(6 pages)

Reg. No. : ....

Code No.: 9084

Sub. Code: PBOM 14

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2017.

First Semester

Botany

## PHYTOCHEMISTRY

(For those who joined in July 2017 onwards)

Time: Three hours

Maximum: 75 marks

PART A —  $(10 \times 1 = 10 \text{ marks})$ 

Answer ALL questions.

Choose the correct answer:

- 1. The aim of the pharmaceutical industry is to develop a
  - (a) Novel drug
  - (b) Chemical drug
  - (9) Plant drug
  - (d) Synthetic drug

- 2. Phytochemistry is dealing with
  - (a) Plant products
- (b) Chemical products
- (c) Animal products
- d) Physical products
- 3. Secondary metabolites are
  - (a) Organic compounds
  - (b) Inorganic compounds
  - (c) Animal compounds
  - (d) Novel compounds
- 4. Humans use the secondary metabolites as a
  - (a Medicines
  - (b) Flavorings
  - (c) Recreational drugs
  - (d) All the above
- Alkaloids are type of substances.
  - (a) Acid

- (b) Neutral
- (c) Chemical
- (d) Basic nitrogenous
- 6. Glycosides are condensation products of
  - (a) Sugar + aglycone
- (b) Sugar + Protein
- (c) Protein + Aglycone (d) Fats + Aglycone

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- 7. Tannins give colour with iron compound
  - (a) Pale yellow
- (b) Blue black
- (c) Light pink
- (d) Orange
- 8. Glycyrrhizinic acid on hydrolysis gives
  - (a) Glycyrrhetic acid
  - (b) Glycyrrhizin
  - (e) Liquiritin
  - (d) Isoliquiritin
- 9. Terpenes made up of
  - (a) Calcierene
- (b) Pseudopriene
- (c) Neoprene
- (d) Isoprene
- 10. Example of alcohol volatile oil
  - (a) Peppermint
  - (b) Cinnamon
  - (c) Lemon peel
  - (d) Orange peel

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PART B —  $(5 \times 5 = 25 \text{ marks})$ 

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Comment on phytochemistry.

Or

- (b) What is infusion? Explain it.
- 12. (a) Write notes on polyvalent action of phytomedicines.

Or

- (b) Give a concise account on synergy action in phytochemistry.
- 13. (a) Describe the flavonoids.

Or

- (b) Briefly explain the morphines.
- 14. (a) Give a concise account on properties of glycosides.

Or

(b) Define terpenoids.

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[P.T.O.]

15. (a) Explain the sources of volatile oil.

Or

(b) List out the medicinal uses of resins.

PART C —  $(5 \times 8 = 40 \text{ marks})$ 

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write an essay on the importance of phytochemistry in pharmaceutical industry.

Or

- (b) Give a detailed account on method of preparation of plant extracts.
- 17. (a) Explain the classification of secondary metabolites.

Or

- (b) Enumerate the chemical test of preliminary phytochemical screening.
- 18. (a) Write an essay on classification of flavonoids.

Or

(b) Give a detailed account on natural sources and therapeutic applications of flavonoids.

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19. (a) Enumerate the classification of glycosides.

Or

- (b) Explain the natural sources of glycosides.
- 20. (a) Write an essay on volatile oils.

Or

(b) Describe the method of extraction and utilization of sandal wood oil.

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