

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END-SEMESTER EXAMINATION)**

**CLASS: B.PHARM  
BRANCH: PHARMACY**

**SEMESTER: IV  
SESSION: SP/2023**

**SUBJECT: BP405T PHARMACOGNOSY AND PHYTOCHEMISTRY I**

**TIME: 3.00 Hours**

**FULL MARK: 75**

**INSTRUCTIONS:**

1. The missing data, if any, may be assumed suitably.
  2. Before attempting the question paper, be sure that you have got the correct question paper.
  3. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
  4. This question paper consists of (03) three parts. Read the part wise instructions before attempting the questions.
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**PART-I**

**Objective type questions (Instruction: Answer all questions)**

Q1. (10 x 2 = 20 Marks)

- A. Draw a neat diagram of different types of stomata with example?
- B. How collection time influences quality of plant drugs with examples?
- C. How percentage purity of powder drug can be calculated using Lycopodium spore method?
- D. Distinguish between organised and unorganised drugs and write the botanical name of each of them?
- E. How are hallucinogens defined?
- F. How are Allergens defined?
- G. Can glycosides be identified by common test? Explain with an example?
- H. How different ash values linked with quality of drug with examples?
- I. Define phyto hormones and list their applications?
- J. List the applications of serratiopeptidase and streptokinase?

**PART-II**

**Short Answers**

**(Instruction: Answer seven out of nine questions)**

(7 x 5 = 35 Marks)

- Q1. Define adulteration? What are the different methods used for adulteration?
- Q2. How swelling index and foam index estimated and mention the significance of the same?
- Q3. List the advantages and disadvantages of plant tissue culture?
- Q4. Explain chemical method of evaluation of herbal drugs?
- Q5. Write the test to identify of three plant fibers and write the biological source, chemical constituents, and uses of the same?
- Q6. Explain with examples how cultivation of drugs is influenced by various factors?
- Q7. Discuss different chemical methods of evaluation of natural drugs?
- Q8. How natural drugs are classified and write the advantages and disadvantages of the same?
- Q9. Analyse in detail microscopic method for finding percentage purity of a powdered drug?

**PART-III**

**Long Answers**

**(Instruction: Answer two out of three questions)**

(2 x 10 = 20 marks)

- Q1. Explain the different phytoconstituents in nature with their biological source and identification tests?
- Q2. How polysaccharide containing drugs identified? Explain in detail the chemical tests and write the biological source of same
- Q3. Explain different quantitative microscopic methods of evaluation of natural drugs with illustration?