

Section-A

Multiple Choice Questions (MCQ's)

Q.1: Choose the correct answer for each from the given options:

- (i) Intercalary Meristem may found at:
 (a) Below the Node (b) Base of inter-node
 (c) At the Cambium Ring (d) Both (a) and (b)
- (ii) In mature cell, chromosome consist of two genetically identical threads called:
 (a) Chromatids (b) Chromomers
 (c) Homologous Chromosome (d) Chromonema
- (iii) The means of reproduction in Unicellular organisms is:
 (a) Spore formatin (b) Cell-division (c) Gametes fromation
 (d) Amitosis
- (iv) Parthenocarpy is the type of asexual reproduction:
 (a) Found in plants (b) Type of asexual reproduction
 (c) Fruit form without fertilization (d) All of these
- (v) The type of chromosomal aberratio where size of chromosome does not change:
 (a) Deletion (b) Translocation (c) Inversion (d) Duplication
- (vi) Carbohydrate molecules which formed in cytosol to prevent freezing is:
 (a) Glucagon (b) Strach (c) Fruction (d) Dextrins
- (vii) Living tissues of plants have elongated cell with irgeularly thickened cell wall are:
 (a) Collenchyma (b) Sclereides (c) Fiber (d) Tracheids
- (viii) The hydrophytes and Elpiphytes are the producers of:
 (a) Coniferous forest (b) Temperate deciduous forest
 (c) Tropical rain forest (d) Mangorves forest
- (ix) Cells in the spaces between the fingers that are no longer needed perform:
 (a) Growth (b) Necrosis (c) Mitosis (d) Apoptosis

Section-B (Short Answer)

Note: Answer any TEN of the following questions.

- Q.2: What types of plants grow in the soil and air of low water potential and how they adapt there?
- Q.3: How young (Primary) stem get mechanical support?
- Q.4: Which of the plant hormone produced by plants during adverse environmental conditions?
- Q.5: Is there any effect of low temperature on the the promotion of flowering? Name the phenomenon and explain how?
- Q.6: How high and hlow concentration of O₂ effects the growth of plants?
- Q.7: How Histone protein is different from other proteins and why they bind to DNA to

form Nucleosome?

- Q.8: Why abnormal Chromosome number appears in an organism? Name the term used for abnormal chromosome number?
- Q.9: Why members of population are variable in length? Give genetical reason and phenomenon.
- Q.10: " Pond is balanced system between water and Nutrient" Justify the statement.
- Q.11: Which of the Biome found near Arctic Ocean? Give its three salient features.
- Q.12: Define any TWO of the following:
 (a) Co-Dominance (b) Annual Rings (c) Transposition
- Q.13: Distinguish between any one of the following in tabulated form.
 (a) Neretic and Oceanic Region (b) Epigeal and Hypngeal Germination
- Q.14: What is role of growth hormone in plant movement?

Section-C (Descriptive Answer)

Note: Answer any TWO of the following questions.

- Q.15: What are Pollen Grains? Where they produced inside flower and develop into male gametophyte?
- Q.16: What do you mean by plant movement? Describe different types of movement takes place due to external stimuli.
- Q.17: A male mouse has a gene of Gray coat colour (B) which is dominant over black colour gene(b). If gene (I) is present in the same mouse which intefare gene of the trait of skin colour as well as dominant over (i) then what will be the chances of phenotypic ratio of children when heterozygous male and female mice for both trait are crossed. Also give the phenotypic ratio of parents, prove it with the help of Genetic cross.