सत्यं विश्वमानम्

WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 5th Semester Examination, 2023-24

BOTACOR11T-BOTANY (CC11)

Time Allotted: 2 Hours | Full Marks: 40

The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.

1. Answer ***all*** the following questions: 1×6 = 6

(a) Define MGU.
(b) What is double Fertilization?
(c) What is porogamy?
(d) What is the meaning of ruminate endosperm?
(e) Write the meaning of self-sterility.
(f) What is obturator?

2. Answer any ***eight*** questions from the following: 3×8 = 24

(a) What are the components of anther wall? Mention the functions of the tapetum. 1+2
(b) Describe the structure of a typical ovule with proper diagram. 3
(c) What is NPC system? Mention one of its merit and demerit. 2+1
(d) What is adventive polyembryony? Cite an example. 2+1
(e) Write in brief about the methods to overcome self-incompatibility. 3
(f) Write about three different contrivances for cross pollination. 3
(g) Briefly discuss about three different seed dispersal mechanisms with examples. 3
(h) Write the distinctive features of Hydrophilous and Entomophilous Flowers. $1\frac{1}{2}+1\frac{1}{2}$
(i) What is parasexual hybridization? Mention two of its importance. 2+1
(j) Describe orthotropous and amphitropous ovule with schematic diagrams and examples. 3
(k) Differentiate between hollow style and solid style of angiosperms with examples. $1\frac{1}{2}+1\frac{1}{2}$
(l) Write a brief note on embryo-endosperm relationship. 3

3. Answer any ***two*** questions from the following: 5×2 = 10

(a) Describe the embryo development in *Capsella bursa-pastoris* with proper diagram. 3+2
(b) Describe the development of nuclear and cellular type of endosperms with diagrams and examples. 2+2+1
(c) Give a brief account of apogamy and apospory with examples. $2\frac{1}{2}+2\frac{1}{2}$
(d) Define with schematic diagrams and examples of monosporic, and tetrasporic embryo sac. $2\frac{1}{2}+2\frac{1}{2}$

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