

BSC. PART - II EXAMINATION - 2012

BOTANY HONOURS PAPER III

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

I. Answer the following questions :

- (i) Name the person who discovered the cell nucleus.
- (ii) Name a simple tissue in which living protoplast is absent.
- (iii) What are open bundles ?
- (iv) Name a monocot plant studied by you in which secondary growth is seen.
- (v) What is tapetum ?
- (vi) What is cleistogamy ?
- (vii) Name the parts of gynoecium

[B] Select the correct answer of the following :

- (i) The commercial jute fibres are :
(a) Xylem Fibres (b) Bast Fibres (c) surface Fibres (d) Interxylary Fibers
- (ii) The pulses belonging to the family :
(a) Poaceae (b) Fabaceae (c) Rosaceae (d) Cucurbitaceae
- (iii) The richest source of Vitamin-A is :
(a) Radish (b) Carrot (c) Lemon (d) Orange
- (iv) Parenchyma which performs photosynthesis is called as :
(a) Chlorenchyma (b) Collenchyma (c) Aerenchyma (d) Sclerenchyma
- (v) A sieve tube is a living cell, yet it does not possess :
(a) Cytoplasm (b) Cell wall (c) Nucleus (d) Plasma membrane
- (vi) In a collateral vascular bundle phloem is : (a) Outside the xylem
(b) Inside the xylem (c) On both sides of xylem (d) All around the xylem
- (vii) A microspore is the first cell of :
(a) Male sporophyte (b) Female sporophyte
(c) Male gametophyte (d) Female gametophyte

(viii) The fertilized egg is called :

- (a) Zygote (b) Ovule (c) Embryo (d) Seed

GROUP - A

2. What are Meristems? Discuss various types of meristems and their functions.
3. Differentiate between the following :
(a) Exarch Xylem and Endarch Xylem (b) Collenchyma and Aerenchyma
(c) Fascicular cambium and interfascicular cambium
4. What is double fertilization ? Describe the process of fertilization in angiosperm.
5. Write short notes on any two of the following :
(a) Helobial endosperm (b) Xenia and metaxenia (c) Megasporogenesis

GROUP - B

6. Give the botanical names, families and uses of the following :
(a) Rice (b) Potato (c) Sugarcane
7. Give an account of five drug-yielding plants of your region.
8. Describe the processing and uses of rubber.
9. Write short notes on any two of the following
(a) Shisham (b) Coconut (c) Mustard (d) Cotton