



**NE-02010308**

Seat No. \_\_\_\_\_

**M. Pharm. (Sem. I) Examination**

**January - 2017**

**Natural Products**

**(Core - III)**

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (1) Answer and tie both the sections separately.
  - (2) Figures to the right indicate marks.
  - (3) Answer any three from each section except 1 and 5 are compulsory.
  - (4) Draw neat and clean diagram when required.

**SECTION - I**

- 1** Answer any **seven** out of given **ten** questions : **14**
- (1) Write biological source of saccharide natural sweetening agent and use of it.
  - (2) Define oxidation and antioxidants.
  - (3) What are immunoglobulins ? Explain it.
  - (4) Write biological source of any two edible dyes.
  - (5) Explain Vitamin C and Vitamin E as antioxidants.
  - (6) Define Enzyme inhibition assay
  - (7) Define primary and secondary metabolites with examples.
  - (8) Define metabolome, metabolomics and proteomics.
  - (9) Define chemotaxonomy.
  - (10) Classify muscarinic receptors.
- 2** Answer the following :
- (1) Note on edible dyes with its advantage and limitations. **7**
  - (2) Define Sweetening agents. Write detailed note on nonsaccharide-plant sweeteners: **6**
- 3** Answer the following :
- (1) Discuss methods for plantbodies and application of plantibodies. **7**

- (2) Definite dereplication. Discuss hyphenated techniques of dereplication. **6**
- 4 Answer the following :
- (1) Write note on metabolomics in drug discovery.
- (2) Discuss herbal perfumery agents.
- SECTION - II**
- 5 Write any two out of three : **14**
- (1) Give detailed phytochemical classification of plants.
- (2) Discuss general steps for Bioactivity Guided Isolation with its concepts.
- (3) Discuss relation between phytochemistry and taxonomy.
- 6 Answer the following :
- (1) Discuss role of vitamins and minerals as dietary antioxidants. **7**
- (2) What is Radioligand receptor binding assay? Explain it in detail **6**
- 7 Answer the following :
- (1) Discuss importance of enzyme inhibition in pharmacological activity. **7**
- (2) Note on naturalcosmetic agents. **6**
- 8 Answer the following :
- (1) What are antioxidants ? Discuss the role of antioxidant in dietary supplements in case of cancer protection. **7**
- (2) Discuss chemotaxonomy in classification of plants. **6**
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