

BSCCHO 286

Choice Based Credit System IV Semester B.Sc. Degree **Examination, September 2022** (2021-2022 Batch Onwards) **CHEMISTRY (Open Elective Paper)** Food Chemistry and Chemistry in Daily Life

Time: 2 Hours Max. Marks: 40

Instructions: 1) Write the question number and subdivisions **clearly**.

- 2) Write the equations and diagrams wherever necessary.
- 3) Answer Part A in first two pages of the answer book.

PART - A

1. Answer **any five** of the following: $(5 \times 2 = 10)$ a) What are food additives? b) What are the harmful effects of food adulteration? c) Why matches are called safety matches? d) What is wind power density? e) What is solar energy?

PART - B

f) Write any two applications of biomass energy.

Answer any two of the following questions, choosing one full question from each Unit: $(15 \times 2 = 30)$

Unit - I

2. a) How do you detect the presence of vanaspathi and smashed potato in ghee sample? 4 b) What are soft drinks? Explain their toxic effect on health. 4 c) i) Write a note on action of soap on dirt. 4 ii) Write a note on micronutrients. 3

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| 3. | a) | Explain artificial ripening of fruits. | 3 |
|----|----|--|---|
| | b) | Explain the chemical substances used in the food preparation. | 5 |
| | c) | i) Explain the digestion of food in large and small intestine. | 4 |
| | | ii) Write a note on shoe polish and its chemical constituents. | 3 |
| | | Unit – II | |
| 4. | a) | Explain the different types of transformation of biomass energy. | 4 |
| | b) | Explain different types of ocean energy. | 4 |
| | c) | i) Write any four applications of solar energy. | 4 |
| | | ii) Write a note on wind turbines. | 3 |
| 5. | a) | Draw water cycle. | 3 |
| | b) | How does hydropower plant work? | 5 |
| | c) | i) Explain photovoltaic devices. | 4 |
| | | ii) Write any three applications of biomass. | 3 |