



'समानो मन्त्रः समितिः समानी'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 3rd Semester Examination, 2023

CC5-BOTANY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

GROUP-A

1. Answer any **five** questions from the following: 1×5 = 5
- (a) What is quiescent centre?
 - (b) What are hydathodes?
 - (c) What do you mean by false fruit?
 - (d) What is drupe?
 - (e) What do you mean by syngenesious stamen?
 - (f) What is Ranunculus type of stomata?
 - (g) What is epiblema?
 - (h) What is laticiferous duct?

GROUP-B

2. Answer any **three** questions from the following: 5×3 = 15
- (a) Differentiate between dicot and monocot stem anatomically with suitable examples. 5
 - (b) Distinguish between: 2½+2½
 - (i) Hypogynous and Epigynous flower
 - (ii) Orthotropous and Anatropous ovules.
 - (c) Write short note on: 5
 - (i) Korper-Kappe theory
 - (ii) Kranz anatomy
 - (d) Write adaptive anatomical features of hydrophytes. 5
 - (e) What is aestivation? Describe different types of aestivation with proper diagrams and examples. 1+4

GROUP-C

3. Answer any **two** questions from the following: 10×2 = 20
- (a) Illustrate different types of vascular bundles with suitable diagrams. Mention the components of xylem and phloem. 8+2
 - (b) What do you mean by secondary growth? Describe with sketches how secondary growth takes place in dicotyledonous stem. 2+8
 - (c) Describe different types of trichomes with two examples of each type. 10
 - (d) Distinguish between: 5×2 = 10
 - (i) Dorsiventral and isobilateral leaf
 - (ii) Tracheids and trachea.

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