Paper Code : 95504

I Semester Degree Examination (NEP), April 2022
Subject : CHEMISTRY
Paper : Chemistry in Daily Life
Paper : OE

Time : 2 Hours | Max. Marks : 60

***Instruction** : Answer **all** Sections.*

SECTION – A **(5×2=10)**

Answer **any five** of the following :

1. a) Name any two fruit flavors in food.
   b) In place of sucrose which alternative substances are used in food name any one.
   c) What is the use of lactometer ? Name the carbohydrate present in milk.
   d) Name the vitamins present in tartaric acid and sun light.
   e) How are triglycerides converted into soaps ? Name the reaction.
   f) The battery which produce the current with oxygen and hydrogen is called
   g) Polyethene and Nylon come under which polymers category.

SECTION – B **(4×5=20)**

Answer **any four** of the following :

2. How are the pesticides analysed in food in general and in rice in particular ?

3. How is mineral content and fat content analysed in milk and butter ?

4. Which vitamins are required in food for the following disease ?
   i) Scurvy
   ii) Muscle weakness
   iii) Night blindness
   iv) Bleeding in babies
   v) Metabolic energy production.

P.T.O.

5. Write the composition of oil, how is its purity detected ? Why butter to be stored in freezer.

6. Name the polymers present in
   i) Electronics
   ii) Automobiles
   iii) Medical field
   iv) Aero-space material
   v) Clothes.

7. How is solar energy is future energy ? Comment your opinion.

SECTION – C (3×10=30)

Answer **any three** of the following :

8. a) How the following alkaloids detected in the following : 6
      i) Caffine in tea and coffee.
      ii) Chicory in coffee ?
   b) Which are the artificial food colourents ? 4

9. a) With neat labelled diagram, explain the manufacture of soaps. Mention the name of the process with general example. 5

   b) Tests for adulterants like argemone oil and mineral oil. What is Halphen test ? 5

10. a) Which are the strategies for the development of environmental friendly polymers ? 5
    b) What is polymerisation ? Explain the classification and characteristics of polymers. 5

11. a) How is methanol detected in alcoholic beverages ? 2
    b) What is detergent ? How are detergents manufactured ? 4
    c) Write two applications each for primary and secondary batteries. 4

12. a) What is chloral hydrate ? How is it detected in toddy ? 3
    b) Write the structure of Vitamin-A and Vitamin-C. 4
    c) What are problems in plastic waste management ? 3

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B.A./B.Com./B.B.A./B.Sc./B.C.A. I Semester Degree Examination (NEP), April 2023
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Time : 2 Hours | Max. Marks : 60

***Instruction** : Answer **all** Sections.*

SECTION – A

Answer **any five** of the following : **(5×2=10)**

1. a) Name the constituents of milk.

   b) What are food preservatives ? Give an example.

   c) Write the structure of Vitamin A.

   d) What are synthetic food colours ? Give example.

   e) Name vitamins present in ascorbic acid and sunlight.

   f) What is a battery ?

   g) Write any two advantages of plastics in aerospace industries.

SECTION – B

Answer **any four** of the following : **(4×5=20)**

2. How do you determine the caffeine content in tea and coffee ?
3. Briefly explain the major types of food flavourings used in foods.
4. What is rancidity ? How to prevent it ?
5. How detergents are classified based on the electrical charge ?
6. Write any five applications of fuel cells.
7. Explain any four characteristics properties of polymers.

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SECTION – C

Answer **any three** of the following : **(3×10=30)**

8. a) How is mineral content analysed in milk and butter ?
   b) What are artificial sweeteners ? Write uses of saccharin and sucralose.

9. a) Write the sources and deficiency diseases of Vitamin C.
   b) How is soap manufactured ?

10. a) Discuss the strategies for the development of environment friendly polymers.
    b) Write any two applications each for primary and secondary batteries.

11. a) How is added water content estimated in milk ? **4**
    b) Name one disease caused by each of the following :
       i) Vitamin A
       ii) Vitamin B
       iii) Vitamin D **3**
    c) Write a note on future energy storer. **3**

12. a) How is analysed pesticide residue in food ? **4**
    b) Explain the test to detect adulterants like mineral oil in edible oil. **3**
    c) Write the applications of polymers as plastics in electronics. **3**