

KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(3 Pages)

Reg. No:.....

Question Code: 26E00307

Course Code : 24USCH22/25USCH22

UG Degree - End Semester Examinations, April 2026

Second Semester

B.Sc., CHEMISTRY

Role of Chemistry in Daily Life

(For those who joined in July 2024 and June 2025 onwards)

Time : 3Hours

Maximum : 75 Marks

PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

CO:1 1. Identify the major component of air.

- K:1
- | | |
|--------------|--------------------|
| (a) Oxygen | (b) Carbon dioxide |
| (c) Nitrogen | (d) Hydrogen |

CO:1 2. Find the gas mainly responsible for the greenhouse effect.

- K:1
- | | |
|--------------------|------------|
| (a) Nitrogen | (b) Oxygen |
| (c) Carbon dioxide | (d) Argon |

CO:2 3. Choose the main constituent responsible for the strength of cement.

- K:3
- | | |
|------------|-------------|
| (a) Lime | (b) Gypsum |
| (c) Silica | (d) Alumina |

CO:2 4. What the main component of ordinary glass?

- K:1
- | | |
|-----------------------|---------------------|
| (a) Silica | (b) Sodium chloride |
| (c) Calcium carbonate | (d) Alumina |

CO:3 5. Talc is an ingredient of

- K:1
- | | |
|-----------------|-----------------|
| (a) shampoo | (b) nail polish |
| (c) face Powder | (d) detergent |

- CO:3 6. Name the vitamin essential for normal vision and maintenance of
K:1 epithelial tissues.
- (a) Vitamin C (b) Vitamin A
(c) Vitamin K (d) Vitamin B12
- CO:4 7. Choose the fertilizer with the highest nitrogen content.
K:1
- (a) Ammonium Sulphate (b) Urea
(c) Super phosphate (d) Potassium chloride
- CO:4 8. Which is the gaseous fuel from the following?
K:1
- (a) coal (b) petrol
(c) LPG (d) coke
- CO:5 9. Find the chromophore group responsible for colour in azo dyes.
K:1
- (a) -OH (b) -N=N-
(c) -COOH (d) -NH₂
- CO:5 10. What is the chemical name of aspirin?
K:1
- (a) Paracetamol (b) Salicylic acid
(c) Benzoic acid (d) Acetyl salicylic acid

PART - B (5 X 5 = 25 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 250 words.

- CO:1 11. (a) Analyse and suggest air component and their importance.
K:4
- (OR)**
- (b) What is greenhouse effect? Explain the impact of greenhouse effect on human life style.
- CO:2 12. (a) Develop the difference between ceramics and glass by
K:3 examine their composition and application.
- (OR)**
- (b) Construct the preparation and mention the uses of polythene and bakelite.
- CO:3 13. (a) Conclude the definition and importance as food constituents
K:4 of proteins.
- (OR)**
- (b) List the general formulation and write preparation for tooth paste and shampoo.

CO:4 14. (a) Compare and classify fuel.

K:4 **(OR)**

(b) List out the example and uses of nuclear fuel.

CO:5 15. (a) Examine the mechanism and action of paracetamol and their
K:4 significance.

(OR)

(b) Classify explosives and give examples.

PART - C (5 X 8 = 40 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 500 words.

CO:1 16. (a) List out the qualities of potable water and discuss about
K:4 water pollution.

(OR)

(b) Distinguish soft water and hard water and design a method of removal of hardness.

CO:2 17. (a) Formulate the composition of cement and refractories and
K:6 mention its applications.

(OR)

(b) Discuss the preparation and uses of PVC and melamine formaldehyde resin.

CO:3 18. (a) Assess the importance of carbohydrates and fats as food
K:5 constituents and balanced diet.

(OR)

(b) Explain the general formulation and preparation of soap and detergents. Mention the possible hazards of cosmetic use.

CO:4 19. (a) Compare NPK fertilizers and mention its need as fertilizers in
K:5 the food production.

(OR)

(b) Explain about urea and super phosphate chemical composition and functions as fertilizers.

CO:5 20. (a) Elaborate the colour chemicals pigment and dyes, their
K:6 examples and applications.

(OR)

(b) Assess the importance of antipyretics and mention the composition and uses of aspirin.