

Sanatana Dharma College, Alappuzha
First Semester B.Sc. Zoology Degree Internal Examination January 2023
Core Course: ZO 1141 Animal Diversity I

Section I

All questions are compulsory (5x1=5)

Time – 1.30 hours

Max. Marks - 40

1. Petasma
2. Metagenesis
3. Demospongiae
4. Red Tide
5. ICZN

Section II

Answer any FOUR questions (4x2 = 8)

6. Scaphognathite
7. Cnidocytes
8. Difference between Ascanoid & Syconoid sponges
9. Uropod
10. Principles of nomenclature
11. Structure of *Actinophrys* with Diagram
12. Ecdysis
13. Mastigobranchiae

Section III

Answer any THREE questions (3 x 4 = 12)

14. Labelled diagram of nervous system of *Penaeus*
15. Comment on Pedicellaria with diagram
16. Polymorphism in *Physalia*
17. Structure of Ommatida
18. Comment on the excretory system of *Penaeus*
19. General characters of Kingdom Protista
20. Importance of Classification

Section IV

Answer any ONE question (1x15= 15)

21. Explain the class Hydrozoa with example
22. Write an essay on the Cephalic & Thoracic appendages of Prawn with diagram
23. Explain the Kingdoms of classification

SANATANA DHARMA COLLEGE, ALAPPUZHA

Outcome Based Internal Evaluation Blue Print – 2022-23

Programme Name and Code: B.SC. ZOOLOGY (250)

Semester 1

Course Name and Code: ANIMAL DIVERSITY I (ZO1141)

Assignment/Seminar

Relevant Course Outcome: Students distinguishes the various vector born diseases	Topic: Prepare Power Point slides on Dengue fever, Japanese Encephatitis, Malaria, Cutaneous Leishmaniasis.
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Internal Question Paper – Mapping of Test Items

Course Outcomes	Test Items with Marks
To learn the basics of systematics and understand the hierarchy of different categories.	<ol style="list-style-type: none"> 1. ICZN – 1 mark 2. Principles of nomenclature – 2 marks 3. Importance of Classification – 4 marks 4. Explain the Kingdoms of classification – 15 marks
To learn the diagnostic characters of different phyla through brief studies of examples.	<ol style="list-style-type: none"> 1. Metagenesis – 1 mark 2. Scaphognathite – 2 marks 3. Cnidocytes – 2 marks 4. Uropod – 2 marks 5. Structure of <i>Actinophrys</i> with Diagram – 2 marks 6. Ecdysis – 2 marks 7. Mastigobranchiae – 2 marks 8. Labelled diagram of nervous system of <i>Penaeus</i> - 4 marks 9. Comment on Pedicellaria with diagram - 4 marks 10. Polymorphism in <i>Physalia</i> - 4 marks 11. Structure of Ommatida - 4 marks 12. Comment on the excretory system of <i>Penaeus</i> - 4 marks 13. General characters of Kingdom Protista - 4 marks 14. Explain the class Hydrozoa with example - 15 marks 15. Write an essay on the Cephalic & Thoracic appendages of Prawn with diagram – 15 marks
To obtain an overview of economically important invertebrate fauna	<ol style="list-style-type: none"> 1. Difference between Ascanoid & Syconoid sponges – 2 marks 2. Demospongiae – 1 mark 3. Petasma – 1 mark 4. Red Tide – 1 mark

Sanatana Dharma College, Alappuzha
Third Semester B.Sc. Zoology Degree Internal Examination January 2023
Core Course: ZO 1341
Experimental Zoology. Instrumentation, Biostatistics & Bioinformatics

Section I

All questions are compulsory (5x1=5)

Time – 1.30 hours
Max. Marks - 40

1. Resolution of microscope
2. Sedimentation coefficient
3. Variable
4. Sample
5. Census

Section II

Answer any FOUR questions (4x2 = 8)

6. Dark field microscope
7. Abbe's Formula
8. Comment on the various Lens systems in a microscope
9. Relative frequency
10. Define range with example
11. Define arithmetic mean
12. Differentiate between primary & secondary data
13. Optical parts of light microscope

Section III

Answer any THREE questions (3 x 4 = 12)

14. Define Biostatistics. Write notes on applications of statistics in various disciplines
15. Explain Fluorescent microscope
16. Comment on the types of Centrifugation
17. Describe the various types of microtome
18. Write notes on tabulation & types of tabulation
19. What is frequency distribution? Comment on the types of frequency distribution
20. TEM

Section IV

Answer any ONE question (1x15= 15)

21. Write an essay on Phase contrast microscope
22. Graphical representation of data & types. Give examples for each
23. Differentiate between light microscope & Electron microscope

SANATANA DHARMA COLLEGE, ALAPPUZHA

Outcome Based Internal Evaluation Blue Print – 2022-23

Programme Name and Code: B.SC. ZOOLOGY (250)

Semester III

**Course Name and Code: EXPERIMENTAL ZOOLOGY, INSTRUMENTATION
BIostatISTICS AND BIOINFORMATICS (ZO 1341)**

Assignment/Seminar

Relevant Course Outcome: Students have a sound knowledge about the various institutes of Zoological and Scientific importance in India	Topic: Prepare Power Point slides on Zoological Survey of India. Central Marine Fisheries Research Institute, Central Institute of Fisheries Technology, Rajiv Gandhi Centre for Biotechnology
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Internal Question Paper – Mapping of Test Items

Course Outcomes	Test Items with Marks
To learn the fundamental characteristics of science as a human enterprise	<ol style="list-style-type: none">1. Define range with example – 2 marks2. Differentiate between primary & secondary data – 2 marks3. Define arithmetic mean – 2 marks4. Abbe's formula – 2 marks5. Sample – 1 mark6. Census – 1 mark
To understand how science works	<ol style="list-style-type: none">1. Resolution of microscope – 1 mark2. Sedimentation coefficient – 1 mark3. Variable – 1 mark4. Relative frequency – 2 marks5. Comment on the various Lens systems in a microscope – 2 marks6. Dark field microscope – 2 marks7. Optical parts of light microscope – 2 marks8. Define Biostatistics. Write notes on applications of statistics in various disciplines - 4 marks9. Explain Fluorescent microscope - 4 marks10. Comment on the types of Centrifugation - 4 marks11. Describe the various types of microtome - 4 marks12. What is frequency distribution? Comment on the types of frequency distribution - 4 marks13. TEM - 4 marks14. Graphical representation of data & types. Give examples for each - 15 marks15. Differentiate between light microscope & Electron microscope – 15 marks
To study to apply scientific methods independently	<ol style="list-style-type: none">1. Write an essay on Phase contrast microscope – 15 marks2. Write notes on tabulation & types of tabulation – 4 mark