

BOT–503

Gymnosperms, Taxonomy of Angiosperms and Anatomy

M. Sc. BOTANY (MSCBOT–12/13/16/17)

First Year, Examination, 2018

Time : 3 Hours

Max. Marks : 80

Note : This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Learners are required to attempt the questions contained in these Sections according to the detailed instructions given therein.

Section–A

(Long Answer Type Questions)

Note : Section ‘A’ contains four (04) long answer type questions of nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. Write an essay on economic importance of Gymnosperms.
2. What do you understand by International Code of Botanical Nomenclature ? Give detailed account of recommendations proposed in Rochester Code for naming the plants.
3. Give a detailed account of any *two* National Parks of India.
4. Write short notes on any *four* of the following :
 - (a) Role of Ecology in Plant Taxonomy

- (b) Cladistic Taxonomy
- (c) Root apical Meristem
- (d) Phloem Tissue System
- (e) Secondary growth in stems of dicots.

Section–B

(Short Answer Type Questions)

Note : Section ‘B’ contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer *four* (04) questions only.

1. Describe morphological features of Cycas.
2. Give characteristics features of any *one* Fossil Gymnosperm studied by you.
3. Give characteristic features of system of classification proposed by Linnaeus.
4. What do you understand by Biosystematics ?
5. Give comparative account of family Ranunculaceae and Magnoliaceae.
6. In-situ conservation.
7. Vascular bundles
8. Primary anatomical structure of roots of Dicots.

Section–C

(Objective Type Questions)

Note : Section ‘C’ contains ten (10) objective type questions of one (01) mark each. All the questions of this Section are compulsory.

Indicate whether the following statements are True *or* False :

1. Casparian strips are found in endodermal cells.
(True/False)
2. Catkin inflorescence is found in Amentiferae,
(True/False)

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3. Binomial system of nomenclature was first proposed by A. P. de Candolle. (True/False)
4. Ovules are developed in archegonia in Gymnosperms. (True/False)
5. Corbett National Park is known for Tigers.(True/False)

Fill in the blanks :

6. is a fossil Gymnosperm.
7. Inflorescence of Euphorbiaceae is
8. Sclerenchyma tissue is meant for
9. Vascular bundles are in monocots.
10. BSI stands for

