



'समानो मन्त्रः समितिः समानी'

UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 5th Semester Examination, 2023

CC11-BOTANY

REPRODUCTIVE BIOLOGY

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) Who is the father of Indian plant embryology?
 - (b) Name one gene for flower development in angiosperms.
 - (c) What is protandry? Give an example.
 - (d) Mention the role of jaculators in seed dispersal.
 - (e) Name one plant with cleistogamous flower.
 - (f) What is gynostegium?
 - (g) Give one example of bisporic embryo sac.
 - (h) What is egg apparatus?

GROUP-B

2. Answer any **three** questions from the following: 5×3 = 15
- (a) Briefly discuss the scope of palynology. 5
 - (b) Write the adaptive features of flowers for cross-pollination. 5
 - (c) Briefly discuss the process of double fertilization with a suitable diagram. 5
 - (d) Write an account on apomixis. 5
 - (e) What do you mean by megasporogenesis? Write in brief about bisporic and tetrasporic megasporogenesis.

GROUP-C

3. Answer any **two** questions from the following: 10×2 = 20
- (a) Elaborate the ABC model of flower development with suitable diagram. 10
 - (b) What is endosperm? Mention its importance. Write a note on different types of endosperm with examples. 1+2+7
 - (c) Write short notes on: 5+5
 - (i) Parasexual hybridization
 - (ii) *In vitro* fertilization.
 - (d) Write the different methods of seed dispersal in plants with a suitable diagram and example. 10

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