZLP2S C22	Study of Chordate s - Practical	CO1: Understand the taxidermic and other methods of preservation of chordates
				CO2: Identify chordates based on special identifying characters and classification.
				CO3: Draw internal anatomy of animals through demo or virtual dissections pics.
5	III	20ZLCC CG33	Cell & Molecular biology, Genetics & Evolution	CO1: Understand the basic unit of all living organisms and to differentiate the structures and functions of various cell organelles present in a eukaryotic cell
				CO2: Appreciate the central dogma of cell and molecular biology and flow of genetic information from DNA to proteins.
				CO3: Have sound knowledge on the concepts of gene, gene interaction, hereditary and variations.

				<p>CO4: Articulate sex determination, human karyotyping, pedigree analysis and genetic disorders</p> <p>CO5: Comprehend the origin of life, process of evolution, forces operating in evolution of new species and apply the same to develop new and advanced varieties of animals for the benefit of the society</p>
6	III	20ZLP3C G32	Cell & Molecular biology, Genetics & Evolution - Practical	<p>CO1: Prepare slides on different phases of cell division by experimentation</p> <p>CO2: Develop skills on human karyotyping and identification of chromosomal disorders</p> <p>CO3: Apply the basic concept of inheritance for applied research, Identify Phylogeny Evolution of animals</p>
7	IV	20ZLCCP E43	Physiology, Cellular metabolism & Embryology	<p>CO1: Understand the functions of important animal physiological systems and metabolism with a special knowledge of hormonal control of human reproduction</p> <p>CO2: Describe the structure, classification and chemistry of biomolecules and enzymes responsible for sustenance of life in living organisms.</p> <p>CO3: Develop a broader understanding of the basic metabolic activities pertaining to catabolism and anabolism of various biomolecules.</p> <p>CO4: Foresee the key events in early embryonic development starting from the formation of gametes up to gastrulation and formation of primary germ layers.</p> <p>CO5: Gain proficiency in laboratory techniques in biochemistry and orient them to apply the scientific method to the processes of experimentation and hypothesis testing.</p>
8	IV	20ZLP4P E42	Physiology, Cellular metabolism & Embryology - Practical	<p>CO1: Recognize and interpret human health based on the composition of blood cells</p> <p>CO2: Impart skills on handling of instruments to demonstrate various activities of enzyme in vitro</p> <p>CO3: Explanation of sections- histological slides.</p>
9	IV	20ZLCCI B43	Immunology & Animal Biotechnology	<p>CO1: Acquire a complete concept on immunity and immune systems.</p> <p>CO2: Through practice with lab techniques and procedures</p> <p>CO3: Know about antigens and antibodies and interactions</p> <p>CO4: Understand the techniques of Animal Biotechnology</p>

				CO5: Knowledge on the PCR and Applications of Animal Biotechnology.
10	IV	20ZLP5I B42	Immunology & Animal Biotechnology - Practical	CO1: Differentiate immune organs and Immune techniques.
				CO2: Hands on experience –Chromatography, Blotting techniques
				CO3: Preparation of culture media
11	V/VI	20ZLSEC 11SA3	Sustainable Aquaculture Management	CO1: Evaluate the current status of aquaculture at the National level.
				CO2: Classify the different types of ponds used in aquaculture
				CO3: Demonstration of induced breeding techniques of Carp fishes.
				CO4: Acquire critical knowledge on commercial importance of shrimps
				CO5: Identification of fin and shell fish diseases.
12	V/VI	20ZLP61 1SA2	Sustainable Aquaculture Management - Practical	CO1: Laboratory identification of the characters Indian Major carps.
				CO2: Estimate physio - chemical characteristics of water used for aquaculture
				CO3: Visiting a Hatchery/Farm/ Aqua diagnostic center to examine the diseases of fin and shell fish.
13	V/VI	20ZLSEC 12PT3	Post Harvest Technology of Fish and Fisheries	CO1: Identify the types of preservation methods employed in aquaculture
				CO2: Choose the suitable Processing methods in aquaculture
				CO3: Maintain the standard quality control protocols laid down in aqua industry
				CO4: Identify the best Seafood quality assurance system
				CO5: Understand the Quality Assurance, Management and Certification
14	V/VI	ZOZLP71 2PT2	Post Harvest Technology of Fish & Fisheries - Practical	CO1: Identify the quality of aqua processed products.
				CO2: Determine the quality of fishery by products.
				CO3: Analyze the protocols of aqua processing methods
15	V/VI	20ZLSEC 21PF3	Poultry Farming Management- I	CO1: Evaluate the status of Indian Poultry Industry
				CO2: Explain the Scientific Poultry keeping
				CO3: Inspect the different breeds of chicken

				CO4: Learning about desi and indigenous breeds
				CO5: Knowledge about Central Avian Research Institute
16	V/VI	20ZLP62 1PF2	Poultry Farming Management- I - Practical	CO1: Identify different types of Poultry rearing practices
				CO2: Evaluate the efficacy of different types of poultry practices in maximizing yield
				CO3: Understand the importance of different hybrid breeds in poultry
17	V/VI	20ZLSEC 22PP3	Poultry Production & Management-II	CO1: Suggest measure for Health care in Poultry
				CO2: Evaluate the economics of poultry production
				CO3: Elaborate the poultry Breeder flock management
				CO4: Hatchery Practices- Management principles of incubation
				CO5: Fertility disorder- etiology, diagnosis and corrective measures
18	V/VI	20ZLP72 2PP2	Poultry Production & Management-II - Practical	CO1: Identify Poultry diseases by observation
				CO2: Analyze Poultry establishment feasibility
				CO3: Understand the maintenance of Poultry Records
19	V/VI	20ZLSEC 31LM3	Live Stock Management-I	CO1: Relate the anatomy of udder with letdown of milk
				CO2: Identify and manipulate the reproductive behavior of cattle
				CO3: Inspect the economics of dairy farming
				CO4: r-DNA technology-Cloning
				CO5: Awareness on cross breeding of cattle and grading up of buffaloes.
20	V/VI	20ZLP63 1LM2	Live Stock Management-I Practical	CO1: Examine the points of dairy cow
				CO2: Understand the behavioral changes of cow during the reproductive period
				CO3: Differentiate the merits and demerits of cross breeds in cattle
21	V/VI	20ZLSEC C32LM3	Live Stock Manage	CO1: Identify and suggest the suitable housing system for the dairy farming
				CO2: Understand management practices for the dairy

			ment-II	farming
				CO3: Learn the process of milk pasteurization
				CO4: Understand the manufacturing strategies and different products
				CO5: Learn about Different products
22	V/VI	20ZLP73 2LM2	Live Stock Manage ment-II - Practical	CO1: Design a model of dairy farm layout
				CO2: Understand procedure of milk pasteurization at milk processing centers
				CO3: Identify various important management practices in dairy farming
23	II	20SDCD T2	Dairy Technol ogy	CO1: Explain the pre-requisites for starting a dairy farm
				CO2: Identify breeds of cattle and demonstrate care and management norms.
				CO3: Summarize the methods of milk collection, storage and entrepreneurship in dairy farming.
24	III	20SDCP F2	Poultry Farming	CO1: Outline the basics of poultry farming
				CO2: Explain the feed and livestock health management
				CO3: Summarize the methods of harvesting eggs and sanitation of farms.
25	III	20LSCH H2	Health and Hygiene	CO1: Outline the importance of health, hygiene and nutrition for a healthy life.
				CO2: Summarize the health care programmes of India
				CO3: Explain community and personal health & hygiene measures.

Mapping of COs with PSOs & POs

S.No.	Sem	Course Code	Course Title	COs	PSOs	POs
1	I	20ZLCCAN13	Animal Diversity- Biology of Non-chordates	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
2	I	20ZLP1SN12	Study of Non-chordates - Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
3	II	20ZLCCAC23	Animal Diversity - Biology of Chordates	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
4	II	20ZLP2SC22	Study of Chordates - Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
5	III	20ZLCCCG33	Cell & Molecular	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4

			Biology, Genetics and Evolution	CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
6	III	20ZLP3CG32	Cell & Molecular Biology, Genetics and Evolution - Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
7	IV	20ZLCCPE43	Physiology, Cellular Metabolism & Embryology	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
8	IV	20ZLP4PE42	Physiology, Cellular Metabolism & Embryology – Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
9	IV	20ZLCCIB43	Immunology & Animal Biotechnology	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4

				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
10	IV	20ZLP5IB42	Immunology & Animal Biotechnology - Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
11	V/VI	20ZLSEC11SA3	Sustainable Aquaculture Management	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
12	V/VI	20ZLP611SA2	Sustainable Aquaculture Management – Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
13	V/VI	20ZLSEC12PT3	Postharvest Technology of Fish & Fisheries	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4

				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
14	V/VI	20ZLP712PT2	Postharvest Technology of Fish & Fisheries - Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4
15	V/VI	20ZLSEC21PF3	Poultry Farming & Management I	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
16	V/VI	20ZLP621PF2	Poultry Farming & Management I - Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
17	V/VI	20ZLSEC22PP3	Poultry Production & Management II	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7

				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
18	V/VI	20ZLP722PP2	Poultry Production & Management II- Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
19	V/VI	20ZLSEC31LM3	Livestock Management I	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
20	V/VI	20ZLP631LM2	Livestock Management I- Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
21	V/VI	20ZLSEC32LM3	Livestock Management II	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO4	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO5	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7

22	V/VI	20ZLP732LM2	Livestock Management II - Practical	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
23	II	20SDCDT2	Dairy Technology	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
24	III	20LSCHH2	Health & Hygiene	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
25	III	20LSCPF2	Poultry Farming	CO1	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO2	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7
				CO3	PSO1, PSO2, PSO3, PSO4	PO1, PO2, PO3, PO4, PO7

Mapping of Courses with PSOs

Course Title	Course Code	PSO1	PSO2	PSO3	PSO4
Animal Diversity-Biology of Non-chordates	20ZLCCAN13	✓	✓	✓	✓
Study of Non-Chordates - Practical	20ZLP1SN12	✓	✓	✓	✓
Animal Diversity - Biology of Chordates	20ZLCCAC23	✓	✓	✓	✓
Study of Chordates - Practical	20ZLP2SC22	✓	✓	✓	✓
Cell & Molecular Biology, Genetics and Evolution	20ZLCCCG33	✓	✓	✓	✓
Cell & Molecular Biology, Genetics and Evolution - Practical	20ZLP3CG32	✓	✓	✓	✓
Physiology, Cellular Metabolism & Embryology	20ZLCCPE43	✓	✓	✓	✓
Physiology, Cellular Metabolism & Embryology - Practical	20ZLP4PE42	✓	✓	✓	✓
Immunology & Animal Biotechnology	20ZLCCIB43	✓	✓	✓	✓
Immunology & Animal Biotechnology - Practical	20ZLP5IB42	✓	✓	✓	✓
Sustainable Aquaculture Management	20ZLSEC11SA3	✓	✓	✓	✓
Sustainable Aquaculture Management - Practical	20ZLP611SA2	✓	✓	✓	✓
Postharvest Technology of Fish & Fisheries	20ZLSEC12PT3	✓	✓	✓	✓
Postharvest Technology of Fish & Fisheries - Practical	20ZLP712PT2	✓	✓	✓	✓

Poultry Management I(Poultry Farming)	20ZLSEC21PF3	✓	✓	✓	✓
Poultry Management I(Poultry Farming) - Practical	20ZLP621PF2	✓	✓	✓	✓
Poultry Management II (Poultry Farming)	20ZLSEC22PP3	✓	✓	✓	✓
Poultry Management II (Poultry Farming) - Practical	20ZLP722PP2	✓	✓	✓	✓
Livestock management I	20ZLSEC31LM3	✓	✓	✓	✓
Livestock management I - Practical	20ZLP631LM2	✓	✓	✓	✓
Livestock management II	20ZLSEC32LM3	✓	✓	✓	✓
Livestock management II - Practical	20ZLP732LM2	✓	✓	✓	✓
Dairy Technology	20SDCDT2	✓	✓	✓	✓
Health and Hygiene	20LSCHH2	✓	✓	✓	✓
Poultry Farming	20SDCPF2	✓	✓	✓	✓

Mapping of Courses with POs

Course	PO1 Essential Knowledge	PO2 Creative and critical thinking and problem solving abilities	PO3 Teamwork and communi- cation skills	PO4 Motivati- on and prepara- tion in life- long learnin- g	PO5 Professi- onalism and leadersh- ip readines- s	PO6 Intercult- ural and ethical compet- ency	PO7 Self- aware- ness and emotio- nal intellig- ence	PO8 Social Responsi- bility
AN	✓	✓	✓	✓				
SNP1	✓	✓	✓	✓				
AC	✓	✓	✓	✓				
SC-P2	✓	✓	✓	✓				
CG	✓	✓	✓	✓				
CG-P3	✓	✓	✓	✓				
PE	✓	✓	✓	✓				
PE-P4	✓	✓	✓	✓				
IB	✓	✓	✓	✓				
IB-P5	✓	✓	✓	✓				
SA	✓	✓	✓	✓				
SA-1P6	✓	✓	✓	✓				
PT	✓	✓	✓	✓				

PT-1P7	✓	✓	✓	✓				
PF	✓	✓	✓	✓			✓	
PF-2P6	✓	✓	✓	✓			✓	
PP	✓	✓	✓	✓			✓	
PP-2P7	✓	✓	✓	✓			✓	
LM	✓	✓	✓	✓			✓	
LM-3P6	✓	✓	✓	✓			✓	
LM-32	✓	✓	✓	✓			✓	
LM-32 - P7	✓	✓	✓	✓			✓	
DT	✓	✓	✓	✓			✓	
HH	✓	✓	✓	✓			✓	
PF	✓	✓	✓	✓			✓	