



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 3rd Semester Examination, 2019

BOTACOR05T-BOTANY (CC5)

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 the following questions: 1×6 = 6
 - (a) What is an apocarpous pistil?
 - (b) What is false fruit?
 - (c) Define quiescent centre.
 - (d) What is meant by Kranz anatomy?
 - (e) Name an inflorescence type where spathe bract is present.
 - (f) What is aerenchyma?

2. Answer any **three** questions from the following: 3×3 = 9
 - (a) Write a note on the adhesion of stamens with examples.
 - (b) Write down the different types of placentation with examples.
 - (c) Distinguish between cyathium and hypanthodium inflorescence.
 - (d) With one example each, explain the simple, aggregate and multiple fruits.
 - (e) Write down the different types of aestivation in floral buds with examples.

3. Answer any **five** questions from the following: 3×5 = 15
 - (a) Explain the role of plant anatomy in pharmacognosy.
 - (b) Write a note on the different types of stomata according to Metcalfe and Chalk.
 - (c) Write in brief the anatomical adaptations in hydrophytes.
 - (d) With the help of schematic diagrams, give a brief account on the different types of vascular bundles.
 - (e) What is hydathode? Briefly describe the structure of the same. 1+2
 - (f) What is periderm? Distinguish between ring porous wood and diffuse porous wood. 1+2
 - (g) Write a note on the role of cambium in secondary growth in dicotyledonous plants.
 - (h) Explain in brief the tunica-carpus theory with schematic diagram.

4. Answer any **two** questions from the following: 5×2 = 10
 - (a) Write down the concept of primitive and advanced carpel types.
 - (b) Characterise with illustrations and examples, the different types of schizocarpic fruits.
 - (c) Describe the tracheary elements with suitable diagrams.
 - (d) What is Calyptragen? Explain the Korper-Kappe theory with illustration.

—x—