

Rekha V.V.I. Questions for 2023 Examination

*Answer of below mentioned V.V.I. questions are present in your
Rekha Examination Guide and Guess Part-I Zoology-1*

GROUP-A

(Animal Diversity - I)

- | | | |
|--|-------|----|
| 1. Describe the different modes of reproduction in Protozoa. | ..... | 7 |
| 2. Give an account of various modes of nutrition in Protozoa. V.V.I. | ..... | 11 |
| 3. Describe structure , locomotion and nutrition in Paramecium. | ..... | 14 |
| 4. Describe Asexual and Sexual reproduction in Paramecium. | ..... | 17 |
| 5. Give an outline classification of the Phylum Protozoa with characters and examples of each class and order. | ..... | 20 |
| 6. Describe the life-history of Trypanosoma. How does it cause disease in man? What methods would you employ to prevent the spread of disease?
Or, Describe the structure and life-history of Trypanosoma. | | 25 |
| 7. Describe the morphology and life cycle of the parasite which causes Amoebic dysentery. V.V.I.
Or, Give an account of the life-history, morphology, bionomics and the economic importance of Entamoeba. | | 28 |
| 8. Classify phylum Porifera upto orders giving diagnostic features and suitable examples. V.V.I. | ..... | 31 |
| 9. Give an account of affinities of Sponges. | ..... | 35 |
| 10. Describe different types of canal system of Sponges. V.V.I. | ..... | 36 |
| 11. What is Metagenesis? Explain it with reference to the life cycle of Obelia.
Or, Give an illustrated account of the life-history of Obelia
Or, What do you understand by alternation of generation in animals? Explain it with reference to the life-history of Obelia. | | 38 |
| 12. What is Polymorphism? Explain it with the reference to the structure of Obelia. | ..... | 39 |
| 13. Describe the structure and affinities of Ctenophora. | ..... | 44 |
| 14. Give general characters of Platyhelminthes and classify upto order with examples. V.V.I. | ..... | 49 |
| 15. Describe the structure and life-history of Taenia solium. V.V.I. | ..... | 51 |
| 16. Describe the life-cycle, pathogenic effects and control of Ascaris. | ..... | 55 |
| 17. Describe the structure of Ascaris. | ..... | 57 |
| 18. Describe the structure and life cycle of Wucherria or Filaria worm. | ..... | 59 |
| 19. Give general characters of Phylum Annelida and classify upto order with examples. | ..... | 61 |
| 20. Describe the haemocoelomic system of Annelida.
Or, What is Coelom? Give an illustrated account of the haemocoelomic system in Leech. V.V.I. | | 64 |

21. Give an account of the nephridial system in Leech (Annelida).
Or, Describe the excretory system of Leech (Annelida). 67
22. Classify Mollusca upto order with characters and examples.
Or, Classify Mollusca mentioning the distinctive features and examples of the different classes. 70
23. Write an essay on the torsion and detorsion in Gastropoda. **V.V.I.** 73
24. Write short note on Pearl formation. 77
25. Give an account of different larval forms in Echinodermata. **V.V.I.** 77
26. Describe water vascular system in Asterias (Starfish). 80

GROUP-B

(Environmental Biology and Animal Behaviour)

1. What do you mean by limiting factors? Explain Liebig's law of minimum with suitable examples. **V.V.I.** 82
2. Describe energy flow through an ecosystem studied by you with reference to laws of thermodynamics. **V.V.I.** 83
3. Define the term ecosystem. Describe in detail the component of a fresh water ecosystem. 85
4. Give an account of the structure and function of a typical ecosystem. 86
5. Define food chain. Illustrate it with reference to a freshwater lake. 89
6. Describe various types of food chains. **V.V.I.** 91
7. What is food web? Give its main characteristics in the ecosystem. 92
8. Give various steps of transfer of energy in an ecosystem. What conclusions you can derive from the transfer of energy. 93
9. What are ecological pyramids? Discuss different kinds of ecological pyramids. 94
10. Define biodiversity and species diversity. Explain the measures of species diversity. **V.V.I.** 97
11. Define the term wildlife and give an account of the present status of wildlife in India. **V.V.I.** 98
12. What is the importance of wildlife to human beings? Comment upon the methods of its conservation. 99
13. Write an essay on wildlife conservation in India.
Or, Define the term conservation. Give an account of the administrative and legislative measures undertaken for conservation of wild life. **V.V.I.** 102
14. Define Toxicology. Give an outline of different types of toxicants and their nature. 106
15. Write an essay on 'Ethology and its methods'. 107
16. What is learning? Describe different types of learning behaviour with the help of suitable examples. **V.V.I.** 110

17. What do you understand by animal behaviour? Throw light on the significance of the study of animal behaviour. 114
18. Discuss psychological, neurophysiological and ethological approaches in the study of animal behaviour. 114
19. Discuss ecological, physiological and evolutionary approaches of animal behaviour. 115
20. Define innate or instinctive behaviour and explain it with the help of suitable examples. 118
21. Describe various forms of instinctive or innate behaviour. 120
22. What do you understand by learned behaviour? Why are they more developed among vertebrates? 122
23. Write an essay on social behaviour in insects. **V.V.I.** 124
24. Write an essay on evolution of social life in insects. 125
25. What are Pheromones? Give an account of releaser and signal pheromones. **V.V.I.** 126
26. Write short note on the following :
 - (i) Chemical toxicants 127
 - (ii) Tiger Reserves in India 127
 - (iii) Ozone 128
 - (iv) Rainwater harvesting 128

ZOOLOGY - 1 (Hons.) (2022)

The questions are of equal value. Answer five questions.
selecting at least two from each group.

Group-A

1. Classify Phylum Porifera upto orders giving distinctive characters and suitable examples. 20
2. Describe the methods of reproduction in Protozoa. 7
Or, Describe the structure, life cycle and pathogenicity of the endoparasite causing filariasis in man. 59
3. Describe the structure and affinities of Ctenophora. 44
4. Give an account of excretory system in annelids. 67
- Or,** Describe water vascular system in starfish. 80

Group-B

5. Give an account of abiotic and biotic components of a freshwater ecosystem. 85
6. Discuss the methods of conservation of wildlife. 99
7. Elucidate types and nature of toxicants studied by you. 106
8. Describe the methods of rain water harvesting. What benefits you expect from such practice adopted by farmers. 128

ZOOLOGY - 1 (Hons.) (2021)

The questions are of equal value. Answer five questions.
selecting at least two from each group.

Group-A

1. Classify Phylum coelenterata upto orders giving diagnostic features and suitable examples.
2. Describe the structure, life cycle and pathogenicity of the parasite causing amoebic dysentery in man. 28
Or, Write an essay on evolution of Metazoa.
3. Give an account of parasitic adaptations in Platyhelminthes. 49
4. Describe the phenomenon of torsion and detorsion in gastropods. 73
Or, Give an account of Haemocoelomic system in leech. 64

Group-B

5. What do you mean by limiting factors? Discuss laws of limiting factors with Illustrations. 82
6. Describe energy flow in an ecosystem studied by you. 83
7. Give an account of social behaviour in insects. 124
8. Describe various types of learning behaviour citing suitable examples. 110

ZOOLOGY - 1 (Hons.) (2020)

Answer five questions, selecting at least two from each Group.

Group - A

1. Classify phylum porifera upto the orders giving diagnostic features and suitable examples. 31
2. Describe the phenomenon of polymorphism in coelenterates.
3. Describe the structure, life cycle and pathogenicity of Taenia solium. 51
4. Give an account of water vascular system in starfish. 80

Group - B

5. Define ecosystem. Describe the various components of any freshwater ecosystem studied by you. 85
 6. What are food-chains? Explain the various types of food-chains with the help of schematic representations. 91
 7. Define biodiversity. Give an account of various efforts made in India for the conservation of biodiversity. 97
- Or,** Give an account of administrative and legislative measures that have been taken up for conservation of wild life in India. 102
8. What are pheromones? Describe the role of signaling or releaser and primer pheromones in animal behaviour. 126



Rekha V.V.I. Questions for 2023 Examination

*Answer of below mentioned V.V.I. questions are present in your
Rekha Examination Guide and Guess Part-I Zoology-2*

Group–A

(Animal Diversity)

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|---|-------|----|
| 1. Write an essay on “Origin of Chordates.” V.V.I. | | 5 |
| 2. Give the general characters and classification of Hemichordata. | | 6 |
| 3. Give the general characters and classification of Urochordata. | ..... | 8 |
| 4. Give the general characters and classification of Cephalochordata. | ..... | 11 |
| 5. What is retrogressive metamorphosis? Describe it with reference to the life cycle of Herdmania. | ..... | 12 |
| 6. Give the general characters and classification of Cyclostomata. V.V.I. | ..... | 14 |
| 7. Describe general characters, habit, habitat, distribution, external features and affinities of Petromyzon. | ..... | 17 |
| 8. Classify Chondrichthyes upto orders. | ..... | 19 |
| 9. Give the general characters of Chondrichthyes. V.V.I. | ..... | 20 |
| 10. Classify Osteichthyes upto orders. | ..... | 22 |
| 11. Give the general characters of Osteichthyes. | ..... | 24 |
| 12. Describe the process of respiration in a bony fish studied by you. V.V.I. | ..... | 26 |
| 13. Write an essay on migration of fishes. | ..... | 28 |
| 14. Give the characteristic features of class Amphibia and classify upto order. | ..... | 29 |
| 15. Write an essay on Origin and evolution of Amphibia. | ..... | 32 |
| 16. Write an essay on the parental care in Amphibians. | ..... | 34 |
| 17. Explain Neoteny. V.V.I. | ..... | 36 |
| 18. Classify living reptiles upto order giving their characteristic features and suitable examples. | ..... | 38 |
| 19. Describe biting mechanism of snakes. | ..... | 42 |
| 20. Give the general characters of Aves. | ..... | 44 |
| 21. Explain the flight muscles or flight adaptation in columba or Pigeon (birds). | ..... | 47 |
| 22. Give an account of Origin of birds. | ..... | 49 |
| 23. Give an account of Migration of birds. V.V.I. | ..... | 52 |
| 24. Give an account of distribution, general characters and affinities of Prototheria. | ..... | 57 |
| 25. Describe the general characters, affinities and distribution of Metatheria or Marsupials. | ..... | 59 |
| 26. Give an account of the adaptive radiation of Mammals. | ..... | 61 |
| 27. Give an account of dentition in Mammals. V.V.I. | ..... | 64 |

Group-B
(Developmental Biology)

- | | | |
|--|-------|-----|
| 1. Discuss the process of Oogenesis. V.V.I. | ..... | 68 |
| 2. Give an account of Spermatogenesis. | ..... | 69 |
| 3. Give an account of different type of eggs in vertebrates. | ..... | 73 |
| 4. Give an account of Fertilization. | ..... | 74 |
| 5. Give an account of Parthenogenesis. V.V.I. | ..... | 78 |
| 6. What is Cleavage? Discuss the kinds and characteristics of Cleavage. | ..... | 79 |
| 7. Give an account of different types of cleavage found in vertebrates. | ..... | 81 |
| 8. What is fate map? Give an account of fate map in frog. | ..... | 87 |
| 9. Describe the development of frog upto the formation of three germinal layers. | ..... | 90 |
| 10. Describe the development of chick upto the formation of three germinal layers. V.V.I. | ..... | 97 |
| 11. Give an account of extra-embryonic membranes in chick and point out their functions. V.V.I. | ..... | 101 |
| 12. What is placenta? Describe its different types in mammals. Explain their functions. | ..... | 104 |
| 13. Give an elementary description of primary organizer. V.V.I. | ..... | 110 |

ZOOLOGY - 2 (Hons.) (2022)

Answer any five questions. Selecting at least two from each group.

Group-A

- | | | |
|---|-------|----|
| 1. Give an account of Retrogressive metamorphosis in Herdmania. | ..... | 12 |
| 2. Classify class Amphibia upto orders giving salient features and suitable examples. | ..... | 29 |
| 3. Write an essay on migration in fishes. | ..... | 28 |
| Or, Describe biting apparatus and mechanism of biting in snakes. | ..... | 42 |
| 4. Write an essay on flight adaptation in birds. | ..... | 47 |

Group-B

- | | | |
|---|-------|-----|
| 5. Describe types and patterns of cleavage in vertebrate series. | ..... | 81 |
| 6. Describe gastrulation in frog upto the formation of three primary germinal layers. | | |
| 7. What is fertilization ? Describe the mechanism of fertilization. | ..... | 74 |
| 8. Write short notes on any two of the following : | | |
| (a) Spermatogenesis | ..... | 69 |
| (b) Types of placenta | ..... | 104 |
| (c) Extraembryonic membranes in chick | ..... | 101 |
| (d) Fate map in frog | ..... | 87 |

ZOOLOGY - 2 (Hons.) (2021)

Answer any five questions. Selecting at least two from each group.

Group-A

1. Give an account of origin of Chordates. 5
2. Classify Cyclostomes with salient features. 14
3. Write an essay on migration of birds. 52
4. Describe any three of the followings:
 - (a) General characters of Chondrichthyes. 20
 - (b) Neoteny 36
 - (c) Skeletal peculiarities of Chelonia
 - (d) Dentition Rabbit 64
 - (e) Metatheria 52

Group-B

5. Describe the mechanism of Oogenesis in mammals. 68
6. What is Gastrulation? Describe the development of chick embryo up to the formation of three germinal layers. 97
7. Give an account of extra embryonic membrane in chick. 101
8. Write short notes on any three of the following :
 - (a) Types of eggs 73
 - (b) Fate map 87
 - (c) Function of placenta 104
 - (d) Parthenogenesis 78
 - (e) Primary Organizer 110

ZOOLOGY - 2 (Hons.) (2020)

Group - A

1. Give an account of Retrogressive Metamorphosis in Herdmania. 12
2. Describe the mechanism of respiration in bony fishes. 26
Or, Write an essay on migration of fish. 28
3. Describe the biting mechanism of poisonous snakes. 42
4. Give an account of flight adaptations in Birds. 47

Group - B

5. Describe the various types of cleavage encountered in vertebrates. 81
6. Describe the types of placenta in mammals. Add a note on functions of placenta. ... 104
7. Describe, in detail, the process of spermatogenesis in mammals. 69
8. What is fertilization? Discuss the sequence of events during fertilization in vertebrates. 74

