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STD: XI **BIOLOGY SET-5 (B L-9,10 Z L – 2,8)** **MARKS-50**

I.CHOOSE THE CORRECT ANSWER : **30X1=30**

1. Identify the Archaebacterium
   a. *Acetobacter* b. *Erwinia* c. *Treponema* d. *Methanobacterium*
2. The haploid number of chromosome for an angiosperm is 14, the number of chromosome in its endospermwould be
   a. 7 b. 14 c. 42 d. 28
3. Select the mismatch pair
   a. *Musa* - Unicostate b. *Lablab* - Trifoliolate
   c. *Acalypha* - Leaf mosaic d. *Allamanda* - Ternate phyllotaxy
4. Aggregate fruit develops from
   a. Multicarpellary, apocarpous ovary b. Multicarpellary, syncarpous ovary
   c. Multicarpellary ovary d. Whole inflorescence
5. In an inflorescence where flowers are borne laterally in an acropetal succession the position of the youngest floral bud shall be
   a. Proximal b. Distal c. Intercalary d. Anywhere
6. A true fruit is the one where
   a. Only ovary of the flower develops into fruit
   b. Ovary and calyx of the flower develops into fruit
   c. Ovary, calyx and thalamus of the flower develops into fruit
   d. All floral whorls of the flower develops into fruit
7. In meiosis crossing over is initiated at
   a. Diplotene b. Pachytene c. Leptotene d. Zygotene
8. Stomata of a plant open due to
   a. Influx of K+ b. Efflux of K+ c. Influx of Cl– d. Influx of OH–
9. Identify correct match.
   1. Die back disease of citrus - (i) Mo
   2. Whip tail disease - (ii) Zn
   3. Brown heart of turnip - (iii) Cu
   4. Little leaf - (iv) B

a.	1 (iii)	2 (ii)	3 (iv)	4 (i)
b.	1 (iii)	2 (i)	3 (iv)	4 (ii)
c.	1 (i)	2 (iii)	3 (ii)	4 (iv)
d.	1 (iii)	2 (iv)	3 (ii)	4 (i)

10. The correct sequence of flow of electrons in the light reaction is
    a. PS II, plastoquinone, cytochrome, PS I, ferredoxin.
    b. PS I, plastoquinone, cytochrome, PS II ferredoxin.
    c. PS II, ferredoxin, plastoquinone, cytochrome, PS I.
    d. PS II, plastoquinone, cytochrome, PS II, ferredoxin.

11. **Assertion (A):** Oxidative phosphorylation takes place during the electron transport chain in mitochondria.
Reason (R): Succinyl CoA is phosphorylated into succinic acid by substrate phosphorylation.
    a. A and R is correct. R is correct explanation of A

b. A and R is correct but R is not the correct explanation of A
c. A is correct but R is wrong
d. A and R is wrong.

12._____ is the powerful growth inhibitor
a. Ethanol b. Cytokinins c. ABA d. Auxin

13. Which of the following reaction is not involved in Krebs cycle.
a. Shifting of phosphate from 3C to 2C
b. Splitting of Fructose 1,6 bisphosphate of into two molecules 3C compounds.
c. Dephosphorylation from the substrates
d. All of these

14. Identify the correct statement
i. Sulphur is essential for amino acids Cystine and Methionine
ii. Low level of N, K, S and Mo affect the cell division
iii. Non-leguminous plant Alnus which contain bacterium *Frankia*iv. Denitrification carried out by nitrosomonas and nitrobacter.
a. I, II are correct. b. I, II, III are correct c. I only correct d. all are correct

15. In a fully turgid cell
a. DPD = 10 atm; OP = 5 atm; TP = 10 atm b. DPD = 0 atm; OP = 10 atm; TP = 10 atm
c. DPD = 0 atm; OP = 5 atm; TP = 10 atm d. DPD = 20 atm; OP = 20 atm; TP = 10 atm

16.What taxonomic aid gives comprehensive information about a taxon?
a. Taxonomic Key b. Herbarium c. Flora d. Monograph

17. Who coined the term biodiversity?
a. Walter Rosen b. AG Tansley c. Aristotle d. AP de Candole

18. Which of the following is a crustacean?
a. Prawn b. Snail c. Sea anemone d. Hydra

19. The respiratory pigment in cockroach is
a. Haemoglobin b. Haemocyanin c. Haemoerythrin d. None of the above

20. Prevention of substances from leaking across the tissue is provided by
a. Tight junction b. Adhering junction c. Gap junction d. Elastic junction

21. Which of the following have an open circulatory system?
a. Frog b. Earthworm c. Pigeon d. Cockroach

22. Buccopharyngeal respiration in frog
a. is increased when nostrils are closed b. Stops when there is pulmonary respiration
c. is increased when it is catching fly d. stops when mouth is opened.

23. Enterokinase takes part in the conversion of
a. Pepsinogen into pepsin b. Trypsinogen into trypsin
c. Protein into polypeptide d. Caseinogen into casein

24. Asthma is caused due to
a. inflammation of bronchus and bronchioles. b. inflammation of bronchione
c. damage of diaphragm. d. infection of lungs

25.Erythroblastosis foetalis is due to the destruction of
a. Foetal RBCs b. Foetus suffers from atherosclerosis
c. Foetal WBCs d. Foetus suffers from mianmata

26.Kidney stones are produced due to deposition of uric acid and
a. silicates b. minerals c. calcium carbonate d. calcium oxalate

27. ATPase enzyme needed for muscle contraction is located in
a. actinin b. troponin c. myosin d. actin

28. Synovial fluid is found in
a. Ventricles of the brain b. Spinal cord c. immovable joint d. freely movable joints.

29.Which of the following hormone is not secreted under the influence of pituitary gland?

a. thyroxine b. insulin c. oestrogen d. glucocorticoids

30. Which of the statement regarding Lac insect is TRUE?

a. A microscopic, resinous crawling scale insect
b. Inserts its proboscis into plant tissue suck juices and grows
c. Secretes lac from the hind end of body.
d. The male lac insect is responsible for large scale production of lac.

II.ANSWER THE FOLLOWING QUESTIONS : 10X2=20

31. Differences Between Diffuse Porous Wood and Ring Porous Wood .
32.Differences Between Sap Wood (alburnum) and Heart Wood (duramen).
33.Differences Between Phellem and Phelloderm.
34.Differences Between Spring Wood and Autumn Wood.
35.Write the Importance of Studying Growth Rings.
36. Explain sclereids with their types.
37. Distinguish the anatomy of dicot root from monocot root.
38.Distinguish the anatomy of dicot stem from monocot stem.
39.Differentiate protonephridia from metanephridia.
40. What is the nitrogenous waste produced by amphibian larvae and by the adult animal?
41. Draw and label the parts of L S of human kidney.
42.Which of the chordate characteristics do tunicates retain as adults?
43. List three features that characterise bony fishes.