

- c) Briefly describe the manufacturing process of Alkyl aryl sulphonate from a kerosene distillate. Outline the steps involved in the manufacturing process and reactions involved in each step. State its important uses in the industry flow sheet of the process. [4+2+2+2]
- d) i) Prepare a flow sheet for a petrochemical plant feedstock sources.
 ii) Prepare a flow sheet for the chemicals produced from benzene.
 iii) Para xylene is a feed stock for production of which synthetic fibre? Give reaction. [4+4+2]

Unit - III

4. Choose the correct alternative (**any four**) : [4×1]
- a) Analgesic drugs are
 i) Pain relievers ii) antibiotics
 iii) used in treatment of T.B iv) used in treatment of typhoid
- b) Antibiotic
 ii) inhibits/destroys the growth of microorganisms ii) is used as a pain reliever
 iii) is an anaesthetic iv) is an antimalarial drug
- c) Penicillin is made by employing a/an termentation process
 i) continuous ii) aerobic batch iii) anaerobic batch iv) none of these
- d) Which of the following is not an antibiotic
 i) Penicillin ii) sheptomycin iii) tetracycline iv) quinine
- e) Which of the following is not food additive?
 i) Citric acid ii) inverlage iii) benzoyl peroxide iv) ammonium chloride
- f) Eugenol is present is the oil of—
 i) Pepper ii) Fennel iii) Ajowan iv) clove
- g) Oil of bitter almond contains mainly—
 i) Phenol ii) Bisphenol iii) terpene iv) Benzaldehyde
- h) Oil of wintergreen is rich in—
 i) Methyl salicylate ii) Pinene iii) Phenol iv) Thymol
5. Answer **any three** questions : [3×2]
- a) What is meant by the term Essential oil? Give two examples of essential oils mentioning their main constituents.
- b) What is an isolate? Give two examples and state their uses in perfumes.
- c) Outline the synthesis of vanilin from Phenol.
- d) How Phenyl Ethyl alcohol is prepared by Grignard Reaction?
- e) How Aspirin is manufactured? Give chemical reactions.
- f) How methyl salicylate is manufactured? Give chemical reactions.
3. Answer **any one** of the following questions : [1×10]
- a) i) What is an antibiotic? [1]
 ii) How Penicillin is manufactured by fermentation Process? Give the process in details with chemical reactions and flow sheet. State its uses. [2+6+1]
- b) i) What are meant by the term Analgesic and Antipyretic? Give examples. [2]
 ii) How paracetamol is manufactured starting from chlorobenzene? Give the process with chemical reactions and flow sheet of the process. State its uses.
- c) What are sulpha drugs? Give two examples of sulpha drugs stating their uses. How sulfaguanidine is manufactured? Give chemical reactions and its uses. [3+4+2+1]
- d) i) Write the names of two antimalarial drugs which are used and also write their formula. [3]
 ii) How Paludrin is manufactured? Give chemical reactions, process flow sheet and its uses. [3+3+1]

