

**A-3-Z**

Roll No.....

Total No. of Questions : 14]

[Total No. of Printed Pages : 3

**XIARWZJD21**

**5703-Z**

**BOTANY**

(BIOLOGY)

Time : 1.15 Hours]

[Maximum Marks : 35

**Section-A**

1 each

1. What is the range of the number of species that are known and described ?
2. Expand PGR.
3. A cone in case of gymnosperms is formed of a tight array of overlapping scales on a central axis. What is the another name of cone ?
4. Name the metabolic pathway through which the electron passes from one carrier to another.

**Section-B**

2 each

5. What do the terms Phycobiont and Mycobiont signify ?
6. What type of fruit is Mango ? Give its parts.

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Turn Over

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7. Once water is absorbed by the root hairs, it can move deeper into root layers by two distinct pathways; apoplast pathway and symplast pathway. Describe briefly the both pathways.

*Or*

Define Diffusion. Name the factors that affect the rate of diffusion.

**Section-C**

3 each

8. Give the schematic representation of Glycolysis.  
9. Describe the characteristic features of Bryophytes.

*Or*

Differentiate between red algae and brown algae.

10. Define Stomata. Describe the structure of stomatal aperture.  
11. Give the floral formula of family Fabaceae. Draw also its floral diagram.  
12. Define the following terms :  
(a) Osmosis  
(b) Deplasmolysis  
(c) Imbibition

**Section-D**

5 each

13. What are Protists ? Protozoans are included under protists which has four major groups. Describe briefly those four groups of protozoans.

*Or*

What is Botanical Garden ? Explain its role. Name any two botanical gardens present in India.

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14. Discuss the functions of the following essential elements :

- (a) Calcium
- (b) Magnesium
- (c) Zinc

*Or*

Describe the three stages of Calvin cycle.