



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 5th Semester Examination, 2021-22

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 as far as practicable
All symbols are of usual significance.*

1. Answer **all** the following questions: 1×6 = 6
- (a) Name a plant having aril in seed.
- (b) What is Ubisch bodies?
- (c) What is Cybrid?
- (d) Write the full form of MGU.
- (e) What is massulae?
- (f) What is the function of Suspensor?
2. Answer any **eight** questions from the following: 3×8 = 24
- (a) What is Tapetum? Mention the functions of Tapetum. 1+2
- (b) What are the major causes for the loss of pollen viability? 3
- (c) Why pollen of angiosperms is referred to as microspore? Illustrate the successive stage of microsporogenesis (labeled diagrams only).
- (d) Differentiate between Dichogamy and Herkogamy with examples. 3
- (e) If the haploid number of chromosome in a plant is 8, how many chromosomes would be there in — 3
- (i) Microspore mother cell (ii) Pollen grains (iii) Ovum
- (iv) Embryo and (v) Endosperm
- (f) Differentiate between Amoeboid or Invasive Tapetum and Glandular Tapetum. 3
- (g) Mention in brief the scope of Palynology. 3
- (h) Define albuminous and exalbuminous seeds with examples. 3
- (i) Differentiate among Nuclear, Cellular and Helobial endosperm. 3
- (j) Mention different Hydrochorous and Zoochorous type of fruit dispersals with example. 3
- (k) Mention the characteristics feature of the flowers, where Anemophily, Hydrophily and Entomophily take place. 3
- (l) Distinguish Monosporic, Bisporic and Tetrasporic type of embryo sac. 3

3. Answer any *two* questions from the following: 5×2 = 10
- (a) Write briefly the method applied to overcome self-incompatibility. 5
 - (b) Discuss briefly about changes associated with the formation of Inflorescence primordia from vegetative shoot apical meristem. 5
 - (c) Schematically represent NPC classification as proposed by Erdtman. 5
 - (d) What is Tectum? How the spore and pollen wall can be differentiated? Draw a schematic diagram of sporoderm following Erdtman and Faegri. 1+1+3

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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