

(6 pages)

Reg. No. :

Code No. : 6414

Sub. Code : ZBOM 14

M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2022.

First Semester

Botany – Core

PHYTOCHEMISTRY

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The solvent used for extraction is known as
(a) Distillate (b) Extract
(c) Mare (d) Menstruum
2. Identify the process used for extraction
(a) Infusion (b) Decoction
(c) Digestion (d) All of the above

3. Which of the following is NOT the class of secondary metabolite?

(a) Amino acids (b) Terpenes
(c) Phenolics (d) Alkaloids

4. Name the class of secondary metabolites which is characterized by the presence of the hydroxyl group with an aromatic ring?

(a) Glycosides (b) Phenolics
(c) Alkaloids (d) Terpenes

5. Beta-carotene, a plant pigment falls under which of the following classes of terpenes?

(a) Triterpenes
(b) Teteraterpenes
(c) Diterpenes
(d) Polyterpenes

6. Epicatechin gallate (ECG) is a type of flavonoid, found in which of the following?

(a) Orange (b) Green tea
(c) Berries (d) Carrot

Page 2

Code No. : 6414



7. Stas-otta process is used for extraction of
 (a) Glycosides (b) Alkaloids
 (c) Terpenoids (d) Resins
8. Saponin glycosides shows one of the following property
 (a) Laxative
 (b) Anti convulsant
 (c) Foaming
 (d) Astringent
9. Which of the following is used in the preparation of dental products?
 (a) Clove (b) Mentha
 (c) Cinnamom (d) Fennel
10. Volatile oil _____
 (a) Has low refractive index
 (b) Has specific rotation
 (c) Soluble in water
 (d) Leave stain on evaporation

Page 3 Code No. : 6414

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
 Each answer should not exceed 250 words.

11. (a) Measure the scope of Phytochemistry.
 Or
 (b) How will you prepare the plant extracts?
12. (a) Quote the secondary metabolites in plants.
 Or
 (b) What are the methods used for separation of plant constituents?
13. (a) Classic flavonoids.
 Or
 (b) Explain about β carotenes.
14. (a) Identify the properties of glycosides.
 Or
 (b) Extend the natural sources of glycosides.

Page 4 Code No. : 6414
 [P.T.O.]



15. (a) Mention the sources of volatile oils.

Or

- (b) Describe about extraction and utilization of tulsi oil.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 600 words.

16. (a) Enumerate parameters for selecting appropriate plant extraction method.

Or

- (b) State the importance of phytochemistry in Pharmaceutical industries.

17. (a) Illustrate primary phytochemical screening methods.

Or

- (b) Discuss on polyvalent action of phytomedicines.

18. (a) Provide the sources and therapeutic applications of Ephedrine.

Or

- (b) Distinguish between flavones and Flavanones.

Page 5

Code No. : 6414

19. (a) Explain the structure and significance of Coumarins.

Or

- (b) Evaluate the toxicological effects of glycosides.

20. (a) Discuss on phytochemical, extraction and uses of sandal wood oil.

Or

- (b) Give an account on medicinal uses of resins.

Page 6

Code No. : 6414

