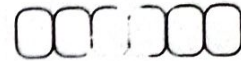


TVL11Bot

Tirunelveli District
Common Half Yearly Examination - 2024



Standard 11
BOTANY
PART - I

Marks: 70

Time: 3.00 Hours

15×1=15

Choose the best answer from the following.

- 1) Identify the Archaeobacterium
 - a) Acetobacter
 - b) Erwinia
 - c) Treponema
 - d) Methanobacterium
- 2) Which of the following represents gametophytic generation in Pteridophytes
 - a) Prothallus
 - b) Thallus
 - c) Cone
 - d) Rhizophore
- 3) Select the mismatch pair
 - a) Musa - Unicostate
 - b) Lablab - Trifoliolate
 - c) Acalypha - Leafmosaic
 - d) Allamanda - Ternate phyllotaxy
- 4) Vexillary aestivation is characteristic of the family
 - a) Fabaceae
 - b) Asteraceae
 - c) Solanaceae
 - d) Brassicaceae
- 5) The Father of Botany is
 - a) Linnaeus
 - b) Aristotle
 - c) Haeckel
 - d) Theophrastus
- 6) Cell theory was proposed by
 - a) Bentham and Hooker
 - b) Beadle and Tatum
 - c) Schleiden and Schwann
 - d) Engler and Prantl
- 7) In meiosis crossing over is initiated at
 - a) Diplotene
 - b) Leptotene
 - c) Pachytene
 - d) Zygotene
- 8) is also called as soluble RNA
 - a) tRNA
 - b) rRNA
 - c) mRNA
 - d) HnRNA
- 9) In Gymnosperms, the activity of the sieve cells are controlled by
 - a) Nearly sieve tube members
 - b) Phloem parenchyma cells
 - c) Nucleus of companion cells
 - d) Nucleus of albuminous cells
- 10) The common bottle cork is a product of
 - a) Vascular cambium
 - b) Phellem
 - c) Phellogen
 - d) Xylem
- 11) What type of transpiration is possible in the Xerophyte Opuntia?
 - a) Stomatal
 - b) Lenticular
 - c) Cuticular
 - d) All the above
- 12) The element which is not remobilized
 - a) Phosphorous
 - b) Pottassium
 - c) Calcium
 - d) Nitrogen
- 13) The compound which links Glycolysis and Krebs cycle is:
 - a) Acetyl CoA
 - b) Succinic acid
 - c) citric acid
 - d) Pyruvic acid
- 14) Which Chlorophyll molecule does not have a phytol tail?
 - a) Chl-a
 - b) Chl-b
 - c) Chl-c
 - d) Chl-d
- 15) is a phytohormone
 - a) Cytokinin
 - b) Auxin
 - c) Ethylene
 - d) Gibberellin

PART - II

Answer any 6 questions. Q.No. 24 is compulsory.

6×2=12

- 16) Give two examples for mycorrhizae forming fungi
- 17) Draw and label the parts of regions of root
- 18) Write the functions of fruits.
- 19) Define cell cycle
- 20) Differentiate Porous and Non-porous wood.
- 21) Define Osmosis
- 22) Write the overall equation of respiration
- 23) Define Bolting
- 24) Respiratory quotient is zero in Succulent plants. Why?

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PART - III**6×3=18****Answer any 6 questions. Q.No. 33 is compulsory.**

- 25) Differentiate nodal and internodal cells of chara
- 26) Write the differences between Taxonomy and Systematics
- 27) What are the properties of water
- 28) What are sieve tubes? Explain
- 29) Write the difference between sapwood and Heart wood
- 30) What is Kranz anatomy?
- 31) Write the role of nitrogenase enzyme in nitrogen fixation
- 32) Write any three significance of pentose phosphate pathway
- 33) Draw the ultra structure of plant cell

PART - IV**5×5=25****Answer all the questions**

- 34) a) Write the distinguishing feature of monera
(OR)
b) Draw the life cycle of Agaricus
- 35) a) Explain the different types of placentation with example
(OR)
b) Describe the flower of clitoriaternatea in technical terms
- 36) a) Difference between plant and animal cell
(OR)
b) Write the characteristic feature of DNA
- 37) a) Distinguish the anatomy of dicot root from monocot root
(OR)
b) Write the experiment of potato osmoscope
- 38) a) Write the differences between cyclic and non-cyclic photo phosphorylation
(OR)
b) Write the physiological effect of cytokinin.