

2017

M.Sc. 2nd Semester Examination

BOTANY

PAPER—BOT-204

Full Marks : 40

Time : 2 Hours

The figures in the margin indicate full marks.

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

Illustrate the answers wherever necessary.

Unit—I

(General concept of Plant Kingdom)

[Marks : 20]

1. Answer any *five* questions :

5×1

(a) Name one organelle having double membrane.

(b) Name the first vascular land plant.

(Turn Over)

- (c) Give example of a sea algae.
- (d) Name one economically important Gymnosperm.
- (e) Name one mechanical tissue.
- (f) Name the organelle responsible for photosynthesis.
- (g) Name any one aquatic pteridophyte.

2. Write short notes on any *one* of the following : 1×5

- (a) Five kingdom concept.
- (b) Characteristic features of algae.

3. Answer any *one* question of the following : 10×1

- (a) Comment on the uniqueness of plant all structure and its components. Mention three different types of tissues found in plants. 5+5
- (b) Write down the adaptations achieved by the pteridophytes during their colonization on land. Briefly discuss economic uses of algae. 5+5

Unit—II

(Economic uses of Plant)

[Marks : 20]

4. Answer any *five* questions : 5×1
- (a) What is endosperm ?
 - (b) Differentiate edible and essential oil.
 - (c) Write down active principle of *Andrographis*.
 - (d) Which part of the plant is used as mat from mat grass.
 - (e) Which part of jute plant is used as jute fibre.
 - (f) Mention two strategies for conservation of local medicinal plants.
 - (g) Which part of zinger plant is used ?
5. Answer any *one* of the following : 1×5
- (a) Brief description of *ocimum*.
 - (b) Dye yielding plants and their uses.
 - (c) Commercial uses of fossil plants.

6. Answer any *one* question of the following : 1×10

- (a) Give examples of some cereal plants and their uses. What are the major components of tea and rice bran oil. Mention health benefits of tea and rice bran oil.

2+3+2+3

- (b) Give a common name for *Adhatoda Zeylanica*. Briefly mention its phenotypic characters. Comment on its medicinal use.

Name three plant sources of edible oil and two sources of essential oil mentioning their scientific names and source parts. (1+2+2)+(3+2)