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ODD SEMESTER EXAMINATION ,2022-23

**COURSE NAME :-B.PHARM
SEMESTER -5 SEM**

SUBJECT:-PHARMACOGNOSY AND PHYTOCHEMISTRY -II

Time: 3 Hours

Max.marks:75

Note :- Attempt all parts.

PART -A

Q.1 Attempt all the questions (Each question carries 1 mark) (20x1=20 marks)

(A) Multiple choice questions.

1. Intermediate product of photosynthesis;

- (a) Glucose (b) Pyruvic acid (c) Carbon-di-oxide (d) Water

2. Tropane alkaloids present in

- (a) Vinka (b) Opium (c) Rauwolfia (d) Belladonna

3. The important precursor for the production of steroidal drugs is

- (a) Gitoxin (b) Diosgenin (c) Digoxin (d) Digitoxin

4. Botanical name of Indian Senna

- (a) Cassia angustifolia (b) Cassia acutifolia (c) Cassia fustila (d) Cassia indica

5. Keller killiani test is specific for

- (a) Diosgenin (b) Digitoxigenin (c) Steroid (d) Digitoxose sugar

6. Which of the following statement for alkaloids is correct

- (a) Physiologically active (b) Basic in nature
(c) Heterocyclic ring with at least one nitrogen (d) All above

7. Iridoids are the type of

- (a) Monoterpenoid (b) Diterpenoid (c) Triterpenoid (d) Tetraterpenoid

8. Paclitaxel obtained from various taxus species (*Taxusbrevifolia*) used for treatment of

- (a) Diabetes (b) Cancer (c) Hypertension (d) Malaria

9. Which of the following is not the example of oleo gum resin

- (a) Benzoin (b) Guggul (c) Asafoetida (d) Water

10. Barbaloin (anthraquinone glycoside) present in aloe is a type of

- (a) C – Glycoside (b) O – Glycoside (c) S – Glycoside (d) N – Glycoside

11. An example of solanaceous alkaloid is :

- (a) Senna (b) Atropine
(c) Quinine (d) Pilocarpine

12. Lignans was first introduced by

- (a) Haworth (1948) (b) Hoffman (1948)
(c) Henrich (1848) (d) Hano (1848)

13. The volatile oil of coriander may contains:

- (a) Curcumin (b) Cascarosides
(c) Carminic acid (d) Coriandrol

14. Tannins give Which colour with iron compound ?

- (a) Pale yellow (b) Light pink
(c) Orange (d) Blue black

15. Drug is not an example of unorganized crude drug :

- (a) Catechu (b) Benzoin
(c) Hing (d) Cinnamon

16. Which is not an Example of acid resins?

- (a) Benzoin (b) Colophony
(c) Sandrac (d) Myrrh

17. Myrrh contains important acid :

- (a) Comiphoric acid (b) Abietic acid
(c) Benzoic acid (d) Acetic acid

18. Homogenous mixture of resins and oil are called as:

- (a) Oleoresins (b) Oleogum

- (c) Capsicum (d) Myrrh

19. Which tannin is present in the clove bud?

- | | |
|------------------------|-------------------|
| (a) Pyrogallop tannins | (b) Gallic acid |
| (c) Ellagic acid | (d) None of these |

20. Palisade ratio in Alexandrian Senna is :

- | | |
|--------|--------|
| (a) 7 | (b) 10 |
| (c) 13 | (d) 16 |

PART – B

Long answer type question. (ANY TWO) (10X2=20marks)

21. Create a detail note on Industrial production, isolation, identification, estimation and utilization of Podophyllotoxin.

OR

Caffeine.

22. Describe an explanatory note on modern spectroscopy techniques for application in identification of crude drugs.

23. Explain about chromatographic techniques and their application in identification and purification of phytoconstituents.

PART:-C

Short answer type question. (ANY FIVE) (7X5=35 marks)

24. Define primary and secondary metabolites. Create a note on Shikimic acid pathway **OR** Mevalonate acetate pathway.

25. Discuss amino acid pathway and formation of different secondary metabolites through amino acid pathway.

26. Explain the, modern methods of extraction of crude drugs.

27. List, a detailed note on Tracer technique.

28. Discuss general introduction, composition, chemistry, biosource and therapeutic application of Alkaloids.

OR

Tannins secondary metabolites.

29. Create a note on basic metabolic pathway. Explain formation of secondary metabolite formation of hyoscyamine

OR

Strychnine.

30. Create a note on isolation, identification and analysis of followings; (**Any Two**)

- | | |
|--------------|-----------|
| (a) Curcumin | (b) Rutin |
|--------------|-----------|

- (c) Quinine (d) Artimisin
31. Create a note on industrial production, estimation and utilization of followings; (**Any Two**)
(a) Forskoline (b) Taxol
(c) Vincristine & Vinblastine (d) Sennosoid
32. Demonstrate, biological source, chemical class, therapeutic and commercial application of followings; (**Any Two**)
(a) Lignans (b) Guggul
(b) Digitalis (d) Menta