PART - III

(சிறியுயியம் / Tamil & English Versions)

தமிழ் பெண்கள் / Time Allowed : 3 Hours

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 pencil to draw diagrams.

பதிலி - I / PART - I

(i) சிறுவுருசாலை சுருங்குகளின் வளிமத்தியம்.
(ii) சிறுவுருசாலை சுருங்குகளின் சுழல்.

Note:
(i) Answer all questions.
(ii) Choose and write the correct answer.

1. முதலைக் குருதிகள் எழுந்துகொள்ளும் காலமும்

(அ) 17 வருடம் வருடாக
(ஆ) 12 வருடம் முடிக்கம்
(ஆரை) 5 வருடம் வருடாக
(ஆரை) 30 வருடம் முடிக்கம்

Thymus gland growth occurs up to:
(a) 17 years
(b) 12 years
(c) 5 years
(d) 30 years

[சின்னப்படு / Turn over]
2. The part of brain, that is involved in olfactory reflexes:
(a) Thalamus (b) Hypothalamus
(c) Pons (d) Vermis

3. The book 'Philosophic Zoologique' was published by:
(a) Charles Darwin (b) August Weismann
(c) Mc Dougall (d) Jean Baptiste de Lamarck

4. The size of fry is:
(a) < 3.0 cm (b) < 3.5 cm (c) < 2.5 cm (d) < 4.5 cm

5. Apis Indica is:
(a) Indian bee (b) African bee
(c) European bee (d) Rock bee

6. The biggest WBC is:
(a) Eosinophil (b) Basophil
(c) Monocyte (d) Lymphocyte
7. Immunoglobulins are chemically:
   (a) glycogens  (b) glycoproteins
   (c) glycolipids  (d) lipo-proteins

8. Which antibody characterizes the allergic reaction?
   (a) Ig G  (b) Ig A  (c) Ig M  (d) Ig E

9. Minorca variety of fowl belongs to which country?
   (a) Italy  (b) England  (c) America  (d) Spain

10. The fish cultured in fresh water is:
     (a) Rohu  (b) Mugil  (c) Lobster  (d) Milk fish

11. Which is commonly considered as a 'biological Paradise'?
     (a) Gulf of Mannar Biosphere Reserve
     (b) Nilgiri Biosphere Reserve
     (c) Nanda Devi
     (d) Great Nicobar
12. In recent days insulin resistant diabetes is commonly noticed in the age group of:

(a) 10 - 15 years  (b) 40 - 50 years
(c) 35 - 40 years  (d) 20 - 25 years

13. Darwin supported the following concepts for evolution:

(a) survival of the fittest
(b) arrival of the fittest
(c) The differentiation of somatoplasm and germplasm
(d) Genetic diversity

14. Area responsible for reabsorption of water, glucose, sodium phosphate and bicarbonates from glomerular filtrate is:

(a) glomerulus  (b) proximal convoluted tubule
(c) collecting duct  (d) descending limb of Henle’s loop
15. An oily substance called sebum is secreted by:
(a) Sweat gland (b) Sebaceous gland
(c) Thyroid gland (d) Tear gland

16. During root canal treatment, the cavity of the tooth is filled with a sealing paste made of:
(a) Chitin (b) Calcium carbonate
(c) Iodised salt (d) Gutta-percha resin

17. Which one of the following is not a dairy breed?
(a) Sahiwal (b) Sindhi (c) Umblachery (d) Malvi

18. Which one of the following is an exotic fish?
(a) Catla (b) Rohu (c) Tilapia (d) Mugil

19. Deficiency of vitamin D causes:
(a) Nyctalopia (b) Xerophthalmia
(c) Osteomalacia (d) Pellagra
20. The number of ATP molecules spent to convert toxic ammonia into a molecule of urea is/are:
(a) Four  (b) Two  (c) Three  (d) One

21. The process cDNA involves:
(a) DNA transcription
(b) DNA replication
(c) DNA mRNA synthesis
(d) tRNA

C DNA means:
(a) DNA library
(b) Transcription of DNA
(c) DNA produced with the help of mRNA
(d) tRNA

22. The sterile female bees are:
(a) Queen bee
(b) Worker bee
(c) Drone
(d) Queen and larva

23. The substance that destroys the muscle protein during Rigor mortis is:
(a) Proteolytic enzymes
(b) Mitochondrial enzymes
(c) Lysosome enzymes
(d) Esterases
24. Name the human disease due to autosomal dominant gene:
(a) Sickle cell anaemia
(b) Thalasemia
(c) SCID
(d) Huntington's chorea

25. Which of the following is called as artificial kidney?
(a) donor kidney
(b) dializer
(c) tissue-matched kidney
(d) preserved kidney

26. Albinism is due to:
(a) absence of melanin
(b) absence of vitamins
(c) presence of melanin
(d) absence of hormones

27. The granulation of tissues around the site of fracture is called:
(a) nodule
(b) papilla
(c) rudiment
(d) callus

28. The secretion of the glands of the nurse bee is:
(a) Propolis
(b) Royal jelly
(c) Bee Venom
(d) Pollen
29. The pathogenic form of Entamoeba histolytica is:
(a) encysted mares (b) vegetative trophozoite
(c) merozoite (d) schizont

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

31. List out the essential amino acids.

32. What is meant by hepatitis?

33. Give two reasons for cataract.

34. Name the muscles involved in respiration.

35. What are the symptoms of cretinism?

36. What is corpus albicans?
37. உலக குடும்ப தேவைகள் அவற்றின் திருச்சபைப்பிகள் பலவை? 
   What are the schemes included under national Family Welfare Programme?

38. ‘நோயோனின் பொருளி’ என்ற பொருள் என்னும் தொன்மையும்?
   What does the term ‘zoonanthroponosis’ refer to?

39. பெருத் கைரையில் பெருகக்கப் பாறையும்?
   State the functions of spleen.

40. DNA தொடர்பேற்று என்ற பொருள் என்னும்?
   What is called DNA segmenting?

41. நோய்ப் பொருள் என்ற பொருள் என்னும்?
   What is called differentiation?

42. செம்மை அங்கரோன் பிறப்பான் பாறையும்?
   What are the advantages of solar energy?

43. மக அறுவன் வெட்டியை எடுக்கும் விளையாட்டுகள் பலவை?
   What are the control measures of cow pox?

44. கெம்பவால் பாறையும் என்னும்?
   What is fibroin?

45. கெம்பிகைகள் பாறையும் என்னும்?
   What is Brooding?

46. கெம்பிகள் வெள்ளையும் பாறையும் என்னும்?
   What is Swarming?

47. பல்ளிகையில் தொலை விளையாட்டுப் பாறையும்?
   What are the three stages of sericulture?
48. Mention any two objection to Darwinism.

49. Distinguish between fresh water and marine water.

50. What is costiasis?

PART III

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

51. Write about the different types of carbohydrates and their significance.

52. Explain the various types of memory.

53. Write a note on control and preventive measures of AIDS.

54. Write any five pathogenic protozoans of different genera and mention their diseases.

55. Give an account of immuno deficiency diseases.

56. "Ozone is a natural sun block" - Discuss.
57. Describe the reason for decline of biodiversity.

58. Write short notes on artificial insemination.

59. Write the uses of C.T.

60. Briefly describe Sewal Wright effect.

61. Give an account of integrated fish culture.

62. Give an account of Bionomics of Rohu.

प्रश्न - IV / PART - IV

Note: Answer any four questions.

63. Describe various types of arthritis and their causes.

64. Write an essay on hearing deficiency and the correcting measures adopted.

65. What is diabetes mellitus? Write its symptoms and causes.

[ Turn over ]
Give an account on cultivation of animal viruses.

Give an account of human genome project.

"Fresh water management" - Discuss.

Describe the poultry farming methods.

Describe induced fish breeding technique.