

M.Pharm. F.Y. (Pharmacognosy) (CBCS Pattern) Sem-I
MPG103T - Phytochemistry

P. Pages : 1

Time : Three Hours



GUG/W/22/14160

Max. Marks : 75

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- Notes :
1. Diagrams and Chemical equation should be given wherever necessary.
 2. Illustrate your answers wherever necessary with the help of neat sketches.
 3. All questions are compulsory.

- 1. SHORT NOTE (Answer **any ten**)** **10x2**
=20
- a) Define Radiotracer and enlist their techniques.
 - b) Note on standardization of herbal drug.
 - c) Application of HPLC in herbal medicine.
 - d) Application of spectroscopic techniques in Pharmacognosy.
 - e) Application of Radio-tracer techniques.
 - f) Importance of natural products in discovery of drugs.
 - g) Write the chemistry of Glycyrrhizin.
 - h) Note on Caffeine.
 - i) Principle of Mass spectroscopy.
 - j) Define and classify the steroids.
 - k) Note on choice of solvents.
- 2. SHORT ESSAY (Answer **any five**)** **5x7**
=35
- a) Write in detail about quinine extraction and characterization.
 - b) Discuss the technique of Flash chromatography.
 - c) Write about quality evaluation of crude drug.
 - d) Discuss in detail about Andrographolide.
 - e) Explain structural elucidation of Carvone by spectroscopic techniques.
 - f) Note on Product Discovery Process.
 - g) Explain SCFE technique with advantages and disadvantages.
- 3. LONG ESSAY (Answer **any two**)** **2x10**
=20
- a) Explain in detail about alkaloid including its extraction, isolation, Characterization and purification methods.
 - b) What are the recent advances in extraction with emphasis on selection of methods?
 - c) Explain in detail about phytochemical finger printing methods and its applications in characterization of herbal extracts.
