PART - III

ZOOLOGY

(தமிழ் மற்றும் ஆங்கிலம் விளக்க / Tamil & English Versions)

தினமு : 3 நாட்கள் ]

Time Allowed : 3 Hours ]

[ மகிழ்ச்சியில் முடிவுக்கான காலம் : 150
[ Maximum Marks : 150

Instructions : (1) Check the question paper for fairness of Printing. If there is any lack of fairness, inform the Hall Supervisor immediately.

(2) Use Black or Blue ink to write and underline and pencil to draw diagrams.

పాఠాని - I / PART - I

పాఠాని : (i) ఆశంతి విద్యార్థికుడు సిలియము ప్రతికారం.

(ii) క్రిష్ణ సిలియము తింట విధానాధికారి సముదాయాన్ని.

Note : (i) Answer all the questions.

(ii) Choose and write the correct answers.

1. ప్యాథాలిటిని కమాండ్ కార్పోరేషన్ లోని విభాగం : 

   (a) మీటర్ ముందు వంటి 
   (b) మెట్రోమెటర్ 
   (c) దానావియా ముందు 
   (d) ఏడాదిలోని కప్పర్

The instrument used for the preparation of pituitary extract is :

(a) Centrifuge 
(b) Manometer 
(c) Galvanometer 
(d) Endoscopy
2. A fine mesh net provided in a hatching pit is known as:
(a) Berm  (b) Happa  (c) Monk  (d) Bouchot

3. Total absence of plasma cell causes:
(a) Albinism  (b) Huntington’s Chorea  (c) Agammaglobulinemia  (d) Anemia

4. The organ of Corti is located on the:
(a) Basilar membrane  (b) Scala media  (c) Reissner’s membrane  (d) Tectorial membrane

5. The Volume of CSF secreted per day in human is:
(a) 550 ml  (b) 170 ml  (c) 200 ml  (d) 220 ml

6. The pacemaker of heart is in:
(a) Left auricle  (b) Right auricle  (c) Right ventricle  (d) Left ventricle
7. Tilapia mosambica does not survive below this temperature:

(a) 15°C  (b) 10°C  (c) 20°C  (d) 25°C

8. The kidney failure leads to:

(a) Amnesia  (b) Uraemia
(c) Anaemia  (d) Leucoderma

9. The Minorca is originated from:

(a) India  (b) America
(c) Spain  (d) Australia

10. The chromosomes 19 and 20 represented in group:

(a) C  (b) E
(c) F  (d) G
11. The collection of gene in a population is called:
(a) Gene pool  
(b) Gene frequency  
(c) Genome  
(d) Allelic frequency

12. The disease Nosema is caused by:
(a) Bacteria  
(b) Protozoa  
(c) Fungus  
(d) Virus

13. The blood vessel which begins systemic circulation is:
(a) Pulmonary artery  
(b) Pulmonary vein  
(c) Aorta  
(d) Coronary Sinus

14. The mineral necessary for O₂ transport is:
(a) Sodium  
(b) Potassium  
(c) Iron  
(d) Magnesium
15. Lymphocytes are produced at:
(a) Bone marrow  
(b) Thymus  
(c) Spleen  
(d) Lymph nodes

16. Which of the following is a fuel gas?
(a) Hydrogen  
(b) Trifluoro methyl  
(c) Sulphur penta fluoride  
(d) Chloro fluoro carbon

17. The small pox vaccine consists of:
(a) HBV  
(b) Oncogene  
(c) Vaccinia  
(d) Variola

18. The macrophages that engulf microbes during phagocytosis are produced from:
(a) Eosinophils  
(b) Erythrocytes  
(c) Monocytes  
(d) Neutrophils
19. Which one of the following is a pentose sugar?
   (a) Glucose  (b) Fructose  (c) Sucrose  (d) Ribose

20. At which vessel, Blood pressure is measured?
   (a) Vein  (b) Artery  (c) Capillaries  (d) Lymph vessel

21. Example for Brackish Water fish:
   (a) Tilapia  (b) Mrigal  (c) Rohu  (d) Madavai and Koduva

22. Vitamin found in cod-liver oil is:
   (a) $B_{12}$  (b) $B_1$  (c) $B_6$  (d) D

23. A small segment of myofibril is called:
   (a) Myocin  (b) Actin  (c) Sarcomere  (d) Sarcoplasm
24. The optimum temperature of the artificial brooder during the first 3 days is:
(a) 30°C  (b) 28°C  (c) 33°C  (d) 32°C

25. The Thymus functions best during:
(a) Early life  (b) Later life  (c) Middle age  (d) At rest

26. The vasopressin is otherwise called as:
(a) ADH  (b) Progesterone  (c) LH  (d) Oxytocin

27. The uptake of genes by the animal cells is called:
(a) Transduction  (b) Conjugation  (c) Transformation  (d) Transfection
28. The cattle breed found in Baroda is:
(a) Haryana  
(b) Gir  
(c) Siri  
(d) Hallikar

29. Sickle cell anemia is common for:
(a) African black  
(b) American black  
(c) European Whites  
(d) Asians

30. The transmitter substance at nerve cell junction is:
(a) Acetyl Choline  
(b) Adrenalin  
(c) Insulin  
(d) Thyroxine

**PART - II**

Note: Answer any fifteen questions.

31. What is PUFA?

32. What are the uses of root canal treatment?

33. Define the term Hering Breuer reflex.

34. Differentiate between embolus and thrombus.

35. Write down the symptoms of marasmus.
36. What are the important functions of medulla oblongata?

37. What is corpus albicans?

38. How is the plasmodium falciparum infection dangerous?

39. What are the genetic basis for transplantation technology?

40. Write any three uses of haemocytometer.

41. How is the transplantation of whole nucleus done?

42. What is meant by Seeding of Clouds?

43. What is Swarming?

44. Define the term propolis.

45. Write the characteristics of Aseel breed of fowl.

46. What is artificial insemination?
47. How are the fowls classified?

48. Define bottle neck effect.

49. What are called Bouchots?

50. What is integrated fish culture?

पत्र - III/ PART - III

Note: Answer any seven questions including question no. 56. Which is compulsory.

51. Describe the different types of bone fractures.

52. What are the types of memory?

53. Give an account on bacterial genetics.

54. Describe the scolex of Taenia Solium with diagram.

55. Explain the structure of immuno globulin with a neat diagram.
56. Write the effects of Ozone depletion.

57. Describe the formation of silk.

58. Briefly describe the reasons for decline of biodiversity.

59. Mention any five uses of Bees Wax.

60. Write down the mechanism that prevent interspecific crosses.

61. What are the prospects of aquaculture?

62. Give an account on fish diseases.

**B Part - IV / PART-IV**

Note: Answer any four questions.

63. Explain the process of inspiration and expiration with diagrams.

64. Explain the composition of blood.

65. Write an essay on menstrual cycle.
66. Explain the viral diseases of human.

67. Give an account on bio-informatics.

68. Describe the management of hazardous wastes.

69. Write an essay on common diseases of cattle.

70. Describe induced breeding in fish culture.