

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The role of TiO_2 in cosmetics
(a) antiseptic (b) uv-filter
(c) colourant (d) preservatives
2. Pick out the name of a natural perfume from the following
(a) musk (b) linalool
(c) coumarin (d) flavones

8. Plants prepare their own food by _____
(a) hydrolysis
(b) oxidation
(c) reduction
(d) photosynthesis
9. The chemical compound used in leather tanning is _____
(a) ammonium sulphate
(b) ammonium borate
(c) basic chromium sulphate
(d) ammonium chloride
10. _____ is a synthetic fiber.
(a) wool
(b) silk
(c) cotton
(d) nylon

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the classification of cosmetics.
Or
(b) Summarize the role of additives in cosmetics.

3. The byproduct obtained with soap is _____
(a) KOH (b) NaOH
(c) glycol (d) glycerol
4. Pick out the name of the surfactant from the following
(a) sodium sulphate
(b) sodium lauryl sulphate
(c) uranyl sulphate
(d) paraffin
5. In microwave oven electromagnetic energy is converted into _____ energy.
(a) light (b) sound
(c) heat (d) none of the above
6. Which of the following is a saturated fatty acid?
(a) myristic acid
(b) palmitic acid
(c) steric acid
(d) all the above
7. Plant converts carbon dioxide into _____
(a) starch
(b) aldehyde
(c) ketone
(d) water

12. (a) What are soaps? Give their composition.
Or
(b) Summarize the bio-degradability of soap.
13. (a) Compile the chemistry of microwave cooking.
Or
(b) Predict the nature and composition of fatty acids in butter.
14. (a) Illustrate the effect of nutrient deficiency in plants.
Or
(b) Illustrate the role of fertilizers with example.
15. (a) Identify the different dyes used in textile industries. Give their nature.
Or
(b) Write the composition of carpet material.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Tabulate the composition of moisturizing soap and medicated soap.

Or

- (b) Discuss the following cosmetics in detail.

- (i) shampoo
- (ii) deodorants

17. (a) What are detergents? Explain their action.

Or

- (b) Give the composition of the following with example.

- (i) washing soap
- (ii) toilet soap.

18. (a) Compile the chemistry of cooking.

Or

- (b) Predict the stability of nutrients during cooking.

19. (a) Discuss the biological control of weeds and pests.

Or

- (b) Illustrate the following with example

- (i) insecticides
- (ii) fungicides

20. (a) Construct the methodology for leather tanning.

Or

- (b) Illustrate the following with example.

- (i) Yarn
- (ii) Fabrics.