

Printed Pages: 2

Paper Id:

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Sub Code: PHAR-527

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M. PHARM.
(SEM II) THEORY EXAMINATION 2017-18
NATURAL PRODUCTS

Time: 3 Hours

Total Marks: 100

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 2 x 10 = 20
- a. Give two examples of antibiotics of marine origin.
 - b. What do you mean by Novel Drug Templates?
 - c. Define: Recombinant DNA Technology?
 - d. Write two examples of anti-protozoals of natural origin.
 - e. What is the role of Infra Red Spectroscopy in structure elucidation?
 - f. What are Bioassays?
 - g. Draw the chemical structure of any two tropane alkaloids.
 - h. Name any two screening models for anti-diarrhoeal activity.
 - i. What do you mean by acute toxicity studies?
 - j. Write the medicinal importance of Rhein.

SECTION B

2. Attempt any *three* of the following: 10 x 3 = 30
- a. Explain the role of natural products in the development of new drugs.
 - b. Describe the bioactive compounds from microorganisms with reference to antibiotics.
 - c. How will you elucidate the structure of Morphine using the synthetic, degradative and spectral techniques?
 - d. Discuss the methods for screening of natural products for Anti-diabetic activity.
 - e. Elaborate the significance of biomedicinals from Plant Tissue Culture.

SECTION C

3. Attempt any *one* part of the following: 10 x 1 = 10
- a. Give a detailed note on novel drug templates.
 - b. Discuss the importance of plant derived drugs in modern system of medicine.

4. **Attempt any *one* part of the following:** **10 x 1 = 10**
- a. Discuss the anti-protozoals from natural products.
 - b. Elaborate the significance of marine natural products
5. **Attempt any *one* part of the following:** **10 x 1 = 10**
- a. How will you elucidate the structure of Quercetin?
 - b. Describe the steps for structural elucidation of Camphor.
6. **Attempt any *one* part of the following:** **10 x 1 = 10**
- a. Describe the pharmacological screening methods for anti-fertility activity.
 - b. How will you screen any herbal drug for anti-ulcer activity?
7. **Attempt any *one* part of the following:** **10 x 1 = 10**
- a. Explain the types of plant tissue cultures and their maintenance. Also throw some light on their nutritional requirements.
 - b. Describe the hi-tech products from plant tissue culture with reference to Genistein and Taxanes.