

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

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

**SEMESTER: V  
SESSION: MO-23**

**SUBJECT: BP504T PHARMACOGNOSY & PHYTOCHEMISTRY-II**

**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 types of questions (Instruction: Answer all questions)**

**Q1. (10 x 2 = 20 Marks)**

- A. Write down the biological source of drugs from Umbelliferae and Leguminosae family.
- B. Name the identifying character of Clove and Cinchona.
- C. How will you distinguish between Fennel and Coriander by using microscope.
- D. Write down the morphological characters of Senna.
- E. Write down the uses of following drugs.  
i) Artemisinin ii) Diosgenin iii) Digoxin iv) Atropine v) Podophyllotoxin vi) Caffeine.
- F. Only digitoxose answers Keller Kilani test? Evaluate the statement and defend with structures?
- G. Compare cardenolides and bufadienolides? Support your answer with structures?
- H. Devise a method to show which nitrogen of lysine is involved in formation of anabasine?
- I. Summarise the structures of different types of amino acids produced in biosynthetic pathway?
- J. Propose chemical tests to identify four different classes of phytoconstituents?

**PART-II**

**Short Answers**

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

**(7 x 5 = 35 Marks)**

- Q2. Recall back to Alkaloids. Describe the different kinds of alkaloids using appropriate examples.
- Q3. Write down the biological source, plant characteristics, chemical components, and intended uses of any volatile drug.
- Q4. Explain about the biological source, therapeutic uses, chemical composition, of Senna.
- Q5. Write down the utilization and uses of Taxol and Vincristine.
- Q6. Define Glycosides. Discuss the various types of Glycosides.
- Q7. Write down the biological source, chemical constituents, and uses of Digitalis.
- Q8. Arrange the different building blocks used in biosynthesis of phytoconstituents?
- Q9. Outline the isolation procedure of alkaloids? Write the chemical tests to identify alkaloids and glycosides?
- Q10. Evaluate the biosynthetic pathways for producing terpenoids and aromatic compounds?

**PART-III**  
**Long Answers**  
(Instruction: Answer two out of three questions)

(2 x 10 = 20 marks)

- Q11. How could you describe and classify Resin? In addition, outline in detail the applications, chemical constituents chemical test, and collection process of a particular resin.
- Q12. Explain the different methods to elucidate biosynthetic pathways?
- Q13. Write the general features of cardiac glycosides? Construct the biosynthetic pathway of cardiac glycoside?

:::24/11/2023 M:::