

(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 2289551

Roll No.

B.TECH.

Regular Theory Examination (Odd Sem - VII),2016-17

APPLICATIONS OF NATURAL PRODUCTS

SUBJECT CODE - NBT - 042

Time : 3 Hours

Max. Marks : 100

Section - A

Attempt all sections. All sections carries equal marks.

- 1. Write answer of each section in short. (10×2=20)**
 - a) Differentiate between isoprenoid and oxygenated isoprenoid compounds.
 - b) List down common nitrogen containing natural compounds.
 - c) Define the term Nutraceuticals.
 - d) What are the natural sources of flavoring agents in products, Name them.
 - e) Enumerate few examples of hair darkeners.
 - f) Explain microbial load in herbal preparation.
 - g) State the role of WHO in herbal medicines and its standardization.

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- h) In short show the concept and examples of Adaptogens.
- i) Define counter current extraction.
- j) List down the modern natural product-derived drugs.

Section - B

Attempt any three questions from this section.

(3×10=30)

- 1. Illustrate the role of herbal medicines in traditional healing.
- 2. Show the isolation and purification process of Penicillin.
- 3. Broadly classify the natural products. Briefing about their applications and advantages too.
- 4. Classification of Nutraceuticals and health foods with suitable explanations.
- 5. Narrate the utilization of aromatic plants in natural products with their structural formation and their role in the specific products.

Section - C

Attempt all questions from this section. (5×10=50)

- 1. Explain terpene hydrocarbons with suitable examples also state their wide applications and use in various industrial sectors.
- 2.
 - a) Describe the important therapeutic classes in detail.
 - b) Show the phytochemical screening of alkaloids, saponins, flavanoids, tannins and polyphenols.

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- 3. How preparation of following health foods (garlic, honey, hops, turmeric and fenugreek) are done?
- 4. Define the term hepatoprotectives, immunomodulators and ultrasound extraction.
- 5.
 - a) What are the methods of extraction and isolation of phytopharmaceuticals. Show with schematic diagrams.
 - b) What are the recent approaches to the study of natural products ?
