

KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

THOOTHUKUDI – 628 003

(5 Pages)

Reg. No:

Question Code No: 25000311

Course Code : 24USCH22

UG Degree - End Semester Examinations, November 2025

Second Semester

B.Sc. CHEMISTRY

Role of Chemistry in Daily Life

(For those who joined in July 2024 onwards)

Time : 3 Hours

Maximum : 75 Marks

PART – A (10 X 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer:

- Which of the following is not a green house gas?
 - Hydrogen
 - Methane
 - Nitrous oxide
 - Carbondioxide
- Permanent hardness of water is due to the presence of
 - Magnesium bicarbonate
 - Magnesium sulphate
 - Calcium bicarbonate
 - Magnesium carbonate

3. Limestone is the raw material for
- (a) Glass (b) MF resin
(c) Ceramics (d) Bakelite
4. The process of slow cooling of glass articles is called
- (a) Smelting (b) Moulding
(c) Calcination (d) Annealing
5. The richest source of energy
- (a) Carbohydrate (b) Fat
(c) Sugar (d) Protein
6. The main raw materials used in shampoo is
- (a) Calcium carbonate (b) Glucose
(c) Sodium lauryl sulphate (d) Nitrocellulose
7. The percentage of nitrogen in urea is
- (a) 70 % (b) 63 %
(c) 47 % (d) 28 %
8. The most common nuclear fuel is
- (a) U^{234} (b) U^{235}
(c) U^{238} (d) Th^{232}
9. Aspirin is
- (a) Salicylic acid (b) Salicylaldehyde
(c) Methyl salicylate (d) Acetylsalicylic acid
10. Alizarin is a _____ dye.

- (a) Azo (b) Nitro
(c) Anthraquinone (d) Direct

PART - B (5X5=25 Marks)

**Answer ALL Questions choosing either (a) or (b).
Answer should not exceed 250 words.**

11. (a) What are water quality parameters? Give the water quality standards as per WHO for potable water.

(OR)

(b) How is hardness of water removed by reverse osmosis method?

12. (a) Differentiate between thermoplastics and thermosetting plastics.

(OR)

(b) Give the preparation method and uses of PVC.

13. (a) What are the functions of food?

(OR)

(b) Write the method of preparation and uses of nail polish.

14. (a) Describe the role of nitrogen on plant growth.

(OR)

(b) How is urea manufactured? Mention its uses.

15. (a) What are analgesics? Give two examples.

(OR)

(b) Explain the preparation and uses of paracetamol.

PART – C (5 X 8 = 40 Marks)

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

Answer should not exceed 500 words.

16. (a) Describe the composition of air and its importance for human life.

(OR)

(b) What are the sources of water? Discuss the impact of water pollution on marine life and environment.

17. (a) What is Portland cement? How is it manufactured?

(OR)

(b) Discuss the composition and any three applications of the following.

i) Glass ii) Refractories

18. (a) Define soap. What are the raw materials used in the manufacture of soap? How is it manufactured?

(OR)

(b) Outline the preparation and uses of the following.

i) Tooth paste ii) Face powder

19. (a) What are fertilizers? Explain the characteristics of good fertilizers.

(OR)

(b) Define fuels. How are they classified?

20. (a) Write notes on

i) Pigments ii) Dyes

(OR)

(b) What are explosives? How are they classified? Give two examples for each.

