



ZOOLOGY IMPORTANT QUESTIONS 2Yr

LAQ

1. Describe the structure of the heart of man with the help of neat labelled diagram.
2. Give an account of working of the human heart.
3. Describe the excretory system of man, giving the structure of a nephron.
4. Describe female reproductive system of a woman with the help of labelled diagram.
5. Describe male reproductive system of a man. Draw a labelled diagram of it.
6. Describe chromosomal theory of sex determination.
7. What are multiple alleles? Describe multiple alleles with the help of ABO blood groups in man.
8. What is criss cross inheritance? Explain the inheritance of one sex linked recessive character in human beings.

SAQ

Chapter 1 Digestion and Absorption.

1. Draw a neat labelled diagram of L.S of a tooth ?
 2. Describe the process of digestion of proteins in the stomach.
 3. What are the functions of liver?
 4. If, you take butter in your food, how does it get digested and absorbed in the body?
- #### Chapter 1B Breathing and exchange of gases
5. Explain the process of inspiration and expiration under normal conditions.
 6. Describe disorders of respiratory system.
 7. How is respiratory movements regulated in man?
 8. What are the major transport mechanisms for CO₂?
 9. Distinguish between IRV and ERV

Inspiratory capacity and expiratory capacity

Vital capacity and total lung capacity (IRV).

Chapter 2B : Excretory Products and their Elimination

10. Describe the internal structure of kidney of man.
11. Draw a labelled diagram of the V.S. of Kidney.

Chapter 3 Musculo skeletal system

12. Draw a neat labelled diagram of pelvic girdle:
13. Describe the important steps in muscle contraction.
14. Describe the structure of synovial joint with the help of a neat labelled diagram.

Chapter 3B: Neural Control and Coordination

15. Draw a labelled diagram of the T.S of the spinal cord of man
16. Give an account of synaptic transmission.
17. Give an account of the retina of the human eye.

Chapter 4A : Endocrine System and Chemical coordination

18. Explain how hypothyroidism and hyperthyroidism can affect the body.
19. Write a note on Addison's disease and Cushing's syndrome
20. Give an account of the secretions of pituitary gland
21. List out the names of endocrine glands present in human beings and mention the hormones they secrete

Chapter 4B : Immune System

22. Write short notes on B-cells.
23. Explain the mechanism by which HIV multiplies and leads to AIDS.
24. Write short note on immunoglobulins.



25. Explain the mechanism of humoral immunity
26. Describe various types of barriers of innate immunity.
27. Write a short notes on T – cells.

Chapter 5B : Reproductive health

28. What are Sexually Transmitted Diseases (STDs)? List any three STDs and their Causative organisms.
29. Describe the surgical methods of contraception.
30. write short notes on
(a) IVF (b) ICSI
(c) IUD'

Chapter 6: Genetics

- 31, Describe erythroblastosis foetalis.
32. Describe the Genic Balance Theory of sex determination in drosophila
33. Write the salient features of HGP.
34. Describe the steps involved in DNA finger printing technology.

Chapter 7: Organic Evolution

35. Write a short note on the theory of mutations.
36. What is meant by genetic drift? Explain genetic drift citing the example of Founder Effect.
37. Distinguish between homologous and analogous organs with examples.
38. Explain Darwin's theory of natural selection with industrial melanism
Experimental proof.
39. Discuss the role of different patterns of selections in evolution.
40. Write a short note on Neo-darwinism.

Chapter 8: Applied Biology

41. Explain the different types of cancers
42. Honey bees are economically important. Justify.
43. List out the various steps involved in MOET?
44. Discuss in brief about 'Avian Flu'?
45. Explain in brief about queen bee
46. Write about the procedure involved in MRI.
47. Discuss briefly the process of indirect ELISA.
48. Define vaccine and discuss about types of vaccines
49. Write in brief the types of gene therapy

VSAQ

Chapter 1A: Digestion and Absorption

1. Give the dental formula of adult human beings.
2. Bile juice contains no digestive enzymes, yet it is important for digestion. How?
3. What is chyme?
4. Name the different types of salivary glands of man, and their locations in the Human body.
5. Name the different types of papillae present on the tongue of man.
6. Name the structure of gut which is vestigial in human beings, but well developed in the herbivores and mention the type of tissue with which it is mostly formed.
7. Distinguish between absorption and assimilation.
8. What is the hardest substance in human body? What is its origin?

Chapter 1B : Breathing and Exchange of Gases

9. Define vital capacity. What is its significance.
10. What is meant by chloride shift?
11. What are conchae?
12. Name the muscle that help in normal breathing movements.
13. What happens to the respiratory process in a man going up



the hill

14 Define oxyhaemoglobin dissociation curve. Can you suggest any reason for its sigmoid pattern?

15 Mention any two respiratory disorders and their causes in human beings.

Chapter 2A: Body Fluids and Circulation

16. Sino-atrial node is called the pacemaker of our heart. Why?

17. Name the valves that guard the left and right atrioventricular apertures in man.

Chapter 2B: Excretory Products and their Elimination

18. Name the blood vessels that enter and exit the kidney.

19. What are columns of Bertin?

20. Define glomerular filtration.

21. Distinguish between the enzymes renin and rennin.

22. Distinguish between cortical and juxtamedullary nephrons.

23. What are renal pyramids and renal papillae?

24. Name the structural and functional unit of kidney. What are the two main types of structural units in it?

25. What is the juxtaglomerular apparatus?

Chapter 3A : Musculo – Skeletal System

26. What is a triad system?

27. Write the difference between actin and myosin.

28. What is a motor unit with reference to muscle and nerve?

29. Distinguish between red muscle fibres and white muscle fibers.

30. Name the keystone bone of the cranium. Where is it located?

31. Human skull is described as dicondylic skull. Give the reason.

32. Name the ear ossicles and their evolutionary origin in human beings.

33. Name two cranial sutures and their locations.

Chapter 3B : Neural Control and Coordination

34. What is corpus callosum?

35. Why is the sympathetic division called thoraco-lumbar division?

36. What do you know about arbor vitae?

37. Name the cranial meninges covering the brain of man.

38. How do rods and cones of human eye differ from each other chemically and functionally?

39. Distinguish between the blind spot and the yellow spot.

40. What is organ of Corti?

Chapter 4A : Endocrine System and Chemical Co-ordination

41. What is acromegaly? Name the hormone responsible for this disorder.

42. Which hormone is commonly known as fight and flight hormone?

43. Distinguish between diabetes insipidus and diabetes mellitus.

44. What is insulin shock?

45. What is erythropoietin? What is its function?

46. Which hormone is called anti-diuretic hormone? Write the name of the glands that secrete it.

47. What are androgens? Which cells secrete them?

48. What are Islets of Langerhans?

Chapter 4B: Immune System

49. "Colostrum is very much essential for the new born infants". Justify.

50. Write the names of any four mononuclear phagocytes.

51. Define the terms immunity and immune system.

52. Differentiate between perforins and granzymes.

53. Distinguish between Innate Immunity and Acquired Immunity?



54. What are complement proteins?
55. "More and more people in metro-cities of India are prone to allergies". Justify.
56. What are autoimmune disorders? Give any two examples.
- Chapter 5A: Human Reproductive System**
57. What are the functions of Sertoli cells of the seminiferous tubules and Leydig cells in man ?
58. Define "Spermination" and "Spermiogenesis"?
59. What is capacitation of sperms ?
60. Name the yellow mass of cells accumulated in the empty follicle after ovulation. Name the hormone secreted by it and what is its function?
61. Define gestation period ? What is the duration of gestation period in the human beings
62. What is menstrual cycle ? Which hormones regulate menstrual cycle ?

Chapter 5B : Reproductive Health

63. What are the measures one has to take to prevent contracting STDs?
64. What is 'amniocentesis' ? Name any two disorders that can be detected by amniocentesis,
65. What in your view are the reasons for population explosion, especially in India?
66. Mention the advantages of lactational amenorrhea method.

Chapter 6: Genetics

67. What are multiple alleles?
68. What is Turner's syndrome?
69. What is pleiotropy?
70. What is Klinefelter's syndrome?
71. List out any two applications of DNA fingerprinting technology.
72. What is haplodiploidy?
73. What is Down syndrome?
74. What is 'junk DNA'.
75. What are VNTRs?

Chapter 7 : Organic Evolution

76. What is panspermia hypothesis?
77. Mention the names of any four connecting links that you have studied.
78. Define Biogenetic law, giving an example.
79. Define atavism with an example.
80. What is meant by genetic load? Give an example.
81. Define Founder Effect, give one example.
82. Distinguish between allopatric and sympatric speciations.

Chapter 8: Applied Biology

83. Define the term 'vaccine'
84. Define the terms layer and broiler.
85. What is apiculture?
86. Distinguish between a drone and worker in honey bee colony?
87. Explain the term hypophysation
88. Mention any four fish by-products.
89. Differentiate between Apiculture and aquaculture.
90. Differentiate between Apiculture and Pisciculture.
91. Which substances in a sample are detected by direct and indirect ELISA respectively?
92. MRI scan is harmless. Justify.
93. Define the term Transgenic animal?
94. What does ADA stand for? Deficiency of ADA causes which disease?
95. List out any two Indian carps and two exotic carps.
96. What is popularly called 'Guardian Angle of cell's syndrome
97. Mention any two advantages of inbreeding.
98. List out any four features of cancer cells.