

DEPARTMENT OF BIOLOGY
BIO – BOTANY
MODEL QUESTION PAPER

SECTION – A

- I. Choose the best answer: 14x1=14
1. The fifth International Botanical Congress was held at ____
a) Leningrad b) Cambridge c) Germany d) Newyork
 2. Bracteoles are absent in ____
a) Hibiscus rosa-sinensis b) Malvasylvestris c) Abutilon indicum
d) Pavoniaodorata
 3. In Ricinuscommunis, the inflorescence is ____
a) Racemose b) spike c) panicle d) umbel
 4. Photosynthesis is the important function of ____
a) Parenchyma b) aerenchyma c) chlorenchyma d)
scierenchyma
 5. The stele is eustele in ____
a) Monocot b) dicot leaf c) dicot stem d) dicot root
 6. V-shaped chromosomes are called ____
a) Metacentric b) submetacentric c) telocentric d) acrocentric
 7. The elongation of DNA strand during replication of DNA is due to the action of ____
a) Primase b) RNA primer c) helicase d) DNA
polymerase
 8. Crown gall disease of tomato is caused by ____
a) Agrobacterium tumefaciens c) Bacillus thuringiensis
b) Streptomyces hygroscopicus d) Streptomyces griesus
 9. The bacterium used for the decomposition of hydrocarbons present in the oil is ____
a) Agrobacterium tumefaciens c) Bacillus thuringiensis
b) Pseudomoriasputida d) Streptomyces hygroscopicus
 10. The essential component for the formation of chlorophyll is ____
a) Iron b) magnesium c) manganese d) cobalt
 11. During cyclic photophosphylation, the number of ATP molecules produced per cycle is ____
a) One b) Two c) Three d) Four
 12. Sundew plant refers to ____
a) Monotropa b) Cuscuta c) Viscum d) Drosera
 13. The plant that grows in extreme saline soil is ____
a) Dwarf wheat b) Sugar beats c) pear plants d) atomita 2
rice
 14. Cercosporapersonata causes ____
a) Blast diseases of rice c) bakanaedisceses of rice
b) Tikka diseases of ground nut d) crown hail disease of tomato

SECTION – B

- II. Answer any 7 questions: 7x3=21
15. What is type specimen?
 16. State any three medicinally useful plants of Malvaceae and write their uses.
 17. Write any three anatomical differences between plants of gymnosperms and angiosperms.

18. What is endarch xylem? Give example.
19. Draw the diagram of crossing over.
20. What is called splicing?
21. Write any three differences between light respiration and dark respiration.
22. What is Richmond Lang effect?
23. Write in three sentences about photolysis of water.
24. What is pure line selection of plants?

SECTION - C

- III. Answer any FOUR questions: Question No.25 which is compulsory 4x5=20
25. Write economically useful plants of Solanaceae.
 26. What is meristem? Explain the types of meristem based on its position?
 27. Describe the structure of a chromosome.
 28. Write a brief account on SCP.
 29. Explain non-cyclic photophosphorylation.
 30. Write the significance of pentose phosphate pathway.
 31. 'Sustainable agriculture is an eco-friendly farming system' – discuss.

SECTION - D

- IV. Answer any TWO questions: 2x10=20
32. Describe Datura metal in technical terms.
 33. Write the anatomical difference between monocot stem and dicot stem.
 34. Discuss briefly the recombinant DNA technology.
 35. Explain the steps involved in Krebs cycle.

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SECTION – A

Choose the correct answer :

16x1=16

- 1 . During expiration muscles are in contraction .
 - a) external intercostals
 - b) internal intercostals
 - c) diaphragm
 - d) abdominal
- 2 . The heart muscles receive blood supply through
 - a) aorta
 - b) circum flex artery
 - c) coronary artery
 - d) cerebral artery
- 3 . Which one of the following is the smallest leucocyte ?
 - a) Monocyte
 - b) Lymphocyte
 - c) Basophil
 - d) Eosinophil
- 4 . African sleeping sickness is caused by
 - a) *Leishmaniatropica*
 - b) *Entamoebahistolytica*
 - c) *Plasmodium vivax*
 - d) *Trypanosomagambiense*
- 5 . The incubation period of rabies in human being is
 - a) 10 days
 - b) 1 – 2 weeks
 - c) 3 – 8 weeks
 - d) 1 year
- 6 . Hepatitis B virus causes
 - a) AIDS
 - b) lu
 - c) rabies
 - d) jaundice
- 7 . HIV attacks
 - a) all cells of our body
 - b) RBC
 - c) T helper cells
 - d) platelets
- 8 . The lymphocytes are produced at
 - a) blood vessels
 - b) liver
 - c) spleen
 - d) bone marrow
- 9 . To introduce a gene into a cell , pores can be made on the plasma membrane by method
 - a) electroporation
 - b) electrification
 - c) vector
 - d) gene gun
- 10 . Proteins are made up of
 - a) fatty acids
 - b) carbohydrates

SECTION – D2x10=20

- 34 . Describe the structure of a striated muscle with the help of diagram .
- 35 . Write an essay on menstrual cycle .
- 36 . Management of hazardous wastes – Discuss .
- 37 . Describe the important steps involved in rearing of chickens .

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