



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 5th Semester Examination, 2021

CC11-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 are pollinia?
 - (b) What is aril?
 - (c) Name one gene for flower development in Angiosperms.
 - (d) Give an example of bisporic Embryo Sac.
 - (e) What is the function of suspensor?
 - (f) Mention the role of jaculators in seed dispersal.
 - (g) Give an example of homomorphic self-incompatibility.
 - (h) What do you mean by “atreme” pollen grain?

GROUP-B

2. Answer any **three** questions from the following: 5×3 = 15
- (a) Discuss about the structure of Pollen Wall. 5
 - (b) Describe the structure of Stigma and its modifications. 5
 - (c) Differentiate Chalazogamy and Porogamy. 5
 - (d) Write a short note on Cybrid. 5
 - (e) Describe how heteromorphism in flowers promote cross pollination. 5

GROUP-C

3. Answer any **two** questions from the following: 10×2 = 20
- (a) Give an outline of the NPC system of pollen classification. 10
 - (b) Give a concise account of the embryo development process seen in *Capsella bursa-pastoris*. 10
 - (c) What is polyembryony? Describe different types of polyembryony with suitable examples. 10
 - (d) “Flower is a modified determinate shoot” — Explain with suitable examples and diagrams. 10

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