2018

M.Sc. 2nd Semester Examination

BOTANY

PAPER—BOT-203

Subject Code—23

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.

Use separate Answer-scripts for Unit-I & Unit-II

Unit–I

(Plant Anatomy)

[20 Marks]

1. Answer any *four* of the following : 1×4

(a) What is ray parenchyma ?

(b) What are colleters ?

(c) What do you mean by schizogenous intercellular spaces ?

(d) What are extrafloral nectaries ?

(e) What is resin duct ?

(f) What is callose ?

(g) What are tyloses ?

2. Write short notes on any *two* of the following : 3×2

(a) Salt gland ;

(b) Chemical nature of primary cell wall ;

(c) Nectaries ;

(d) Ultrastructure of cellulose microfibril.

3. Answer any *one* question of the following :

(a) Briefly describe with diagrams the types of stomata according to Metchalfe and Chalk. Write a short note on p-proteins. 6+4

(b) Enumerate the types of anatomy at node is dicotyledonous plants. Mention with examples the types of laticifers on the basis of their structures. 5+5

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Unit–II

(Pharamacognosy)

[20 Marks]

4. Answer any *four* of the following : 1×4

(a) Define pharmocognosy.

(b) What is a primary metabolite ?

(c) What is the chemical constitution of Hager's reagent ?

(d) What is genin ?

(e) Give an example of glucoside.

(f) What is adulteration ?

(g) Name an adulterant of nutmeg.

5. Write short notes on any *two* of the following : 3×2

(a) Alkaloids obtained from ergot and their uses ;

(b) Classification of glycoside according to glycone part ;

(c) Glycosides obtained from senna and their uses.

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

(a) Give a brief account of acetate malonate pathway.

(b) Describe the organoleptic, micromorphological and chemical characteristics of *Rauvolfia*.

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