

**A-3-A**

Total No. of Questions : 14]

Total No.

[Total No. of Printed Pages : 3

**XIARKDD20**

**2703-A**

**BOTANY**

**(BIOLOGY)**

Time : 1½ Hours]

[Maximum Marks : 35

**Section-A**

1 each

1. Number of vascular bundles in Dicot root is :  
(A) 2 (B) 6  
(C) 10 (D) 2-6
2. A tissue responsible for forming new cells/tissues is :  
(A) Parenchyma (B) Sclerenchyma  
(C) Collenchyma (D) Meristematic tissue
3. Number of neck canal cells in true mosses is :  
(A) 4 (B) 4-6  
(C) 1 (D) 6-10

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Turn Over

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4. Draw a diagram of 'Corm'. Label it.

2 each

**Section-B**

5. What is Herbarium ? Give its utility.
6. Define Mineral Nutrition. List macro-elements.
7. Define Respiration. What is its utility ?

Or

What is Fermentation ?

**Section-C**

3 each

8. Define binomial system of nomenclature. Who proposed it ? Give the rules to be observed in this system.

Or

What is Botanical Garden ? Write its advantages in view of taxonomical aids.

9. Write down characteristic features of kingdom Protista.
10. List the criteria of essentiality of elements in plant growth and development.
11. Define Inflorescence. Explain any two types of racemose inflorescence.

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12. Describe very briefly mechanism of opening and closing of stomata as proposed by Levitt.

**Section-D**

5 each

13. Write down the features of Gymnosperms.

*Or*

Define Stem. Describe any *four* modifications of underground stems.

14. Define Aerobic Respiration. Draw a schematic outline of glycolysis of aerobic respiration.

*Or*

Define Growth. Name and explain different phases of growth with the help of growth curve.