

# BSC. PART - II EXAMINATION - 2013

## 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) Write full form of IAA.
- (ii) What is Meristematic tissue?
- (iii) Who discovered double fertilization ?
- (iv) What is biotechnology ?
- (v) Name any two amino acids.
- (vi) Which type of vascular bundle is in Cucurbitales ?
- (vii) Name one plant having C<sub>4</sub> cycle.
- (viii) What is wilting ?

(b) Fill in the blanks : (i) Endosperm is a.....tissue.

- (ii) The ability of plant cells to regenerate into complete plant is called.....
- (iii) Periderm is a .....tissue in plant.
- (iv) Conduction of food in plant happens through.....tissue.
- (v) Part of gynoecium which receives pollen grains is called.....
- (vi) In Nerium, epidermis is .....
- (vii) Glycolysis occurs in.....of the cell

### GROUP-A

2. What is endosperm? Describe the development of different types of endosperm.
3. Draw a well-labelled diagram of T.S. through the stem of Dracaena. Describe its abnormal features.
4. Write short notes on any two of the following :  
(a) Anatomical adaptations in xerophytes (b) Tapetum (c) Bisporic embryo sac  
(d) Parenchyma

### GROUP-B

5. Define transpiration. Describe the mechanism of stomatal transpiration..
6. Describe C<sub>3</sub> cycle in plants.
7. Describe Krebs cycle. How many ATP molecules are generated out of it?

### GROUP-C

8. Describe the structure and synthesis of lipid.

9. What are enzymes ? Describe the characteristic and mode of action of enzyme.
10. Write short notes on any two of the following  
(a) Tissue culture  
(b) Saturated and unsaturated Fats. (c) Genetic Engineering (d) Carbohydrate.