

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Pharm. – SEMESTER VII • EXAMINATION – WINTER -2020**

**Subject Code: 2270008****Date:16/01/2021****Subject Name: NUTRACEUTICALS****Time: 10:30AM To 12:30PM****Total Marks: 54****Instructions:**

1. Attempt any **THREE** questions from Q-1 to Q-6.
2. Q.7 is compulsory to attempt.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

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|-------------|---|-----------|
| <b>Q.1</b>  | (a) What are nutraceuticals? Describe Historical perspective and scope of nutraceuticals                | <b>06</b> |
|             | (b) Discuss regulatory guidelines for nutraceutical products.   | <b>05</b> |
|             | (c) Write a note on health benefit of chlorophyll.  | <b>05</b> |
| <b>Q.2</b>  | (a) Discuss biological source and importance of various dietary fibers used to cure human health.       | <b>06</b> |
|             | (b) Write in detail health benefit of Garlic.   | <b>05</b> |
|             | (c) Write a note on energy drinks.  | <b>05</b> |
| <b>Q.3</b>  | (a) Give guidelines for toxicity studies for nutraceuticals.  | <b>06</b> |
|             | (b) Describe packaging strategies of nutraceutical products.  | <b>05</b> |
|             | (c) Describe in detail “Ginseng as a nutraceuticals.”   | <b>05</b> |
| <b>Q.4</b>  | (a) Discuss about various sourcing information of various nutraceuticals through web data mining.       | <b>06</b> |
|             | (b) Give the difference between prebiotics and probiotics by giving suitable examples.                  | <b>05</b> |
|             | (c) Write a note on DSHEA act.  | <b>05</b> |
| <b>Q.5</b>  | (a) Discuss active constituents of six nutraceutical remedies for arthritis and bronchitis.             | <b>06</b> |
|             | (b) Describe different botanicals used in the treatment of ulcers.                                      | <b>05</b> |
|             | (c) Discuss in detail role of various beans in human health.  | <b>05</b> |
| <b>Q. 6</b> | (a) Narrate in brief about role of biological enhancers as nutraceuticals.                              | <b>06</b> |
|             | (b) Describe biological sources and importance of vegetables and milk in human health.                  | <b>05</b> |
|             | (c) Describe role of Lycopene and carnitine in health benefits.   | <b>05</b> |
| <b>Q.7</b>  | (a) Describe various food preparations used in circulatory problems.                                    | <b>06</b> |
|             | <b>OR</b>   |           |
|             | (a) Narrate in brief health benefits of Linseed.  | <b>06</b> |
|             | <b>OR</b>   |           |
|             | (a) Describe in detail global regulatory agencies and bodies for nutraceuticals in different countries. | <b>06</b> |

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