

**G-4/403(B)/21**

Roll No. ....

**M.Sc. IV Semester Examination, 2021****BIOCHEMISTRY****Paper III****(Nutraceutical Biochemistry and Functional Food)**

Time : 3 Hours ]

[ Max. Marks : 80

**Note :** All questions are compulsory. Question Paper comprises of 3 sections. Section A is objective type/multiple choice questions with no internal choice. Section B is short answer type with internal choice. Section C is long answer type with internal choice.

**SECTION A****1×8=8****(Objective Type Questions)***Choose the correct answer :*

- Naturally occurring compounds found in plants and believed to have health promoting properties are called as .....  
(a) Steroids (b) Toxoids  
(c) Phytochemicals (d) Chlorofluorocarbons
- The shelf life determination for nutraceutical's preparation is based on :  
(a) Safety evaluation data  
(b) Standardization data

P.T.O.

(c) Characterization data

(d) Stability evaluation data

- As per the FSSAI 2003 guidelines for Nutraceuticals, the list of ingredients that can be used as Nutraceuticals is given in .....  
(a) Schedule I (b) Schedule II  
(c) Schedule III (d) Schedule IV
- Ephedra is used for the management of :  
(a) Asthma (b) Allergy  
(c) Hay fever (d) All the above
- Synonyms of Ashwagandha is :  
(a) Indian ginseng (b) Calabar beans  
(c) Chinese ginseng (d) None of the above
- Hypericum taken along with Digoxin :  
(a) Decreases effect of Digoxin  
(b) Increases effect of Digoxin  
(c) Inhibit breakdown of Digoxin  
(d) Increases breakdown of Digoxin
- The term "nutraceutical" was coined in 1989 by :  
(a) William Gerwick (b) Metchinoff  
(c) Stephen De Felice (d) Samuel Thompson

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8. Probiotics are :

- (a) Synthetic nutraceuticals
- (b) Vitamin supplements
- (c) Helpful bacteria
- (d) Digestive enzymes

### SECTION B

4×6=24

#### (Short Answer Type Questions)

**Note :** Attempt one question from each unit.

#### Unit-I

1. Write short note on :

Applied aspects of the Nutraceutical Science

Or

Sources of Nutraceuticals.

#### Unit-II

2. Write short note on :

Use of grape products

Or

Flaxseed oil as Nutraceuticals.

#### Unit-III

3. Write short note on :

Nutraceutical remedies Bronchitis

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Or

Circulatory problems.

#### Unit-IV

4. Write short note on :

Types of inhibitors present in various foods

Or

Assessment of RDA.

### SECTION C

4×12=48

#### (Long Answer Type Questions)

**Note :** Attempt one question from each unit.

#### Unit-I

1. Explain Ethnomedicine in India.

Or

Describe Relation of Nutraceutical Science with Medicine and Human physiology.

#### Unit-II

2. Explain properties, structure and functions of Glucosamine and Octacosanol.

#### Unit-III

3. Explain with examples how Nutraceuticals bridging the gap between food and drug ?

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*Or*

How Nephrological disorders and Liver disorders  
can be cure through herbal medicine ?

**Unit-IV**

4. How different types of inhibitors can be  
inactivated present in various foods ?

*Or*

Describe role of Probiotics are Prebiotics as  
nutraceuticals.

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