

V11Bio

Virudhunagar District
Common Quarterly Examination - 2023

0011210

Standard 11

Time: 3.00 Hrs.

BIOLOGY

Marks: 70

PART - I [BIO-BOTANY]

Marks: 35

Section - I**Note: 1. Answer all the questions.****8×1=8****2. Choose the correct answers and write it with their options.**

- 1) Of the following which one is leaf modification?
a) Phylloclade b) Cladode c) Phyllode d) Twiners
- 2) In an inflorescence where flowers are borne laterally in an aeropetal succussion the position of the youngest floral bud shall be
a) Anywhere b) Distal c) Proximal d) Intercalary
- 3) **Match and Choose the correct sequence:**

i) Phylogenetic system	-	a) Bentham and Hooker
ii) Artificial system	-	b) Engler and Prantl
iii) Botanical survey of India	-	c) Carolus Linnaeus
iv) Natural system	-	d) Janakiammal

a) i-c, ii-d, iii-b, iv-a b) i-b, ii-c, iii-d, iv-a
c) i-b, ii-c, iii-a, iv-d d) i-c, ii-b, iii-a, iv-d
- 4) Water is a polar molecule because
a) They have uniform charge distribution
b) They hydrogen have slight negative charge
c) They have negative charge
d) They have uneven distributions of electrical charge
- 5) Colchicine prevents the mitosis of the cells at which stage?
a) Metaphase b) Anaphase c) Prophase d) Telophase
- 6) Who proposed five kingdom classification?
a) Whittaker b) Alexopoulos c) Copeland d) Ainsworth
- 7) Amber is a product obtained from
a) Taxus brevifolia b) Abies balsamea
c) Cedrus atlantica d) Pinites succinifera
- 8) Which are called as power house of a cell?
a) Plastids b) Lysosomes c) Centriole d) Mitochondria

Section - II**Answer any four of the following:****4×2=8**

- 9) What are mesosomes?
- 10) How root climbers differ from stem climbers?
- 11) What is author citation? Give an example.
- 12) State : Protoplasm theory.
- 13) What is cytokinesis?
- 14) Define: Enzymes

Section - III**Answer any three of the following.****3×3=9****Question No: 19 is compulsory.**

- 15) Do you think shape of chloroplast is unique for algae. Justify your answer.
- 16) What is called true cyme? Give an example.
- 17) What are the functions of cellwall?
- 18) What are epiphytic roots? Give an example.
- 19) Write any three significance of mitosis.

Section - IV**Answer all the questions:****2×5=10**

- 20) a) Distinguish between Gymnosperm and Angiosperm. (OR)
b) Write the botanical description of Allium cepa.
- 21) a) Describe the structure of polytene chromosomes. (OR)
b) Explain the structure of DNA.

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PART - II [BIO-ZOOLOGY]

Marks: 35

Section - 1

Note: i) Answer all the questions.**8×1=8****ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.**

- 1) Cladogram considers the following
 - a) physiological and biochemical
 - b) taxonomic and systematics
 - c) evolutionary and phylogenetic
 - d) none of the above
- 2) Name the symmetry in adult gastropod
 - a) asymmetrical
 - b) bilateral symmetry
 - c) radial symmetry
 - d) pentamerous symmetry
- 3) What types of fibres are found in connective tissue matrix?
 - a) areolar
 - b) tubular
 - c) cartilage
 - d) collagen
- 4) Which is hermaphrodite?
 - a) frog
 - b) cockroach
 - c) earthworm
 - d) roundworm
- 5) Which of the following is not the function of the liver?
 - a) production of insulin
 - b) detoxification
 - c) storage of glycogen
 - d) production of bile
- 6) Vital capacity is _____.
 - a) TV+IRV
 - b) TV+ERV
 - c) RV+ERV
 - d) TV+IRV+ERV
- 7) Lub sound is caused by
 - a) closure of atrioventricular valves
 - b) opening of semilunar valves
 - c) closure of semilunar valves
 - d) opening of atrioventricular valves
- 8) Animal requiring minimum amount of water to produce urea
 - a) areotelic
 - b) ammonotelic
 - c) uricotelic
 - d) chemotelic

Section - 2

Answer any four of the following:**4×2=8**

- 9) What is the role of Charles Darwin in relation to the concept of species?
- 10) What is open circulatory system? Give example.
- 11) Name the specialised connective tissues.
- 12) How does the male frog attract the female for mating?
- 13) Write the dental formula and the different types of teeth.
- 14) What is lymph? Write its function.

Section - 3

Note: Answer any three of the following.**3×3=9****Question Number 19 is compulsory.**

- 15) What is the nitrogenous waste produced by an amphibian larva and by the adult animal?
- 16) Write the antigen and antibodies of four blood groups.
- 17) Which structure seals the larynx when we swallow food? Where is it located?
- 18) Bile juice contains no enzymes. Yet it is important for digestion why?
- 19) Why cockroaches are known as vectors?

Section - 4

Note: Answer the following questions.**2×5=10**

- 20) What are the rules of nomenclature?

(OR)

What is epithelium? Write any four characteristic features of different epithelia.

- 21) Write the events of inspiration and expiration.

(OR)

Describe the mechanism by which human heart is initiated and controlled.
