

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI

Department of Pharmacy (Pilani Campus)

End Semester Examination May (OPEN BOOK)

Second Semester 2017-2018 PHA F344 - Natural Drugs Max. Marks 25

Date: 7/5/2018 Duration: 90 Minutes Weightage: 20%

Instruction:

1. All questions are compulsory
 2. Figures to right in square bracket indicates maximum marks
 3. Write precise answers and use diagram wherever necessary
 4. Marks will be given for correct answers (including spelling) with proper justification
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1. Write short note on the natural drug [4]
 - i) Used as Anti-urolithiatic-
 - ii) Used for relieving pain and inflammation-
2. Leaves of trees fall and seeds become dormant? Explain this observation [3]
3. Identify and discuss about a natural product "X" which is a condensation product of a basic unit "Y" that is obtained from acetate and shikimate pathways [5]
4. Describe and discuss the importance of any two families that bear flowers [4]
5. A crude sample needs to be investigated for drug discovery. Design a suitable strategy for this investigation [4]
6. Discuss the following
 - i. Plant division containing fossil members [1.5]
 - ii. Formation of polyketide scaffolds in plants [1.5]
7. A crude drug sample has pungent taste, aromatic odor and possesses scars on it. [2]

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Date: 7/5/2018

Duration: 90 Minutes

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Instruction:

1. Write precise answers and draw diagram &/or structures wherever appropriate
 2. Write botanical names correctly, incorrect and miss spelt names will not be considered
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1. Write short note on the [5]
 - a. Drug used for treatment of jaundice
 - b. Natural drug that bears carpels
2. Explain the biosynthesis of Podophyllotoxin [5]
3. Explain the factors affecting migration in chromatography [3]
4. Answer the following questions in brief [6]
 - a. Two specific color reactions of mucilage
 - b. Evening Primrose oil is rich source of which constituent
 - c. What do you understand by the term biternate
 - d. What is callose and Tylose?
 - e. What is perigynous
 - f. What are vein islet numbers for *Cassia angustifolia* and *Cassia acutifolia*
5. Describe the Islamic contribution in the development of natural drugs [1.5]
6. Draw structures of the following constituents [2]
 - i. Quinine
 - ii. Menthol
 - iii. Carminic acid
 - iv. Chlorogenic acid
7. Write five types of polyphenol nutraceuticals along with their source. [2.5]