

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**

**B. Pharm. Winter 2019 - 20 Examination**

**Semester: 5****Subject Code: BP504T****Subject Name: Pharmacognosy and Phytochemistry - II****Date: 28/11/2019****Time: 10.00 am To 1.00 pm.****Total Marks: 75****Instructions:**

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

**Q.1 Multiple Choice Questions (MCQs) (1 Mark Each)****(20)**

1. Precursor for Acetate Mevalonate pathway is
  - a) Acetic acid
  - b) Isopentenyl pyrophosphate
  - c) Acetyl CoA
  - d) Farnesyl pyrophosphate
2. Dragendroff reagent is used for detection of
  - a) Alkaloid
  - b) Glycoside
  - c) Flavonoids
  - d) Resins
3. Glycoresins are made up of
  - a) Resins + Sugar
  - b) Resins + Volatile oil
  - c) Resins + Gum
  - d) Resins + Fixed oil
4. Caffeine is soluble in
  - a) Water
  - b) Organic solvent
  - c) Ether
  - d) None of Above
5. Which of the following volatile oil having specific gravity more than one?
  - a) Mentha
  - b) Clove
  - c) Cinnamon
  - d) Fennel
6. Select the tanning containing antidiabetic drug.
  - a) Catechu
  - b) Amla
  - c) Pterocarpus
  - d) None of above
7. Digitalis is \_\_\_\_\_ Glycoside
  - a) Steroidal
  - b) Cardiac
  - c) Anthraquinone
  - d) Triterpenoids
8. Radioactive isotope of carbon is
  - a)  $^{12}\text{C}$
  - b)  $^{10}\text{C}$
  - c)  $^{15}\text{C}$
  - d)  $^{14}\text{C}$
9. Chemical test for identification of Asafoetida
  - a) Umbelliferone
  - b) Muroxide
  - c) Combined umbelliferone
  - d) Vitalimorin
10. Most suitable chromatographic techniques for Volatile liquid is
  - a) HPLC
  - b) GC
  - c) MS
  - d) HPTLC
11. \_\_\_\_\_ serves as a precursor for synthesis of steroids
  - a) Artemisin
  - b) Atropine
  - c) Diosgenin
  - d) Digoxin
12. Spectroscopic techniques for identification of functional group
  - a) IR
  - b) NMR
  - c) UV
  - d) MS
13. Which of following drug has arenchyma in its microscopy
  - a) Senna
  - b) Cinchona
  - c) Clove
  - d) Cinnamon

14. Keller-Kiliani's test is used for identification of
- |                  |                  |
|------------------|------------------|
| a) Carboxysugars | b) Methoxysugars |
| c) Deoxysugars   | d) None of above |
15. Out of the following, which drug is known as Jethimadh?
- |              |              |
|--------------|--------------|
| a) Digitalis | b) Aloes     |
| c) Clove     | d) Liquorice |
16. Antihypertensive drug from syllabus
- |              |               |
|--------------|---------------|
| a) Rauwolfia | b) Belladonna |
| c) Ginger    | d) Artemisia  |
17. *Camellia sinensis* is botanical sources of
- |           |           |
|-----------|-----------|
| a) Ruta   | b) Coffee |
| c) Ginger | d) Tea    |
18. Which of the following is not considered as modern method of extraction?
- |                                  |                                    |
|----------------------------------|------------------------------------|
| a) Modified maceration           | b) Super critical fluid extraction |
| c) Liquid phase micro extraction | d) Percolation                     |
19. \_\_\_\_\_ is anticancer drug from following
- |          |                    |
|----------|--------------------|
| a) Vinca | b) Podophyllotoxin |
| c) Taxol | d) All of above    |
20. How many vittae are present in fennel chremocarp?
- |       |      |
|-------|------|
| a) 12 | b) 6 |
| c) 2  | d) 4 |

**Q.2 Long Answers (any 2 out of 3) (10 Marks Each)**

**(20)**

- Define Alkaloid and glycoside and write about their detail classification with examples.
- Discuss Acetate Pathways: Acetate mevalonate and Acetate malonate.
- Discuss Pharmacognosy any **two drugs** from following
  - Aloe
  - Asafoetida
  - Opium

**Q.3 Short Answers (any 7 out of 9) (5 Marks Each)**

**(35)**

- Write difference between fennel and coriander.
- Discuss tracer technique.
- Discuss Super Critical Fluid Extraction.
- Industrial production and utilization of Vincristine and Vinblastine.
- Discuss complete Pharmacogony of Liquorice.
- Application of Spectroscopy in purification and identification of herbal drugs.
- Write difference between pale catechu and black catechu.
- Industrial production and utilization of Sennoside OR Caffeine.
- Discuss carotenoids.