

EDUCATIONAL MULTIMEDIA RESEARCH CENTRE
GUJARAT UNIVERSITY, AHMEDABAD 380 009

Mapping of E-contents produced under Phase-I of the NME-ICT Project

Zoology

PHASE - I		
SUBJECT : ZOOLOGY		
MAIN COURSE : B.Sc 1st Year		
Sr.No.	Paper Name : Z101 B	Paper Name: Animal Diversity-I
1	Topic Number: 1	Topic Name: Animal Classification: Principles & Features
	Lecture No. 1	Lecture Name: Animal Classification: Principles & Feature
2	Topic Number : 1	Topic Name: Principles of classification
	Lecture No. 2	Lecture Name: Structural Organization & Classification of Non - Chordates
3	Topic Number: 2	Topic Name: Classification of Protozoa
	Lecture No. -	Lecture Name: Classification of Protozoa
4	Topic Number: 3	Topic Name: Origin of Metazoa
	Lecture No. 1	Lecture Name: Origin of Metazoa
5	Topic No: 3	Topic Name: Metamerism
	Lecture No : 2	Lecture Name: Metamerism
6	Topic Number: 3	Topic Name: Symmetry

	Lecture No. 3	Lecture Name: Symmetry
7	Topic Number: 4	Topic Name: Corals & coral reefs
	Lecture No. 2	Lecture Name: Corals and Coral Reefs
8	Topic Number: 4	Topic Name: Polymorphism in Hydrozoa
	Lecture No. -	Lecture Name: Polymorphism in Hydrozoa
9	Topic Number: 6	Topic Name: Plathelminthes and Nematelminthes
	Lecture No. 1	Lecture Name: Fasciola Hepatica (Liverfluke)
10	Topic Number : 6	Topic Name: Plathelminthes and Nematelminthes
	Lecture No. 2	Lecture Name: Fasciola Hepatica (Liverfluke)
11	Topic Number: 10	Topic Name: Crutacean Larvae
	Lecture No. 1	Lecture Name: Crutacean Larvae
12	Topic Number: 10	Topic Name: ABC of ther Largest Phylum - Arthropoda
	Lecture No. 2	Lecture Name: Arthropoda
13	Topic Number: 10	Topic Name: Vision in Arthropods
	Lecture No. 3	Lecture Name: Vision in Arthropods
14	Topic Number: 10	Topic Name: Metamorphosis in Insects
	Lecture No. 4	Lecture Name: Metamorphosis in Insects

15	Topic Number: 10	Topic Name: Social Life in Insects : Part-1
	Lecture No. 5	Lecture Name: Social Life in Insects: Part-1
16	Topic Number: 10	Topic Name: Social Life in Insects: Part-II
	Lecture No. 6	Lecture Name: Social Life in Insects : Part – II
17	Topic Number: 10	Topic Name: Trilobites
	Lecture No. 7	Lecture Name: Trilobites: Part-1
18	Topic Number: 10	Topic Name: Trilobites
	Lecture No. 7	Lecture Name: Trilobites : Part-2
SUGGESTED PRACTICALS		
19	Topic Number: Suggested Practicals-1	Topic Name: Amoeba
	Lecture No. -	Lecture Name: Amoeba
20	Topic Number: Suggested Practicals - 5	Topic Name: Ascaris Lumbricoides
	Lecture No. -	Lecture Name: Ascaris Lumbricoides
21	Topic Number: Suggested Practicals - 9	Topic Name: Peripatus
	Lecture No. -	Lecture Name: Peripatus
22	Topic Number: Suggested Practicals - 14	Topic Name: Phylum : Echinodermata
	Lecture No. -	Lecture Name: Phylum : Echinodermata

SUBJECT : ZOOLOGY

MAIN COURSE : B.Sc 1st Year

Paper Number: Z-102B

Paper Name: Cell Biology

23

Topic Number : 1

Topic Name:
Cell Theory

Lecture No. -

Lecture Name:
The Cell Theory

24

Topic Number : 2

Topic Name:
Diversity of Cell Size and Shape

Lecture No. -

Lecture Name:
Diversity of Cell Size and Shape

25

Topic Number: 3

Topic Name:
Structure of prokaryotic and Eukaryotic cells

Lecture No. -

Lecture Name:
Prokaryotic Cell

26

Topic Number: 3

Topic Name:
Structure of prokaryotic and Eukaryotic cell

Lecture No. 2

Lecture Name:
Eukaryotic Cell

27

Topic Number : 4

Topic Name:
Isolation and growth of cells

Lecture No. -

Lecture Name:
Isolation and Growth of Cells

28	Topic Number: 6	Topic Name: Cellular Organelles: Separation & Characterization
	Lecture No. -	Lecture Name: Cellular Organelles: Separation & Characterization
29	Topic Number: 7	Topic Name: Cellular Energy Transactions Role of Mitochondria
	Lecture No. -	Lecture Name: Cellular Energy Transactions Role of Mitochondria
30	Topic Number : 10	Topic Name: Vesicular Trafficking
	Lecture No. -	Lecture Name: Vesicular Trafficking & Endocytosis
31	Topic Number: 11	Topic Name: Cell Signaling
	Lecture No. –	Lecture Name: Cell Signaling
32	Topic Number :12	Topic Name: Cytoskeleton
	Lecture No. -	Lecture Name: Cytoskeleton
33	Topic Number :13 and Suggested Practicals 11	Topic Name: Cell division cycle – Mitosis Suggested Practical – Preparation of stages of mitosis
	Lecture No. -	Lecture Name: Mitosis (Theory & Practical)

34	Topic Number: 16	Topic Name: Cell Differentiation
	Lecture No. -	Lecture Name: Cell Differentiation
35	Topic Number : 19	Topic Name: Biology of Cancer
	Lecture No. -	Lecture Name: Biology of Cancer
	SUGGESTED PRACTICALS	
36	Topic Number: Suggested Practicals - 9	Topic Name: Isolation and estimation of DNA from
	Lecture No. 1	Lecture Name: DNA Isolation
37	Topic Number: Suggested Practicals - 9	Topic Name: Estimation of DNA
	Lecture No. 2	Lecture Name: DNA Estimation: Part – 1
38	Topic Number: Suggested Practicals - 9	Topic Name: Estimation of DNA
	Lecture No. 3	Lecture Name: DNA Estimation: Part-2
39	Topic Number: Suggested Practicals -10	Topic Name: Electrophoresis
	Lecture No. -	Lecture Name: Electrophoresis

40	Topic Number : Suggested Practicals - 11	Topic Name: Preparation of Meiotic Chromosome from Rat/Mice Testes
	Lecture No. 2	Lecture Name: Preparation of Chromosome from Rat/Mice Testes

SUBJECT : ZOOLOGY

MAIN COURSE : B.Sc IIInd Year

	Paper Number: Z- 201 B	Paper Name: Animal Diversity – II
41	Topic Number: 1	Topic Name: Chordates: Origin & Characteristic
	Lecture No. -	Lecture Name: Chordates : Origin & Characteristics
42	Topic Number: 3	Topic Name: Agnatha – Classification up to orders
	Lecture No. -	Lecture Name: Agnatha (Classification Upto Orders)
43	Topic Number: 5	Topic Name: Amphibians – Origin & Evolution Parental Care
	Lecture No. 1	Lecture Name: Origin, Evolution and Parental Care in Amphibians
44	Topic Number: 5	Topic Name: Amphibians Classification
	Lecture No. 2	Lecture Name: Classification of Amphibians
45	Topic Number: 6	Topic Name: Reptiles

	Lecture No. 1	Lecture Name: Reptiles
46	Topic Number: 6	Topic Name: Reptiles
	Lecture No. 2	Lecture Name: Reptiles
47	Topic Number: 9	Topic Name: Mammals – Origin General Characters
	Lecture No. 1	Lecture Name: Origin & General Characters of Mammals
48	Topic Number: 9	Topic Name: Mammals – Classification ...
	Lecture No. 2	Lecture Name: Classification of Mammals

SUBJECT : ZOOLOGY

MAIN COURSE : B.Sc IIInd Year

	Paper Number: Z- 202 B	Paper Name: Physiology
49	Topic Number: 2	Topic Name: Chemical Foundations of Physiology
	Lecture No. 1	Lecture Name: Chemical Foundations of Physiology
50	Topic Number: 2	Topic Name: Chemical Foundations of Physiology
	Lecture No. 2	Lecture Name: Chemical Foundations of Physiology
51	Topic Number: 4	Topic Name: Theory – Composition & Function

	Lecture No. 1	Lecture Name: Blood (Composition & Function)
52	Topic Number: 4	Topic Name: Blood: Composition and function of blood
	Lecture No. 2	Lecture Name: Blood Formation
53	Topic Number: 5	Topic Name: Heart – Structure
	Lecture No. 1	Lecture Name: Structure of Heart
54	Topic Number: 5	Topic Name: Conduction and regulation of heart beat
	Lecture No. 2	Lecture Name: Function of Heart
55	Topic Number: 7	Topic Name: Respiration, Mechanism
	Lecture No. 1	Lecture Name: Respiration
56	Topic Number: 7	Topic Name: Respiration, Mechanism
	Lecture No. 2	Lecture Name: Control of Respiration
57	Topic Number: 8	Topic Name: Digestion & Absorption of Dietary Components
	Lecture No. -	Lecture Name: Digestion & Absorption of Dietary Components
58	Topic Number: 9	Topic Name: Nutritional requirements and disorders
	Lecture No. 1	Lecture Name: Nutrition & Diseases

59	Topic Number: 9	Topic Name: Nutrition requirements and disorders
	Lecture No. 2	Lecture Name: Nutrition & Diseases
60	Topic Number: 10	Topic Name: Structure & Function of Kidney
	Lecture No. 1	Lecture Name: Structure & Function of Kidney
61	Topic Number: 10	Topic Name: Structure & Function of Kidney
	Lecture No. 2	Lecture Name: Structure & Function of Kidney
62	Topic Number: 12	Topic Name: Physiology of neuronal function
	Lecture No. 1	Lecture Name: Neural Functions
63	Topic Number: 12	Topic Name: Physiology of neuronal function
	Lecture No. 2	Lecture Name: Neural Functions
64	Topic Number: 13	Topic Name: Endocrine glands and hormones
	Lecture No. -	Lecture Name: Endocrine Glands & Hormones
65	Topic Number: 14	Topic Name: Reproduction in Mammals
	Lecture No. 1	Lecture Name: Reproduction : Female
66	Topic Number: 14	Topic Name: Reproduction in Mammals

	Lecture No. 2	Lecture Name: Reproduction : Male
67	Topic Number: 15	Topic Name: Integration of tissue Function
	Lecture No. -	Lecture Name: Integration of Tissue Functions : Neuronal & Endocrine Aspects
68	Topic Number: 16	Topic Name: Metabolism – Concept, selected examples
	Lecture No. 1	Lecture Name: Metabolism
69	Topic Number: 16	Topic Name: Metabolism – Concept, selected examples
	Lecture No. 2	Lecture Name: Metabolism
70	Topic Number: 17	Topic Name: Nature of Enzymes
	Lecture No. -	Lecture Name: Nature of Enzymes
	SUGGESTED PRACTICALS	
71	Topic Number: 2 & 3	Topic Name: Erythrocytes – Ionic Effects & Haemoglobin Estimation
	Lecture No. -	Lecture Name: Haemoglobin Estimation & Erythrocytes – Ionic Effects
72	Topic Number: 4	Topic Name: Practical - RBC & Practical - WBC
	Lecture No. -	Lecture Name: Blood Cell Count: Using Haemocytometer
73	Topic Number: 8	Topic Name: Action of Salivary of Amylase on Starch

	Lecture No. -	Lecture Name: Salivary of Amylase on Starch
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SUBJECT : ZOOLOGY		
MAIN COURSE : B.Sc IIInd Year		
	Paper Number: Z- 204 B	Paper Name: Evolution Behaviour
74	Topic Number : 1	Topic Name: Concept of Evolution
	Lecture No. -	Lecture Name: Concept of Evolution
75	Topic Number : 3	Topic Name: Origin of Prokaryotic & Eukaryotic Cell
	Lecture No. -	Lecture Name: Origin of Prokaryotic & Eukaryotic Cell
76	Topic Number: 5	Topic Name: Concept of Species & Speciation
	Lecture No. -	Lecture Name: Species & Speciation
77	Topic Number: 10	Topic Name: Introduction to Ethology – animal sense organs
	Lecture No. -	Lecture Name: Introduction to Ethology

SUBJECT : ZOOLOGY

MAIN COURSE : B.Sc. III Year

	Paper Number: Z 301 B	Paper Name: Ecology
78	Topic Number: 1	Topic Name: Aim and Scope of Ecology
	Lecture No. -	Lecture Name: Aim and Scope of Ecology
79	Topic Number : 2	Topic Name: Organisms – Principles of Adaptation
	Lecture No. 1	Lecture Name: Adaptations in Organisms: Soil
80	Topic Number: 2	Topic Name: Adaptations & Organisms: Water & Temperature
	Lecture No. 2	Lecture Name: Adaptations & Organisms: Water & Temperature
81	Topic Number : 2	Topic Name: Adaptations in Organisms: Light, Air & Fire
	Lecture No. 3	Lecture Name: Adaptations in Organisms: Light, Air & Fire
82	Topic Number: 3	Topic Name: Precipitation Patterns
	Lecture No. 1	Lecture Name: Precipitation Patterns
83	Topic Number: 3	Topic Name: Vegetation
	Lecture No. 2	Lecture Name: Neural Functions: Part-I
84	Topic Number: 3	Topic Name: Soil types
	Lecture No. 3	Lecture Name: Types of Soil
85	Topic Number : 4	Topic Name: Population
	Lecture No. 1	Lecture Name: Population Characteristics

SUBJECT: ZOOLOGY		
MAIN COURSE: B.Sc. III Year		
	Paper Number: Z 302 B	Paper Name: Genetics & Immunology
86	Topic Number : 7	Topic Name: Chromosome Aberrations and their Implications
	Lecture No. -	Lecture Name: Chromosome Aberrations and their Implications
87	Topic Number : 9	Topic Name: Human Genetics & Genome Analysis
	Lecture No. -	Lecture Name: Human Genetics & Genome Analysis

SUBJECT : ZOOLOGY		
MAIN COURSE : B.Sc. III Year		
	Paper Number: Z – 305 B	Paper Name: Developmental Biology
	SUGGESTED PRACTICAL	
88	Topic Number: 4	Topic Name: Living Chick Embryos - Observations
	Lecture No. -	Lecture Name: Living Chick Embryos - Observations (Practical)

SUBJECT: ZOOLOGY		
MAIN COURSE: B.Sc. III Year		
	Paper Number: Z – 306 B	Paper Name: Applied Zoology
	5	Biotechnology
89	Topic Number: 1	Topic Name: Basic Concepts in Genetic Engineering
	Lecture No. 1	Lecture Name: Basic Concepts in Genetic Engineering