

SIR C R REDDY COLLEGE FOR WOMEN, ELURU

Annual Curricular Plan for the Academic Year 2022 - 2023

Name of the Lecturer:	B.V.RAMYA SRI			
Name of the Department:	Zoology			
Program	I Bsc. BZBT		Group:	I Bsc. BZBT
Title of the Course:	Dairy Technology		Hrs allotted:	30
Year	I YEAR	Semester	II (EVEN SEM)	
Section	I BZBT		Hours/Week	2

Unit No. & Name	Hour	Day	Date	Topic to be Covered	METHODOLOGY ADOPTED	Remarks
UNIT I ESTABLISHMENT OF A DAIRY FORM	1	THURS DAY	01-06-2023	INTRODUCTION	P1	-
	2	WEDNES DAY	07-06-2023	Dairy development in India	P1	-
	3	WEDNES DAY	07-07-2023	Dairy Cooperatives (NDRI, NDDB, TCMFP)	P1	-
	4	WEDNES DAY	14-06-2023	Constraintsof Present Dairy Farming	P1	-
	5	WEDNES DAY	14-06-2023	Future Scope of Dairy Farmer	P1	-
	6	THURS DAY	15-06-2023	Selection of site for dairy farm	P1	-
	7	THURS DAY	15-06-2023	Systems of housing – Loose housing	P1	-
	8	THURS DAY	15-06-23	Systems of Conventional Dairy Farm	P1	-
	9	WEDNES DAY	21-06-2023	Records to be maintained in a dairy farm	P1	-
	10	WEDNES DAY	21-06-2023	Records to be maintained in a dairy farm	P1	-

UNIT-II LIVESTOCK AND IDENTIFICATION OF FEED MANAGEMENT	11	THURS DAY	22-06-2023	Breeds of Dairy CattleS	P1	-
	13	THURS DAY	22-06-2023	Breeds of Dairy Buffaloes	P1	-
	14	WEDNES DAY	28-06-2023	Identification of Indian cattle and buffalo breeds	P1	-
	15	WEDNES DAY	28-06-2023	Identification of Exotic breeds	P1	-
	16	THURS DAY	29-06-2023	Methods of selection of Dairy animals	P1	-
	17	THURS DAY	29-06-2023	Systems of inbreeding and crossbreeding	P1	-
	18	WEDNES DAY	05-07-2023	Weaning of calf, Castration, Dehorning, Deworming and Vaccination programme	P1	-
	19	WEDNES DAY	05-07-2023	Care and management of calf, heifer, milk animal	P1	-
	20	THURS DAY	06-07-2023	Dry and pregnant animal, bulls and bullocks	P1	-
	UNIT -III FEED MANAGEMENT,DA IRY MANAGEMENT,CL EANING AND SANITATION	21	THURS DAY	06-07-2023	Basic Principles of Feed, Important Feed Ingredients,	P1
22		WEDNES DAY	12-07-2023	Feed formulation and Feed Mixing	P1	-
23		WEDNES DAY	12-07-2023	Operation Flood –Definition of Milk and Nutritive value of milk	P1	-
24		THURS DAY	13-07-2023	ICMR recommendation of nutrients	P1	-
25		THURS DAY	13-07-2023	Per Capita Milk production and availability in India and Andhra Pradesh	P1	-
26		WEDNES DAY	19-07-2023	Methods of Collection and Storage of Milk	P1	-
27		THURS DAY	20-07-2023	Labelling and Storage of milk products	P1	-
28		THURS DAY	20-07-2023	Cleaning and sanitation of dairy farm	P1	-
29		WEDNES DAY	26-07-2023	Cleaning and sanitation of dairy farm	P1	-
30		THURS DAY	27-07-2023	Safety precautions to prevent accidents in an industry	P1	-

B. V. Perumal
Signature of the Lecturer

A. Swathi
Signature of the HOD

N. N. N.
Signature of the Principal

P1 - LECTURE

P2 - DEMONSTRATION

P3 - AUDIO, VEDIO

P4 - ASSIGNMENT

P6 - DEBATE

P7 - QUIZ

P8 - GROUP DISCUSSION

P9 - JAM

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Name of the Lecturer:	DR.CH.SWAPNA				
Name of the Department:	ZOOLOGY				
Program	IBSC			Group:	CBZ
Title of the Course:	BIOLOGY OF CHORDATES			Hrs allotted:	60
Year	I YEAR	Semester	II SEM	Course Code:	II
Section	ICBZ			Hours/Week	4

Unit No. & Name	Hour	Day	Date	Topic to be Covered	METHODOLOGY ADOPTED	Remarks
UNIT-1 PROTOCHORDATA	1	Monday	1.5.23	Syllabus ,introduction class	P1	-
	2	Tuesday	2.5.23	General characters of chordates	P1	-
	3	Wednesday	3.5.23	Classification of chordates	P1	-
	4	Thursday	4.5.23	Characters of cephalochordata	P1	-
	5	Friday	5.5.23	Affinities of cephalochordata	P1	-
	6	Saturday	6.5.23	structure of Branchiostoma	P1	-
	7	Thursday	1.6.23	Characters of urochordata	P1	-
	8	Friday	2.6.23	Structure of Herdmania	P1	-
	9	Saturday	3.6.23	Life history of Herdmania	P4	-
	10	Monday	5.6.23	Retgressive metamorphosis	P1	-
	11	Tuesday	6.6.23	Process and significance	P1	-

UNIT II CYCLOSTOMAT AND PISCES	12	Wednesday	7.6.23	UNIT-2: Cyclostomata general characters	P1	-
	13	Thursday	8.6.23	Comparision of petromyzon and myxine	P1	-
	14	Friday	9.6.23	General charecters of Fishes	P1	-
	15	Saturday	10.6.23	External features of scoliodon	P1	-
	16	Monday	12.6.23	Digestive system of scoliodon	P1	-
	17	Tuesday	13.6.23	Respiratory system of scoliodon	P1	-
	18	Wednesday	14.6.23	Structure of heart in scoliodon	P1	-
	19	Thursday	15.6.23	Function of heart in scoliodon	P1	-
	20	Friday	16.6.23	Structure of brain in scoliodon	P1	-
	21	Saturday	17.6.23	Function of brain in scoliodon	P1	-
	22	Monday	19.6.23	Migration in fishes	P7	-
	23	Tuesday	20.6.23	Types of scales	P1	-
	24	Wednesday	21.6.23	Dipnoi fishes	P1	-
	25	Thursday	22.6.23	General characters of amphibians	P1	-
	UNIT - III AMPHIBIA&REPTILIA	26	Friday	23.6.23	Classification of amphibian upto species level	P1
27		Saturday	24.6.23	Ranahexadactyla: Frog external features	P1	-
28		Monday	26.6.23	Digestive system of frog	P1	-
29		Tuesday	27.6.23	Respiratory system of frog	P1	-
30		Wednesday	28.6.23	Structure of heart in frog	P1	-
31		Thursday	29.6.23	Function of heart in frog	P1	-
32		Friday	30.6.23	Structure of brain in frog	P1	-
33		Saturday	1.7.23	Function of brain in frog	P1	-
34		Monday	3.7.23	Reptillia: General characters of reptillia	P1	-
35		Tuesday	4.7.23	Classification of reptillia upto species level	P1	-
36		Wednesday	5.7.23	External features of calotes	P1	-

UNIT - III AMPHIBIA&REPTILIA	37	Thursday	6.7.23	Digestive system in calotes	P1	-
	38	Friday	7.7.23	Respiratory system in calotes	P1	-
	39	Saturday	8.7.23	Structure of heart in calotes	P5	-
	40	Monday	10.7.23	Function of heart in calotes	P1	-
	41	Tuesday	11.7.23	Structure of brain in calotes	P1	-
	42	Wednesday	12.7.23	Function of brain in calotes	P1	-
	43	Thursday	13.7.23	Identification of poisonous snakes	P1	-
	44	Friday	14.7.23	Identification of non-poisonous snakes	P8	-
	45	Saturday	15.7.23	Skull in reptiles	P1	-
UNIT IV AVES	46	Monday	17.7.23	UNIT-4: General characters of aves	P1	-
	47	Tuesday	18.7.23	Classification of aves upto species level	P1	-
	48	Wednesday	19.7.23	Columba livia : External features of columba livia	P1	-
	49	Thursday	20.7.23	Digestive system of columba livia	P1	-
	50	Friday	21.7.23	Respiration system of columba livia	P1	-
	51	Saturday	22.7.23	Structure of heart in columba livia	P1	-
	52	Monday	24.7.23	Function of heart in colubmba livia	P1	-
	53	Tuesday	25.7.23	Structure of brain in columba livia	P1	-
	54	Wednesday	26.7.23	Function of brain in columba livia	P1	-
	55	Friday	28.7.23	Migration in birds	P1	-
	56	Saturday	29.7.23	Flight adaptations in birds	P1	-

UNIT V	57	Monday	31.7.23	Migration in birds	P1	-
	58	Tuesday	1.8.23	Classification of mammalian upto species level	P1	-
	59	Wednesday	2.8.23	Comparision prototherians, metatherians & eutherians	P1	-
	60	Thursday	3.8.23	Dentition in mammals	P1	-



Signature of the Lecturer



Signature of the HOD



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Annual Curricular Plan for the Academic Year 2022 - 2023

Name of the Lecturer :	A. HEMASREE			
Name of the Department:	ZOOLOGY			
Program	II BSC		Group:	II B.SC CBZ,ZFC, BZBT
Title of the Course:	IMMUNOLOGY AND ANIMAL BIOTECHNOLOGY			Hrs allotted: 60 Hrs
Year	II CBZ AND ZFC	Semester	IV B	Course Code: 6B
Section	B.SC - CBZ AND BZBT			Hours/Week : 5Hrs

Unit No. & Name	Hour	Day	Date	Topic to be Covered	METHODOLOGY ADOPTED	REMARKS
UNIT-I IMMUNE SYSTEM	1	Friday	17-03-2023	Introduction class	P1	-
	2	Monday	20-03-2023	Immunology – I (Overview of Immune system)	P1	-
	3	Tuesday	21-03-2023	Introduction to basic concepts in Immunology	P1	-
	4	Thursday	23-03-2023	Innate immunity	P1	-
	5	Friday	24-03-2023	adaptive immunity	P1	-
	6	Monday	27-03-2023	Vaccines	P1	-
	7	Tuesday	28-03-2023	Immunization programme	P1	-
	8	Wednesday	29-03-2023	Cells of immune system	P1	-
	9	Friday	31-03-2023	Organs of immune system	P1	-

	10	Monday	03-04-2023	Organs of immune system	P8	-
UNIT-II ANTIGENS ANTIBODIES AND MHC	11	Tuesday	04-04-2023	Antigens - Basic properties of antigens	P1	-
	12	Thursday	06-04-2023	B and T cell epitomes	P1	-
	13	Monday	10-04-2023	haptens and adjuvants	P1	-
	14	Tuesday	11-04-2023	Factors influencing immunogenicity	P1	-
	15	Wednesday	12-04-2023	Antibodies - Structure of antibody	P1	-
	16	Thursday	13-4-2023	Classes and functions of antibodies	P1	-
	17	Monday	17-4-2023	Classes and functions of antibodies	P4	-
	18	Tuesday	18-4-2023	Structure and functions of major histo compatibility complexes	P1	-
	19	Wednesday	19-4-2023	exogenous and Endogenous pathways of antigen presentation and processing	P1	-
	20	Thursday	20-4-2023	Hypersensitivity – Classification and Types	P1	-
	UNIT-III CELL CULTURE TECHNIQUES	21	Friday	21-4-2023	Animal Cell culture	P1
22		Monday	24-4-2023	tissue and Organ culture media	P1	-
23		Tuesday	25-4-2023	Natural and Synthetic media	P1	-
24		Wednesday	26-4-2023	Cell cultures	P1	-
25		Thursday	27-4-2023	Establishment of cell culture (primary culture, secondary culture, types of cell lines; Protocols for Primary Cell Culture)	P1	-
26		Friday	28-4-2023	Established Cell lines (common examples such as MRC, HeLa, CHO, BHK, Vero)	P1	-
27		Saturday	29-4-2023	Organ culture	P1	-
28		Monday	01-05-2023	Cryopreservation of cultures	P1	-
29		Tuesday	02-05-2023	Stem cells: Types of stem cells and applications	P1	-

	30	Wednesday	03-05-2023	Hybridoma Technology: Production & applications of Monoclonal antibodies (mAb)	P1	-
UNIT-IV APPLICATION OF ANIMAL BIOTECHNOLOGY	31	Thursday	04-05-2023	Applications of Animal Biotechnology: Genetic Engineering: Basic concept	P1	-
	32	Friday	05-05-2023	Vectors	P1	-
	33	Thursday	01-06-2023	Restriction Endo nucleases	P1	-
	34	Friday	02-06-2023	Recombinant DNA technology	P1	-
	35	Monday	05-06-2023	biolistic method (gene gun)	P5	-
	36	Tuesday	06-06-2023	Gene delivery: Microinjection, electroporation	P1	-
	37	Wednesday	07-06-2023	biolistic method (gene gun)	P1	-
	38	Thursday	08-06-2023	liposome and viral-mediated gene delivery	P1	-
	39	Friday	09-06-2023	Transgenic Animals: Strategies of Gene transfer	P1	-
	40	Monday	12-06-2023	Transgenic - sheep and fish	P1	-
	41	Tuesday	13-6-2023	Applications Manipulation of reproduction in animals: Artificial Insemination	P1	-
	42	Wednesday	14-6-2023	Invitro fertilization	P1	-
	43	Thursday	15-6-2023	super ovulation	P1	-
	44	Friday	16-6-2023	Embryo transfer	P1	-
	45	Monday	19-6-2023	Embryo cloning	P1	-

UNIT-V PCR AND DNA SEQUENCING	46	Tuesday	20-6-2023	PCR: Basics of PCR.	P1	-
	47	Wednesday	21-6-2023	DNA Sequencing: Sanger's method of DNA sequencing	P1	-
	48	Thursday	22-6-2023	Traditional and automated sequencing	P1	-
	49	Friday	23-6-2023	Hybridization techniques: Southern blotting	P1	-
	50	Monday	26-6-2023	Hybridization techniques: Northern blotting	P1	-
	51	Tuesday	27-6-2023	Hybridization techniques: Western blotting	P1	-
	52	Wednesday	28-6-2023	Applications in Industry and Agriculture	P1	-
	53	Friday	30-6-2023	Applications in Industry and Agriculture: Fermentation	P1	-
	54	Monday	03-07-2023	Applications in Industry and Agriculture: Fermentation	P1	-
	55	Tuesday	04-07-2023	DNA fingerprinting: Procedure and applications	P7	-
	56	Wednesday	05-07-2023	Different types of Fermentation	P1	-
	57	Thursday	06-07-2023	Different types of Fermentation	P1	-
	58	Friday	07-07-2023	Downstream processing	P1	-
	59	Monday	10-07-2023	Agriculture: Monoculture in fishes	P1	-
	60	Tuesday	11-07-2023	polyploidy in fishes	P1	-

A. Hema Sree
Signature of the Lecturer

Swafu
Signature of the HOD

Hedija
Signature of the Principal

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