

SVGS

HALF YEARLY EXAMINATION - 2019

11 - STD

ZOOLOGY

Time Allowed : 3.00 Hours

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Maximum Marks : 70

PART - I

Note : (i) Answer all the questions. (ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer. 15 x 1 = 15

- Which of these is correct order of hierarchy ?
 (a) Kingdom, phylum, genus and species (b) Phylum, division, genus and class
 (c) Kingdom, genus, class and phylum (d) Phylum, kingdom, species and class
- Nephridia of Earthworms are performing the same function as _____
 (a) Gills of prawn (b) Flame cells of planaria (c) Trachea of insects (d) Nematoblast of Hydra
- Which one of the following is a correct pair?
 (a) Ehler's Danlos Syndrome - Inability to secrete saliva
 (b) Stickler Syndrome - Facial abnormalities
 (c) Rhabdomyo Sarcoma - Defect in synthesis of collagen
 (d) Sjogren's Syndrome - Life threatening soft tissue tumour of head
- An adaptation to the aerial mode of life in pigeon is _____
 (a) Single ovary on the left side (b) Pair of ovary on both the side
 (c) Single ovary on the right side (d) Both (a) and (c)
- A baby suffers from stunted growth, mental retardation, low intelligence quotient and abnormal skin. This is the result of _____
 (a) Low secretion of growth hormone (b) Cancer of the thyroid gland
 (c) Over secretion of pars distalis (d) Deficiency of iodine in diet
- The first Vitamin produced by fermentation process using Acetobacter bacteria is :
 (a) Vitamin D (b) Vitamin C (c) Vitamin B (d) Vitamin A
- Assertion (A)** : Pre-mature babies have low-levels of surfactants in the alveoli.
Reason (R) : The synthesis of surfactants begins only after the 25th week of gestation.
 (a) (A) is correct and (R) is also correct (R) explains (A).
 (b) (A) is wrong but (R) is correct. (c) (A) is correct and (R) is wrong.
 (d) (A) is correct and (R) is also correct but (R) does not explain (A).
- Which is not involved in blood clotting ?
 (a) Fibrin (b) Calcium (c) Platelets (d) Bilirubin
- A baby aged two years is admitted to play school and passes through a dental check - up. The dentist observed that the boy had twenty teeth. Which teeth are absent ?
 (a) Canines (b) Pre-molar (c) Molars (d) Incisors
- Identify the wrong statement regarding "Kidney of mammal".
 (a) Kidney is enclosed in a white fibrous capsule.
 (b) The outer surface is convex while the inner surface is concave.
 (c) The functional unit of kidney is the glomerulus.
 (d) The right kidney is slightly lower than the left one.
- The cranial nerve which controls the movement of eye ball is :
 (a) trochlear nerve (b) optic nerve (c) olfactory nerve (d) vagus nerve
- Isinglass is used in :
 (a) Preparation of wines (b) Clearing of wines (c) Distillation of wines (d) Preservation of wines
- Match the following :**
 (1) Neutrophils - (i) Lack nucleus
 (2) Monocytes - (ii) 3-4 Lobes of nucleus
 (3) Eosinophils - (iii) Kidney shaped nucleus
 (4) Platelets - (iv) Bilobed nucleus
 (a) (1)-(i), (2)-(iv), (3)-(iii), (4)-(ii) (b) (1)-(ii), (2)-(iv), (3)-(i), (4)-(iii)
 (c) (1)-(ii), (2)-(iii), (3)-(iv), (4)-(i) (d) (1)-(iii), (2)-(i), (3)-(ii), (4)-(iv)

14. Name the ion responsible for unmasking of active sites for crossbridge activity during muscle contraction.
 (a) Sodium (b) Potassium (c) Calcium (d) Magnesium
15. Rearing of honey bee is called as _____
 (a) Sericulture (b) Lacculture (c) Vermiculture (d) Apiculture

PART - II

Note : (i) Answer any six of the following. (ii) Question No. 24 is compulsory.

6 x 2 = 12

16. What is the significance of *Thermus aquaticus* ?
17. Differentiate Bone and Cartilage.
18. Is Alzheimer's disease a disease of nervous system ? Discuss the symptoms.
19. Give the location of cleft and spermathecal openings in *Lampito mauritii*.
20. The rate of breathing is more in fishes than human beings. Give reasons.
21. State Frank-Starling Law.
22. Name the analysis used to measure an Athlete's sporting performance by taking muscle biopsies. Why is it done?
23. **Give short note for the following :** (a) Bradycardia (b) Tachycardia
24. Immature nucleated RBC without haemoglobin cause nervous disorder. Name the deficiency disease and the vitamin associated with it.

PART - III

Note : (i) Answer any six of the following. (ii) Question No. 33 is compulsory.

6 x 3 = 18

25. Compare Schizocoelomate with Enterocoelomate.
26. Write the characteristics that contribute to the success of reptiles on land.
27. The blood of Cockroach is not responsible for transporting respiratory gases. Why?
28. Draw a labelled diagram of a typical long bone.
29. Name the functional areas seen in cerebral cortex and explain its function.
30. Calculate the vital capacity using the following data.
- | | | |
|----------------------------|---|---------|
| Expiratory Reserve Volume | - | 1100 ml |
| Tidal Volume | - | 7000 ml |
| Inspiratory Reserve Volume | - | 3000 ml |
31. Give the Economic importance of Bee wax.
32. List three features that characterise bony fish.
33. Certain enzymes are produced in pancreatic juice which are in inactive form and need to be activated before digestion. What are they ? How are they activated ?

PART - IV

Note : Answer all questions.

5 x 5 = 25

34. (a) Classify and describe animal kingdom based on their organisation. (OR)
 (b) Comment on the role of air sacs in increasing the respiratory efficiency in birds.
35. (a) Draw and describe the origin and conduction of Heart beat. (OR)
 (b) (i) Name the protein deficiency diseases seen in growing children and write its
 (ii) symptoms. Write a short note on peptic ulcer
36. (a) List out any five functions of skeletal system. (OR)
 (b) Describe briefly the regulation of kidney function by the following : (i) ADH (ii) ANF
37. (a) Explain any two stages involved in rearing of poultry. (OR)
 (b) Hormones are known as 'Chemical Messenger' - Justify.
38. (a) Diffusion of gases occurs in the alveolar region only and not in the other parts of respiratory system - Discuss. (OR)
 (b) Prawns are the most important aquatic crustacean cultured.
 (i) Write down the names of any four prawn species.
 (ii) Explain the method of culture of fresh water prawn.