

2021

BOTANY — HONOURS

Second Paper

(Group – A)

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer the following questions :

- (a) What are peristome teeth? Mention their function. 2
- (b) Distinguish between elater and pseudoelater. 2
- (c) Name one pollution indicating moss. 1
- (d) Define coal ball. 1
- (e) Mention the different periods of Palaeozoic Era in ascending order. 2
- (f) Which type of rock is best suitable for preservation of fossils? Why? 2

2. Outline the Proskauer's classification (1957) of bryophytes upto class with salient characters and examples. Discuss the spore dispersal mechanisms in *Marchantia*, *Anthoceros* and *Funaria* with appropriate diagrams. 6+3+3+3

Or,

Write notes on the following :

- (a) Importance of bryophytes in plant succession.
- (b) Homologous theory of alternation of generation.
- (c) Progressive sterilization of sporophytes in bryophytes. 5+5+5

3. Describe sporoderm stratification as proposed by Erdtman and Faegri with labelled sketches. Briefly describe the exine ornamentation pattern in spores and pollen grains with example. What is compound aperture? 6+7+2

Or,

Write notes on the following :

- (a) Advantages and disadvantages of forensic palynology
- (b) Coalified compression and impression
- (c) Importance of fossil study. 5+5+5

Please Turn Over

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(2)

4. Write briefly *any two* of the following :

5×2

- (a) Types of endosperm development in angiosperms
 - (b) Apospory and Apogamy
 - (c) Pollen ovule ratio and its significance
 - (d) Microsporogenesis in angiosperms.
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