

ST. XAVIER'S COLLEGE JAIPUR
For B.Sc. Semester I (As per NEP 2020)

ZOOLOGY QUESTION BANK
ANIMAL DIVERSITY (ZOO-51T-101)

PART I

1. Write the locomotory organelles of Protozoans (2022)
2. Differentiate diploblastic animals and triploblastic animals (2022)
3. Write the classification of Hydra. (2022)
4. Define acoelomate (2022)
5. Write the main characters of class Hirudinea (2022)
6. What is apolysis (2022)
7. What do you understand by metameric segmentation? (2022)
8. What is the name of the phylum in which first time nervous system originated? (2014)
9. Give the name of cells present in Taenia for excretion (2014)
10. What is polymorphism
11. Define nematocysts
12. What is Measly pork?
13. What is a strobila?
14. What are Arthropods?
15. Why is hemichordate included under invertebrate?
16. Comment on Mother of Pearl
17. Differentiate the term: a) stomochord and notochord. b) coelomate and acoelomate
18. Write notes on larva of Balanoglossus.
19. What is holozoic nutrition? Give two examples from Protozoa.
20. Write short notes on: a) Structure of tooth b) Types of teeth found in Mammals c) Dental formula d) Diphydont teeth e) Monodont teeth
21. Define convergent evolution.
22. Which mammals from Australia are representative forms of Adaptive radiation.
23. Name the type of feather found in birds (2016)
24. Explain perching mechanism (2015, 2012)
25. Write names of long bones found in hind leg of pigeon (2013)

26. What is the excretory product in birds
27. What is furcula bone? Where is it found?
28. Name a few flightless birds.
29. Give the scientific name of: a) Owl b) Peacock c) Parrot d) Koel e) Hoopoe f) Crow
30. Distinguish between proteroglyphous and solenoglyphous fangs. (1999)
31. Which type of gland in poison gland is found in snakes (2016)
32. Write 2 examples of poisonous and non-poisonous snakes.
33. What is paedogenesis.
34. Write on Neoteny.
35. What adaptations are found in fishes.
36. Give a note on different types of fins in fishes.
37. Differentiate catadromy and anadromy. Give examples.
38. What is potamodromous migration.
39. Write the name of the fish which contains brood pouches to nurse its eggs.
40. Give examples of viviparous fishes.
41. Differentiate euryhaline and stenohaline fishes.
42. What is the process of osmoregulation in fishes.
43. What are osmoconformers/ osmoregulators.
44. Write short notes on : a) types of fins c) Scales of fishes
45. Write short notes on general characteristics of phylum Pisces.
46. Notes on : a) Chondrichthyes b) Placoderm c) Elasmobranch
47. Write short notes on Petromyzon
48. What is Ascidian tadpole larva
49. Define Statocyst.
50. Write short notes on: i) Urochordata ii) Cephalochordata
51. Differentiate between phylum chordata and protochordates.
52. Write the main characteristics of phylum chordata.
53. What is chorda dorsalis.
54. Differentiate between a) Acrania and Acraniata b) Agnatha and Gnathostomata
55. Write short notes on i) Hemichordata ii) Urochordata
56. Give 5 characteristics of phylum Echinodermata.
57. Draw a flowchart of the classification of Echinodermata.
58. In the animals of which class torsion is found?
59. Pearl can be obtained from the animals of which class.

60. In the animals of which class ink glands are found.
61. Define Metamorphosis in Insects.
62. Write notes on: i) Ametabolous ii) Hemimetabolous iii) Holometabolous metamorphosis
63. What are living fossils.
64. Write a note on the different types of metamerism.
65. Difference between Radiata and Bilateria
66. Write on: Acoelom, Eucoelom and Pseudocoelom
67. Write on Deuterostomia and Protostomia.
68. What is taeniasis
69. What is cysticercosis.
70. What are phasmids.
71. Write a note on the excretory system of *Ascaris lumbricoides*.
72. Write notes on formation of coelom.
73. What are the different types of metamerism in Annelida.
74. What are the different types of larval forms that occur in Arthropoda.
75. Differentiate chordata and non-chordata.

PART II

1. Write short note on: concept of protozoa and metazoa (2022)
2. Describe the general characteristics of Phylum Annelida classify in detail with suitable example.
3. Write short notes on: a) Symmetry b) Character of Mammalia (2022)
4. Explain locomotion of Amoeba, Paramecium and Euglena (2022)
5. Write the general features of protista
6. Explain general characters of the phylum Echinodermata and classify the phylum upto classes citing an example from each.
7. Write a note on pearl formation
8. Outline the important phylogenetic aspects of Balanoglossus
9. Explain the chief types of locomotor organelles of Protozoa. Explain how they bring about locomotion.

10. Write short notes on: a) Adaptive radiation in Mammals b) Convergent evolution in Mammals
11. What is the reason behind similarities in Australian marsupials and eutherian mammals.
12. What is nocturnal migration.
13. What are resident birds? Give Example.
14. Define Navigation.
15. Write short note on Seasonal migration.
16. Write down the functions of feathers in birds. Also draw and explain structure of feather.
17. Write a note on mechanism of flight in birds
18. Describe the structure of poison gland (1997, 2006, 2008, 2010)
19. State four differences between poisonous and non-poisonous snakes (1997, 1999, 2006, 2008, 2010)
20. Give an account of the muscles involved in the biting mechanism of poisonous snakes and also illustrate the biting mechanism (2005, 2006, 2008, 2010)
21. Write short notes on: i) Axolotl ii) Ichthyophis iii) Amphiuma iv) Bufo v) Urodela
22. Describe the process of nest building in fishes.
23. Write short notes on: a) Integumentary cups b) Mermaid's purse c) Viviparity in fishes
24. Explain retrogressive metamorphosis in detail.
25. Draw a well labelled diagram of Ascidian tadpole larva and describe its metamorphosis
26. What is protochordates? Explain in detail.
27. Describe the different affinities of phylum hemichordata in detail.
28. Explain water vascular system in Asterias (2004, 2006, 2007, 2009, 2011, 2013, 2014)
29. Give a detailed account of hemichordates.
30. Write 5 main characters of phylum Mollusca
31. Discuss how hormones control metamorphosis.
32. Describe different crustacean larva with a diagram.
33. Describe the canal systems in Porifera.
34. Write in detail the life history and development of *Taenia solium*

PART III

1. Describe the lifecycle of *Ascaris lumbricoides* (2022)
2. Describe the life cycle of *Taenia solium* and its parasitic adaptations.
3. Give an outline on Coelenterata classification.
4. Essay on the classification of Platyhelminthes.
5. Outline the classification of Phylum Annelida.
6. Explain the outline classification of Phylum Arthropoda.
7. Classify phylum Mollusca based on the salient features. Give examples to each.
8. Describe dental formula, importance and function of teeth/ Write an essay on dentition of mammals.
9. Write an essay on adaptive radiation in placental eutherians and marsupial mammal.
10. Write a detailed note on migration of birds
11. Explain flight adaptation in Aves
12. Write an essay on flightless birds.
13. Write an essay on structure and type of feathers.
14. Describe the distinctive features or general characters of class Aves.
15. Classify birds giving important characters and examples of each group.
16. Write an essay on the difference between poisonous and non-poisonous snakes.
17. Classify reptilia (on the basis of temporal vacuities) upto orders giving important characters and suitable examples*
18. Write short note on: a) Parental care in Amphibia b) Nest building in Amphibia c) Viviparity/ Write in detail about parental care in amphibia
19. Give the diagnostic features of class Amphibia. Classify modern Amphibia giving salient features and examples of each other.
20. Write a detailed note on adaptation in fishes.
21. Write a detailed note on migration in fishes.
22. Write in detail about parental care in fishes.
23. Compare and contrast the process of osmoregulation in fresh water and marine fishes.
24. Explain fins in detail. Give a note on the origin theory of fins
25. Write an essay on scales of fishes.
26. Explain differences between Osteichthyes and Chondrichthyes fishes.
27. Describe classification of Phylum Pisces in detail.
28. Give the important characters of superclass Agnatha and classify the groups.

29. What is cyclostomes, classify them in detail.
30. Describe the different changes that occur in Ascidian tadpole larva during metamorphosis.
31. Classify phylum Chordata up to classes, giving the important characters and examples of each class.
32. Write the classification and characteristics of Balanoglossus.
33. Explain general characteristics of phylum Echinodermata with classification and example.
34. How is natural pearl formed and give a note on the types of pearls. Explain with diagram.
35. Explain torsion in gastropods in detail with a diagram.
36. Describe phylum Arthropoda classification in detail.
37. Explain detailed classification of Phylum Annelida.
38. Write characteristics of phylum Porifera and give its classification.

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