

**PART - A****I. Select the correct alternative from the choices given below****1 x 15 = 15**

1. Two kingdom classification has given by  
a) Brown                      b) W.H Whittekar                      c) Copeland                      d) Linnaeus
2. Main component of the cell wall of fungi is  
a) cellulose                      b) pectin                      c) chitin                      d) dextrin
3. ovary is said to be half inferior in which of the following conditions ?  
a) hypogynous                      b) perigynous                      c) epigynous                      d) non of the above.
4. Which of these is not a eukaryote ?  
a) Euglena                      b) anabena                      c) spirogyra                      d) agaricus.
5. In chloroplast, chlorophyll is present in the  
a) outer membrane                      b) inner membrane                      c) thylakoids                      d) stroma.
6. Casparian strips are the bands of thickenings present on-----walls of endodermis  
a) radial                      b) tangential                      c) central                      d) both a and b.
7. The abundant protein of animal world is  
a) RuBisCo                      b) collagen                      c) starch                      d) heparin.
8. The non protein part of enzyme ---  
a) co enzyme                      b) apoenzyme                      c) cofactor                      d) prosthetic group.
9. The process of pairing of homologous chromosomes during zygotene  
a) karyokinesis                      b) chiasmata                      c) crossing over                      d) synapsis
10. The site of glycolysis  
a) cytoplasm                      b) nucleus                      c) mitochondria                      d) cell membrane.
11. Identify the growth promoters in plants-----  
a) ethylene                      b) abscisic acid                      c) auxin                      d) plastin
12. The primary site of respiratory gas exchange in humans  
a) nose                      b) tracheae                      c) alveoli                      d) diaphragm.
13. The amount of blood pumped by the heart in one minute  
a) stroke volume                      b) cardiac output                      c) cardiac cycle                      d) atrial systole
14. The process of release of urine  
a) uremia                      b) micturition                      c) excretion                      d) ejection
15. The largest bone in the human body  
a) patella                      b) tibia                      c) tarsal                      d) femur

**II. Choose the correct and fill in the blanks****1 x 5 = 5**

(uracil, ethylene, phycobiont, glomerulonephritis, bioluminescence)

16. The algal component of lichens \_\_\_\_\_
17. The property of living organism to emit light -----
18. The gaseous plant growth hormone \_\_\_\_\_
19. Inflammation of glomeruli of kidney \_\_\_\_\_
20. The nitrogen base present only in RNA \_\_\_\_\_

**PART - B****III. Answer any FIVE of the following****2 X 5 = 10**

21. Expand ICBN and ICZN.
22. What is diatomaceous earth? Mention its uses.
23. Differentiate between radial symmetry and bilateral symmetry in animals.
24. Define respiratory quotient. Write the RQ value of carbohydrates.
25. What are plant growth inhibitors? Give an example.
26. Name the hormones secreted by neurohypophysis.
27. Define inspiration and expiration.
28. How is male frog different from female frog?

**PART - C****IV. Answer any FIVE of the following.****3 X 5 = 15**

29. Enumerate the characters of pteridophytes.
30. Write a neat labeled diagram of nucleus.
31. Mention the hormones secreted by i) pineal gland ii) pancreas iii) thyroid gland

32. What is Binomial nomenclature ? Mention its rules.
33. Mention the types of flowers based on position of the ovary with an example for each.
34. Mention the three types of synovial joints. Give an example for each.
35. Draw a neat labeled diagram of nerve cell.
36. Explain the any three levels of organization in proteins.

**PART-D**  
**SECTION\_I**

**V. Answer any THREE of the following.**

**5 X 3 = 15**

37. Explain double circulation with the help of diagram.
38. Explain sliding filament theory of muscle contraction.
39. What is Z-scheme of electron transport ? explain with a schematic representation.
40. Mention the characteristic features of phylum annelida.
41. What is aestivation ? describe the types by giving one example each.
42. Sketch and label T.S. of Dicot leaf.
43. Explain the phases of prophase-I in meiosis.
44. Explain the classification of enzymes.

**SECTION-II**

**VI. Answer any one of the following.**

**5 x 2 = 10**

45. Mention the general characteristics of kingdom mycota.
46. Explain C3 pathway with schematic representation.
47. Briefly describe the structure of nephron with the help of a neat labeled diagram..

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