

SENIOR INTER ZOOLOGY

Important Questions

Very Short Answer Type Questions (2 Marks)

UNIT - I

1. Give dental formula of adult man.
2. What is chyme?
3. Name the structure of gut which is vestigial in man but well developed in herbivores. Mention the type of tissue with which it is mainly formed.
4. Name two hormones secreted by intestinal mucosa.
5. What are conchae?
6. What is meant by chloride shift?
7. Draw labelled diagram of Oxygen - Haemoglobin dissociation curve.
8. Name the muscles that help in normal breathing movements.

UNIT - II

9. Why sinoatrial node is called pacemaker?
10. Where is the valve of Thebesius in human heart?
11. Define Cardiac Cycle and Cardiac Output.
12. What renal pyramids and renal papillae?
13. What are columns of Bertin?
14. Define glomerular filtration.
15. Distinguish between renin and rennin.
16. Name the structural and functional units of kidney. What are the two main parts of it?

UNIT - III

17. What is triad system?
18. Name the keystone bone of cranium. Where it is located?
19. Name the ear ossicles of man and their evolutionary origin.
20. What is Corpus Callosum?
21. What is all or none principle?

22. How does rods and cones in retina of eye differ chemically and functionally?
23. What is organ of corti?

UNIT – IV

24. Distinguish between diabetes mellitus and diabetes incipides.
25. Which hormone is called fight or flight hormone?
26. What is erythropoitin? What is its function?
27. Define immunity and immune system.
28. What are complement proteins?
29. Colostrum is essential for new borns. Justify.
30. Define antigen and antibody.
31. What are epitope and paratope?

UNIT – V

32. Name the canals that connect the cavities of scrotal sacs to abdominal cavity.
33. What are the functions of sertoli cells and leydig cells in human testis?
34. Name the yellowish tissue accumulated in empty follicle after ovulation. Name the hormone secreted by it. What is its function?
35. What is meant by implantation?
36. Draw labelled diagram of a sperm.
37. What is capacitation of sperms?
38. Write two reasons for population explosion.
39. What is amniocentesis? Name any two disorders that can be detected by it.

UNIT – VI

40. What are the antigens causing ABO blood grouping? Where they are present?
41. What is erythroblastosis foetalis?
42. What is haplo-diploidy?
43. What is criss cross inheritance?
44. What are sex influenced characters?
45. What are VNTR?
46. What is lyonisation?

UNIT – VII

47. Mention names of any four connecting links you have studied.
48. Define atavism with an example.
49. What is meant by genetic load? Give an example.
50. Distinguish between anagenesis and cladogenesis.
51. Write two examples to disprove Lamarck's inheritance of acquired characters.

UNIT – VIII

52. What is apiculture?
53. Write names of two Indian Carps and two exotic Carps.
54. Mention any two features of PCR.
55. Define 'Transgenic animal'.
56. List any four features of cancer cells.
57. MRI scan is harm less. Justify.
58. Which substances can be identified from a samp by direct and indirect ELISA?

Short Answer Type Questions (4 Marks)

UNIT – I

1. Draw labelled diagram of L.S. of tooth.
2. Describe functions of liver.
3. Explain process of inspiration and expiration under normal conditions.

UNIT – II

4. Describe events in cardiac cycle briefly.
5. Describe differences between an artery and a vein.
6. Explain the mechanism of blood clotting.
7. Draw labelled diagram of V.S. of Kidney.
8. Give brief account on counter current mechanism.
9. Classify vertebrates on the basis of nitrogenous waste they excrete giving examples.

UNIT – III

10. Write short notes on sliding filament theory of muscle contraction.
11. Draw labelled diagram of a sarcomere.
12. Describe the structure of a synovial joint with the help of a labelled diagram.
13. Draw labelled diagram of T.S. of Spinal Cord.
14. Give an account of synaptic transmission.

UNIT – IV

15. List out the endocrine glands present in man and mention the hormones they secrete.
16. Give an account of secretions of Pituitary gland.
17. Why does sugar is present in the urine of a diabetes patient.
18. Write notes an mechanism of action of hormones.
19. Write short notes on immunoglobulins.
20. Explain the mechanism of humoral immunity.

UNIT – V

21. Describe microscopic structure of human testis.
22. Draw lablled diagram of Graafian follicle.
23. Describe placenta in human beings.
24. Draw labelled diagram of female reproductive system in man.
25. Suggest some methods to assist infertile couple to have children.
26. Is sex education necessary in schools? Why?

UNIT – VI

27. Describe genetic basis of ABO blood grouping.
28. Describe genic balance theory of sex determination in *Drosophila*.
29. Write salient features of HGP.
30. Explain inheritance of sex linked recessive trait in man.
31. Describe inheritance of sex influenced traits in man.

UNIT – VII

32. Distinguish between homologous and analogous organs.

33. Write short notes on mutations.
34. Explain Darwin's theory of natural selection with industrial melanism as an experimental proof.
35. Write short notes on Neodarwinism.
36. What is meant by genetic drift? Explain the genetic drift citing the example of Founders Effect.

UNIT – VIII

37. Define the term breeding. What are the objectives of Anema breeding.
38. Explain the important components of poultry management.
39. Honey bees are economically important. Justify.
40. Write in brief the types of gene therapy.
41. List out four features of cancer cells.
42. Discuss briefly the process of indirect ELISA.

Long Answer Type Questions (8 Marks)

UNIT – I

1. Describe Physiology of digestion of various types of food in man.
2. Write an essay on transport of Oxygen and Carbon dioxide by blood.

UNIT – II

3. Describe structure of heart of man with labelled diagram.
4. Write notes on working of heart of man.
5. Describe the process of urine formation.

UNIT – III

6. Give an account of structure and functions of human brain.
7. Explain transmission of nerve impulse through nerve fibre with the help of suitable diagrams.

UNIT – V

8. Describe male reproductive system of man with labelled diagram.

UNIT – VI

9. What are multiple alleles? Describe multiple alleles with the help of ABO blood groups in man.
10. Describe chromosomal theory of sex determination.
11. What is criss cross inheritance? Explain the inheritance. One sex linked recessive character in man.
12. What is DNA finger printing? Mention its applications.

UNIT – VIII

13. Write in detail about breeding.

Writer : K. Sreeramulu