BSC. PART - II EXAMINATION - 2012

BOTANY SUB/GEN

Answer five questions in all, selecting at least one from each Group in which Q. No. 1 is compulsory

1. [A] Answer the following questions :
   (i) Name the person who discovered the cell nucleus.
   (ii) What is the main function of Prosenchyma ?
   (iii) Name two principal types of complex tissues.
   (iv) Define the term 'megasporogenesis'.
   (v) What is Guard Cell ?
   (vi) Write the full name of DPD.
   (vii) Write the full name of ATP.

   [B] Select the correct answers of the following :
   (i) In dicot root cambium is derived from :
   (a) Epidermis (b) Hypodermis (c) Cotex (d) Pericycle
   (ii) In collateral vascular bundle the phloem is :
   (a) Outside the xylem (b) Inside the xylem
   (c) On both side of xylem (d) all around the xylem
   (iii) Parenchyma which performs photosynthesis is called as :
   (a) Chlorenchyma (b) Collenchyma (c) Aerenchyma (d) Sclerenchyma
   (iv) The commercial cork is obtained from :
   (a) Spruce (b) Yew (c) Oak (d) Pine
   (v) The fertilized egg is called
   (a) Zygote (b) Ovule (c) Embryo (d) Seed
   (vi) When pollen tube enters the ovule through microphyle, the process is called:
   (a) Porogamy (b) Mesogamy (c) Chalazogamy (d) Aporogamy
   (vii) Transpiration is a :
   (a) Physical process (b) Physiological Process
   (c) Technological Process (d) Genetical Process
   (viii) 'Lysine' is :
   (a) Carbohydrate (b) Proteins (c) Amino Acid (d) Both (a) and (b)

GROUP - A

2. Give an account of microsporogenesis in angiosperms.
3. Describe the internal structure of a dosiventral leaf. Give suitable diagrams.
4. Write short notes on any two of the following :
   (a) Nutrition of embryo (b) Xenia and Metaxenia (c) Tracheids (d) Endosperm

GROUP - B

5. Describe the ascent of sap in plants.
6. What role do auxins play in plant growth and development ?
7. Write short notes on any two of the following :
   (a) Geotropism (b) Seismonastic Movements (c) Gebberllin (d) Diffusion

GROUP - C

8. Describe briefly the physical and chemical properties of amino acids.
9. Discuss the role of fatty acids synthetase in fatty acid synthesis.
10. Write short notes on any two of the following : (a) Enzymes
    (b) Role of ribosomes in Protein Synthesis (c) Genetic Engineering (d) Polypeptide

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