

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

CLASS: BPHARM
BRANCH: PHARMACY

SEMESTER: V
SESSION: MO/2019

SUBJECT: BP504T PHARMACOGNOSY AND 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 questions (Instruction: Answer all questions)

Q1. (10 x 2 = 20 Marks)

- A. Compare structural difference of the two indole alkaloids.
- B. All saponin cause haemolysis? Justify your answer with examples.
- C. Elaborate the diagnostic microscopical character of *Digitalis lanata*, Coriander, Fennel and Dill?
- D. Classify monoterpenes with examples.
- E. Choose an identification test to distinguish between C and O anthraquinone glycosides?
- F. List different methods to elucidate biosynthetic pathway?
- K. G Sketch the pathway of biosynthesis of terpenes?
- H. Explain why colophony answers copper acetate test?
- I. How Asafoetida is identified by chemical test
- J. Identify the microscopical characters of Belladonna. Stramonium and hyoscyamus?
- K. Propose the test for quinine and opium and write their biological source?

PART-II

Short Answers

(Instruction: Answer seven out of nine questions)

(7 x 5 = 35 Marks)

- Q2. Identify the general features of purpurea glycosides and write their biological source, active constituents, and identification tests.
- Q3. Classify the biological source, active constituents, uses and tests of a lignan and Flavonoid.
- Q4. Write the biological source, active constituents, uses and tests of an iridoid and carotenoid.
- Q5. Write the identification tests of different phytoconstituents and botanical name of the plants and family of the plants having these phytoconstituents.
- Q6. Compile the links between activities of Liquorice with its active constituents.
- Q7. Compare the biological source, active constituents, identification tests and uses of opium and lignan.
- Q8. Evaluate link between activities of Liquorice with its active constituents and draw microscopical features of liquorice.
- Q9. Summarize the general features of diosgenin and write their biological source, active constituents, and identification tests.
- Q10. Compile different methods of extraction of drugs.

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

(2 x 10 = 20 marks)

- Q11. Compile the biological source, active constituents, uses and test of five volatile containing plant drugs.
- Q12. Compile the biological source, active constituents, uses and tests of three resin and two tannin containing plant drugs.
- Q13. Sketch the general biogenetic pathway of different phytoconstituents. Identify three different phytoconstituents having indole group and Explain the mechanism of action, biological source and use of them.

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