1. The greek word "nomos" means _______ a) Identification b) Laws c) Naming d) Arrangement

2. The basic unit in biosystematics is _______ a) Comparium b) Coenospecies c) Ecotype d) Ecospecies

3. The sieve element has a sieve plate at _______ a) top b) bottom c) end wall d) the lateral wall

4. The aerial roots of the epiphytic plant has special _______ a) Velamen tissue b) Parenchyma tissue c) Sclerenchyma tissue d) Cortex tissue

5. Which of the following is a physical mutagen? a) Ethyl methane sulphonate b) Pencillin c) Nitrous acid d) U.V. rays

6. Indian Agricultural Research Institute IARI is situated at _______ a) New Delhi b) Mumbai c) Chennai d) Lucknow

7. The development of shoot from callus is called _______ a) Rhizogenesis b) Caulogenesis c) Organogenesis d) Embryogenesis

8. Number of ATP produced during cyclic photophosphorylation is _______ a) 1 b) 2 c) 3 d) 4


10. APT - 16 is a variety of _______ a) Wheat b) Rice c) Maize d) Sunflower

11. In USA patents are given for a period of _______ a) 10 years b) 7 years c) 17 years d) 70 years
15. Write the botanical names of (a) Tapoica (b) Castor

16. How is ICBN evolved?

17. What is an isobilateral leaf? Give an example.

18. Define SCP and state any of its three uses.

19. Write the role of following enzymes in respiration:
   (a) Aldolase
   (b) Succinyl CoA synthetase

20. What will be the role of SCP to safeguard against human protein deficiency for the future? (or) Give an account of single cell protein.
PART – II ZOOLOGY

PART – I

1. The standard combination of NPK recommended for a fresh water pond for fish farming is ______ a) 4:10:18 b) 10:18:4 c) 18:10:4 d) 4:18:10

2. Magnesium c) Phosphorus d) Calcium

3. The volume of CSF in man is about ______ a) 150 ml b) 220 ml c) 200 ml d) 170 ml

4. The number of times heat absorbed by ______ a) 3000 times b) 200 times c) 10 times d) 3000 times

5. The first director of Pasteur institute for infectious disease was ______ a) Griffith b) Robert Koch c) Joseph Lister d) Louis Pasteur

6. The standard combination of NPK recommended for a fresh water pond for fish farming is ______ a) 4:10:18 b) 10:18:4 c) 18:10:4 d) 4:18:10

7. MHC genes in mouse are located in the chromosome ______ a) Chromosome 6 b) Chromosome 1 c) Chromosome 20 d) Chromosome 2

8. The standard combination of NPK recommended for a fresh water pond for fish farming is ______ a) 4:10:18 b) 10:18:4 c) 18:10:4 d) 4:18:10

9. The number of times heat absorbed by ______ a) 3000 times b) 200 times c) 10 times d) 3000 times

10. Which of the following is a soluble antigen? a) Bacterial toxins b) Erythrocytes c) Viruses d) Bacteria

11. The number of times heat absorbed by ______ a) 3000 times b) 200 times c) 10 times d) 3000 times

12. The standard combination of NPK recommended for a fresh water pond for fish farming is ______ a) 4:10:18 b) 10:18:4 c) 18:10:4 d) 4:18:10

13. The number of times heat absorbed by ______ a) 3000 times b) 200 times c) 10 times d) 3000 times

14. The standard combination of NPK recommended for a fresh water pond for fish farming is ______ a) 4:10:18 b) 10:18:4 c) 18:10:4 d) 4:18:10

15. The standard combination of NPK recommended for a fresh water pond for fish farming is ______ a) 4:10:18 b) 10:18:4 c) 18:10:4 d) 4:18:10

16. The standard combination of NPK recommended for a fresh water pond for fish farming is ______ a) 4:10:18 b) 10:18:4 c) 18:10:4 d) 4:18:10

The milk fever is due to the inability of the animal to assimilate the ______ from the feed. a) Potassium b) Magnesium c) Phosphorus d) Calcium
15. The yellow colour milk in Jersey breed is due to _____ a) carbohydrate b) carotene c) protein d) calcium

16. The book "Philosophie Zoologique" was published by _____ a) Charles Darwin b) August Weismann c) Mc Dougall d) Jean Baptiste de Lamarck

PART – II

17. Write the three folds of living of physiology.

18. Differentiate scotopic vision and photopic vision.

19. What is continuous cell line culture?


22. What is DNA library?

23. Define cloning.

24. Write the tools used in Genetic engineering.

25. Mention biosphere reserves in India.


27. Write the symptoms of milk fever.


PART – III

Q.No 31 is Compulsory

29. Explain the steps in root canal treatment.

30. How will you prepare a bacteriological medium?

31. Describe the structure of lymph node with the help of diagram.

32. Mention uses of Bio-informatics.

33. Enumerate the objections to Darwinism.

PART – IV

34. Discuss any two heart related problems.

35. What is dialysis? Name its two types, importance of dialysis and explain kidney machine.

36. Write an essay on Energy Crisis.

37. What is C.T. Scanner? Write the advantages and uses of CT scanner.