

2016
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 briefly :
 - (a) Distinguish between perichaetium and calyptra. 2
 - (b) State the functions of amphithecium and endothecium. 2
 - (c) Name a pollution sensitive bryophyte. 1
 - (d) Mention two important points of distinction between spores and pollen grains. 2
 - (e) Name the periods of Palaeozoic Era. 2
 - (f) Draw a tricolporate pollen grain in polar view. 1
2. Mention the salient features of the class Bryopsida. Give an account of the mechanism of capsule dehiscence and mode of spore dispersal in different groups of bryophytes. 5+10

Or

Write short notes on the following :

- (a) Vegetative plant body of *Anthoceros*. 5
 - (b) Role of bryophytes in plant succession. 5
 - (c) Antithetic theory of alternation of generation. 5
3. Discuss different modes of preservation of fossils as suggested by Schopf (1975). State the significance of studying fossils. 10+5

Or

Write notes on the following :

- (a) NPC classification of spore and pollen. 5
- (b) Airborne spores and pollen grains versus human health. 5
- (c) Megafossils of Indian Lower Gondwana. 5

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4. Write briefly on *any two* of the following : 5×2
 - (a) Types of endosperm development in angiosperm.
 - (b) Pollen-Ovule ratio and its significance.
 - (c) Apospory and Apogamy.
 - (d) Stages of Microsporogenesis.