

Class XI

Max. Marks: 70

Subject: Biology

Time: 3 hrs

Section A (Very short answer type Questions) 1x5=5

Q1- Heterocyst is found in which of the following groups:

- a) Chrysophytes b) Dinoflagellates c) Nostoc d) Slime moulds

Q2- Asymbiotic association of fungi & roots of higher plants like pine trees is called _____.

Q3- How would you define a Transverse section? Have you ever cut a transverse section, give an example.

Q4- Mark the odd one out in the series:

Areolar tissue, blood, neuron, tendon.

Q5- The lateral meristem in vascular bundle is called _____.

Section B (Short answer type Questions) 2x5=10

Q6- Who introduced binomial nomenclature? Write its two advantages.

Q7- Draw a neat & labeled diagram of a bacterium (Ultrastructure).

Q8- Name the male reproductive and female reproductive organs of bryophytes,

Funaria & Marchantia. On which structure are they borne? What do they reproduce?

Q9- What is Casparian strips? Explain its function.

Q10- Differentiate between tendon & ligaments.

OR

Write the locations of the following tissue in the organs of the body

- a) Simple squamous b) Simple cuboidal c) Ciliated columnar d) Brush bordered columnar

Section C (Short answer type Questions) 3x12=36

Q11- Differentiate between following pair of words

- i) Category & Taxon
- ii) Taxonomy & Systematics

Q12- Compare the structure of Phycomycetes & Basidiomycetes. Name the asexual reproductive structure of each group with an example each.

Q13- Make an outline classification of Protista. Write one character and one example each of the group.

OR

Write any four important characteristic features of Euglenoids.

Q14- Tabulate the differences among Red, Brown and Green Algae with respect to reserved food & type of pigments and economic importance of the product which they produce.

Q15- What do you understand by the following terms:

- a) Radial symmetry b) Triploblastic c) Open circulatory System

Q16- Assign the following animals to their respective Phylum. Write the name of the Phylum and 2 main characters of each phylum:

- a) Tapeworm b) Starfish c) Balanoglossus

Q17- Put the following animals into their respective classes

- a) Butterfly b) Starfish c) Dogfish d) Salamander e) Bat f) Flamingo

Q18- Write the type of root modification of the following roots.

- a) Radish b) Sugarcane c) Sweet Potato d) Banyan Tree e) Wheat
- f) Nodulated roots of leguminous plants.

Q19- With the help of vertical section of a flower, show three different types of ovaries. Name the three kinds.

Q20- Name three basic kinds of fruits with one character and one example each.

Q21- Show the longitudinal section (L.S.) of Phloem & label its parts.

OR

Show Conjoint Collateral Open & Closed vascular bundles.

Q22- Draw the diagrams of 3 types of granulocytes. Write one function each.

Section D (Long answer, Value based Questions) 1x4=4

Q23- The blood donation to the needy person in case of emergency may be considered as a little sacrifice for saving life of an individual or it should not be done at all as it will seriously affect our health. Comment.

Section E (Long answer type questions) 3x5=15

Q24- Illustrate the life cycle of a Fern Pteris. Write briefly about the features.

Q25- Compare the skin & Hearts of different classes of mammals.

OR

Compare the excretory organs & types of blood circulation in different Phyla of animal Kingdom.

Q26- With the help of a suitable diagrams, describe the secondary growth or growth in the girth in Angiosperms.
