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Total No. of Pages : 02

Total No. of Questions : 22

# B.Pharma (2017 Batch) (Sem.-5) PHARMACOGNOSY AND PHYTOCHEMISTRY II-THEORY Subject Code : BP504T M.Code : 76789

Time : 3 Hrs.

Max. Marks : 75

#### INSTRUCTIONS TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains THREE questions carrying TEN marks each and student has to attempt any TWO questions.
- 3. SECTION-C contains NINE questions carrying FIVE marks each and student has to attempt any SEVEN questions.

### SECTION-A

#### Write briefly :

- 1. Write down biological source and uses of CLOVE.
- 2. Give structure and identification tests of PODOPHYLLOTOXIN.
- 3. Write down principle of Microwave-assisted Extraction.
- 4. Give utilization of VINCRISTINE and VINBLASTINE.
- 5. Write down biological source and chemical constituents of RUTA.
- 6. Give biological source and commercial applications of GUGGAL.
- 7. Write applications of Droplet Counter Current Chromatography.
- 8. Describe steps of biosynthesis of Shikimic acid from Erythrose-4 phosphate and Phosphoenolpyruvic acid.
- 9. Describe method of identification of ARTEMISIN.
- 10. Discuss method of estimation of ATROPINE.

### SECTION-B

- 11. Describe Acetate Mevalonate pathway in the biosynthesis of various secondary metabolites.
- 12. Explain method of isolation, identification and analysis of GLYCYRHETINIC ACID.
- 13. Describe method of industrial production, estimation and utilization of FORSKOLIN.

# SECTION-C

- 14. Write down biological source, chemical constituents and therapeutic uses of OPIUM and DIGITALIS.
- 15. Describe principle and applications of Ultrasonic Extraction.
- 16. Write down applications of Spectroscopy in identification of crude drugs.
- 17. Discuss radioactive isotopes in investigation of biogenetic pathway.
- 18. Write a detailed note on CAROTENOIDS.
- 19. Explain method of isolation and identification of CAFFEINE.
- 20. Write down biological source, chemical constituents and therapeutic uses of GINGER and PTEROCARPUS.
- 21. Describe method of industrial production and uses of DIOSGENIN.
- 22. Give a detailed pharmacognostic account on SENNA.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.