SRI VENKATESWARA UNIVERSITY : : TIRUPATI

ZOOLOGY SYLLABUS FOR I SEMESTER

ZOOLOGY –PAPER-I (THEORY)

ANIMAL DIVERSITY OF INVERTBRATES

PERIODS- 60 MAX. MARKS -75

June 5th

Unit-I

1.0 Brief History, Significance of Diversity Of Invertebrates

1.1 Phylum Protozoa:- General Characters and Outline Classification upto Classes With Examples; Type Study: Elphidium,

1.3 Phylum Porifera:- General Characters and Outline Classification Upto Classes with Examples; Type Study: Sycon, Canal System in Sponges.

Unit-II

2.0 Phylum Coelenterata :- General Characters and outline Classification Upto Classes with Examples; Type Study: Aurelia ,Polymorphism in Coelenterates: Corals and Coral Reef Formation.

2.1 Phylum Platyhelminthes :- General Characters and Outline Classification Upto Classes With Examples; Type Study: Fasciola hepatica.

2.2 Phylum Nemathelminthes :- General Characters and Outline Classification upto Classes with Examples.

Unit-III

3.0 Phylum Annelida :- General Characters and Outline Classification upto Classes with Examples; Type Study: Leech., Metamerism in Annelida.

3.1 Vermiculture : Scope, Significance of Vermiculture Earthworms Sps, Processing of Vermiculture,Vermicompost,Economic Importance of Vermicost.

Unit-IV

4.0 Phylum Arthropoda:- General Characters and Outline Classification Upto Classes with Examples; Type Study: Macrobrachium rosenbergii (Scampi).Onychophora:- Peripatus-Structure ,Affinities

4.1 Phylum Mollusca:- General Characters And Outline Classification Upto Classes With Examples.Pearl Formation in Pelecypoda. Torsion in Gastropoda.

Unit-V

5.0 Phylum Echinodermata: General Characters and Outline Classification upto Classes with Examples; Water Vascular System of Star Fish.

5.1 Invertebrates Larval Forms: Amphiblastula, Ephyra, Trochophora, Nauplius, Zoea,Mysis, Megalopa, Glochidium , Bipaneria .

5.2 Hemichordata: General Characters And Outline Classification Upto Classes with Examples; Balanoglossus:Structure , Affinities & Tornaria Larvae

Suggested Readings

1. Modern Text Book Of Zoology Invertebrates ---- R.L. Kotpal

2. Text Book of Invertebrates- Arumugam et.al.,

3. Economic Zoology- Saras Publication

4.Old Telugu academy

SRI VENKATESWARA UNIVERSITY : : TIRUPATI
ZOOLOGY MODEL QUESTION PAPER FOR I SEMESTER
ZOOLOGY – PAPER-I (THEORY)
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TIME : 3 HOURS MAX. MARKS -75

Part-A (5X5=25)

Answer Any Five Questions, Each Question Carries Five Marks
Draw Diagrams Wherever Necessary.

1) Spicules
2) Sycon
3) Cephalic appendages
4) Mysis larva
5) Pearl Formation
6) Scampi.
7) Diptera
8) Halistemma

Part-B
(5X10=50)
Answer All questions , Each Question Carries Ten Marks.
Draw Diagrams Wherever Necessary.

9 (a) Describe the life history of Elphidium

or

(b) Give an account of the structure& functions of various cells in sponges

10 (a) Give an account of Development in Aurelia.

Or

(b) Describe the Reproductive system in liver fluke.

11 (a) Write an essay on process of vermiculture.

Or

(b) Describe the external characters of leech.

12 (a) Give on account on the Structure & Affinities of Peripatus.

Or

(b) Explain the Torsion in Gastropoda.

13 (a) Describe the Water Vascular System in Star Fish.

Or

(b) Write about the affinities of Balanoglossus.

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ZOOLOGY PRACTICAL SYLLABUS FOR I SEMESTER

ZOOLOGY –PAPER-I (THEORY)

ANIMAL DIVERSITY OF INVERTBRATES

PERIODS- 30 MAX. MARKS -50

Animal Diversity of Invertebrates

Observation of the following slides/specimens/models

Protozoa: Elphidium, paramecium –Binary fission,Conjugation.

Porifera: Spongilla, Euspongia, Sycon, Sycon-L.S,T.S.

Coelenterata: Obelia colony,Medusa ,Physalia, Velella,Corallium, Gorgonia, Aurelia,Pennatula.

Platyhelminthes: Planaria, Fasciola hepatica larval stages of Meracidum,Redia,Cercaria ,Echinococcus granulosus.

Nematehelminthes: Ascaris Male&Female ,Ancylostoma duodenale.

Annelida: Neries,Heteroneries,Aphrodite,Hirudo,Trochophore larva.

Arthropoda: Nauplius,Mysis,Zoea Larvae,Anopheles,culex, mouth parts (Male&Female). house fly mouth parts.Scorpion, Crab,Prawn,scolopendra, Sacculina,Limulus,Paripatus.

Mollusca: Chiton,Murex,Sepia,Loligo,Octopus,Nautilus,Glochidium Larva.

Echinodermata: Ophiothrix, Echinus,Clypeaster,Cucumaria, Antedon, Asterias, Bipinnaria larva.

Hemichordata : Balanoglossus,Tornaria larva.

Demonstration of dissection/dissected / Virtual Dissections: Leech / Prawn/Scorpion/Crab Digestive system, Prawn Appendages ,Prawn/Scorpion/Crab Nervous System , Pila/Unio Digestive System, Mounting of statocyst Mounting of Radula.

- Compulsory one species to be adopted for demonstration only by the faculty.

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- Computer Aided Techniques as per U.G.C Guidelines.

Laboratory record work shall be submitted at the time of Practical Examination, Each practical batch should not have more than 20 students.

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ZOOLOGY MODEL QUESTION FOR I SEMESTER
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MAX. MARKS -50

I) Draw a Labeled diagram of virtual dissection/dissected animals of -- -- -- -- -- -- -- 1X10 = 10M

II) Identification of six spotters/models/photographs, draw a labeled neat diagram with salient features. 6 x 5 = 30 M

*One from Protozoa,Porifera ,one from Cnidaria, Helmenthis, two from Annelida, Arthropoda two from Mollusca, Echinodermata, Hemichordate.

III) Certified Record 10 M

Without Practical record –Student is not admitted for University exam

Spotters

Identification } 1 M
Classification }

Labeled Diagram -2 M

Comments – 2 M