

Time: 3 Hours

Marks: 70

- NB: (1) All questions are compulsory.
 (2) Figures to the right indicate full marks.
- 1 (a) State the Schedule M II requirements for nail lacquer manufacturing. 2
 (b) Write a brief note on anti-acne products. 3
 (c) Enlist nail specialty products. 2
 (d) Give an account of the mechanism of action of hair waving products. 2
 (e) Elaborate on an after shave product with a suitable example 3
 (f) Explain the formulation and evaluation of mouthwashes. 3

 - 2 (a) State the sensitization reactions to cosmetics. Briefly explain various sensitivity testing methods. 4
 (b) Discuss the formulation aspects of Cleansing products. 3
 OR
 Explain quality control tests for skin creams. 3
 (c) Elaborate on the raw materials used in shampoos. 4

 - 3 (a) Classify Wet shaving formulations. Discuss the formulation aspects and ingredients used in their formulation. 4
 (b) Which are the various eye make- up products? Suggest a formula for one product. 3
 (c) Write a detailed description of **any one** 4
 (i) Preservatives and antioxidants used in cosmetics
 (ii) Colors used in cosmetic products

 - 4 (a) Write a note on Face Powders. 3
 OR
 Describe the formulation of Foundation cream. 4
 (b) State the classes of hair colorants and explain any one class. 4
 (c) Discuss quality control tests and BIS standards for Toothpastes. 4

 - 5 (a) Write a short note on Depilatories. 3
 (b) Give an account of large scale manufacturing of Lipsticks. 4
 OR
 Describe raw materials used in lipstick formulations. 4
 (c) State the sources of microbial contamination in cosmetics manufacturing and suggest remedies to prevent it. 4

 - 6 (a) What are the factors to be considered while formulating baby cosmetics? Enlist various baby cosmetics. 3
 OR
 Give an account of antiperspirants. 4
 (b) Mention ideal properties of nail lacquers and explain suitable raw materials with examples which impart it. 4
 (c) Elaborate on types of sunscreen agents and discuss evaluation of sunscreen products 4
