

**Total No. of printed pages = 4**

**63/2 (SEM-2) BOT 201**

**2022**

**BOTANY**

**(Theory paper)**

**Paper Code : BOT 201**

**(Plant Taxonomy and Economic Botany)**

**Full Marks – 80**

**Time – Three hours**

**The figures in the margin indicate full marks  
for the questions.**

**1. Choose the correct answer of the following :**

**1×6=6**

**(i) Which of the following taxonomic steps  
involving extensive herbarium collection and  
flora preparation ?**

- (a) Introductory phase**
- (b) Systematic phase**
- (c) Biosystematic phase**
- (d) Holotaxonomic phase**

**[Turn over**

(ii) Operational Taxonomic Units (OUT) are used in

- (a) Arrangements of herbarium sheets
- (b) Categorizing taxonomic characters
- (c) Numerical method of analysis
- (d) Phylogenetic method of analysis

(iii) The Eighteenth International Botanical Congress was held in

- (a) July, 2011                      (b) June, 2011
- (c) June, 2017                    (d) July, 2017

(iv) The classical literature 'Vrishayurveda' was written by

- (a) Susruta                      (b) Charaka
- (c) Parasara                    (d) Pliny

(v) Which of the following author wrote 'De Historia Plantarum' ?

- (a) Theophrastus                (b) Bauhin
- (c) Pliny                        (d) Takhtajan

(vi) Clove (*Syzygium aromaticum*) is the

- (a) Elongated light brown fruits
- (b) Thin pod like capsules
- (c) Dried unopened flower buds
- (d) Dried stigmas and top of styles

2. Answer the following short questions :  $2 \times 5 = 10$

- (a) What is an empirical approach in taxonomy ?
- (b) State two major contributions made by A. P. de Candolle.
- (c) Write the botanical source of Hemp.
- (d) Who is author of the book 'Species Plantarum' ? Mention the year of publication.
- (e) State two diagnostic characters of family Poaceae.

3. Write short notes on any six from the following :  
 $5 \times 6 = 30$

- (a) Principles of Priority and Limitations
- (b) Objectives of Plant taxonomy
- (c) Principles of ICN
- (d) NTFP's
- (e) Serology in taxonomy
- (f) Gross morphological characters in Plant taxonomy
- (g) Economically important plants of Magnoliaceae
- (h) Salient features of Ranunculaceae.

4. Answer any *two* of the following questions :

$10 \times 2 = 20$

(a) Define Typification. Discuss the different type methods you have studied. State the importance of typification.

$2+6+2=10$

(b) Distinguished between Alpha and Omega taxonomy. Briefly discuss the different phases of plant taxonomy.

$4+6=10$

(c) Write an explanatory notes on :

$5 \times 2 = 10$

(i) Centre of origin

(ii) Importance of timber yielding plants.

5. Answer any *one* of the following questions :

$14 \times 1 = 14$

(a) Differentiate between artificial and natural system of plant classification. Briefly discuss an outline of Bentham and Hooker's system of classification. State its merit and demerit.

$4+6+4=14$

(b) What is digital herbarium ? Elaborate the different steps involved in a preparation of herbarium. State four major herbaria in the world.

$2+8+4=14$