



‘समानो यन्त्रः समितिः समानी’

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 3rd Semester Examination, 2022

CC5-BOTANY

MORPHOLOGY AND ANATOMY OF ANGIOSPERMS

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 Carpophore?
 - (b) What is Calyptragen?
 - (c) What do you understand by obdiplostemonous flower?
 - (d) Where do you get horse-shoe shaped embryo?
 - (e) What is stylopodium?
 - (f) What is dendrochronology?
 - (g) What is leaf trace?
 - (h) What is ligule?

GROUP-B

2. Answer any **three** questions from the following: 5×3 = 15
 - (a) What is stele? Represent the types of stele with diagram and suitable examples. 1+4
 - (b) Describe the different types of cohesion of stamens with example. 5
 - (c) Write the anatomical adaptative features of xerophytes. 5
 - (d) Distinguish between: 2½+2½
 - (i) Sap wood and heart wood
 - (ii) Ring and diffuse porous wood.
 - (e) Write notes on any one of the following: 5
 - (i) Sieve elements
 - (ii) Histogen theory.

GROUP-C

3. Answer any **two** of the following questions: 10×2 = 20
 - (a) What are stomata? Describe the different types of stomata with proper diagram and example. 2+8
 - (b) What is vascular cambium? Discuss the secondary growth of dicot stem. 2+8
 - (c) What is the difference between true fruit and false fruit? Discuss the different types of aggregate and composite fruits with proper examples. 2+4+4
 - (d) Write notes on: 5+5
 - (i) Schizocarpic or splitting fruits
 - (ii) Trichomes.

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