

Total No. of Questions : 6]

SEAT No. :

P3165

[Total No. of Pages : 2

[5245]-505

Third Year B. Pharmacy (Semester - V) (Theory)

**355 : ANALYTICAL PHARMACOGNOSY AND
EXTRACTION TECHNOLOGY**

(2013 Pattern)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) All questions are compulsory.*
- 2) Answers to the two sections should be written in separate answer books.*
- 3) Neat diagrams must be drawn wherever necessary.*
- 4) Figures to the right indicate full marks.*

SECTION - I

Q1) Attempt any one of the following: **[10]**

- a) Explain the principle, instrumentation and applications of Soxhlet extraction.
- b) Explain the Principle, procedure and applications of Froth-floatation technique.

Q2) Attempt any five of the following: **[15]**

- a) Give the chemical tests for Strychnine and Piperine
- b) Explain the isolation procedure of Curcumin
- c) Enlist different types of adsorbents for thin layer chromatography
- d) Explain merits and demerits of Microwave-assisted extraction
- e) Explain “Haemolytic activity” as per WHO guidelines
- f) Explain enflourage method with an example
- g) Explain swelling index as per WHO guidelines

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Q3) Attempt any two: [10]

- a) Explain the maceration and percolation process.
- b) Explain the principle and advantages of HPTLC method.
- c) Explain the procedure for determination of Tannin content as per WHO guidelines.
- d) Define Adulteration and explain its types with suitable examples.

SECTION - II

Q4) Attempt any one of the following: [10]

- a) Describe in detail:
 - i) Methods of determining moisture content in crude drugs.
 - ii) Different types of Ash value with their significance.
- b) State the role of documentation in quality management system as per WHO guidelines for Pharmaceutical Laboratory.

Q5) Attempt any five of the following: [15]

- a) Give the isolation procedure of Taxol
- b) Explain the extraction of peppermint oil by steam distillation method
- c) Explain chemical tests for podophyllotoxin and menthol
- d) Explain merits and demerits of Sonication
- e) Add a note on "Pesticidal residue" as per WHO guidelines
- f) Draw neat labeled diagram of supercritical fluid extractor
- g) Enlist the contents of 'Certificate of Analysis' as per WHO guidelines

Q6) Attempt any two: [10]

- a) Explain the decoction and infusion process.
- b) Explain Source, properties, isolation & tests of artemisinin
- c) Explain the procedure for determination of bitterness value as per WHO guidelines.
- d) Enlist parameters of proximate phytochemical analysis

