## M.Sc.(Chemistry) (NEP Pattern) Semester-I NEP-14-5 / 01MSCCH08 - Pharmaceutical and Cosmetic Chemistry

| P. Pages: 2 Time: Three Hours |    |  | GUG/W/23/15076<br>Max. Marks : 80 |
|-------------------------------|----|--|-----------------------------------|
| 1.                            | a) | Discuss in brief drug discovery, design and development?                                   | 8                                 |
|                               | b) | Discuss the synthesis of : i) Chloramphenicol. ii) Aspirin                                 | 8                                 |
|                               |    | OR   |                                   |
|                               | c) | Discuss Retrosynthetic Approach.   | 4                                 |
|                               | d) | Write a note on synthesis of antipyretic agents?   | 4                                 |
|                               | e) | Discuss synthesis of Daspone.  | 4                                 |
|                               | f) | Write a note on synthesis of Phenobarbital.  | 4                                 |
| 2.                            | a) | Discuss aerobic and anerobic fermentation in detail.                                       | 8                                 |
|                               | b) | Discuss preparation methods of:  | 8                                 |
|                               |    | i) Penicillin  |                                   |
|                               |    | ii) Ethyl Alcohol.   |                                   |
|                               |    | OR   |                                   |
|                               | c) | Discuss synthesis of Cephalosporin.  | 4                                 |
|                               | d) | Write a note on production of streptomycin.  | 4                                 |
|                               | e) | Discuss production of Lysine.  | 4                                 |
|                               | f) | Write a note on of Vitamin C.  | 4                                 |
| 3.                            | a) | Discuss preparations and give two uses of following.  i) Nail enamel.  ii) Suntan Lotions. | 8                                 |
|                               | b) | Write a note on preparations of i) Hair dye ii) Talcum powder iii) Hair spray              | 8                                 |
|                               |    | OR   |                                   |

|    | c) | Discuss preparation of various types of creams.  | 4 |  |  |
|----|----|--|---|--|--|
|    | d) | Write a note on artificial flavors.  | 4 |  |  |
|    | e) | Explain preparation methods of lipsticks.  | 4 |  |  |
|    | f) | Write a note on uses of: i) Antiperspirants. ii) Artificial flavors iii) Shampoo                   | 4 |  |  |
| 4. | a) | What are essential oils? Give importance of Eugenol and Muscone with respect to cosmetic industry? | 8 |  |  |
|    | b) | Write in detail about: i) Sandalwood oil. ii) 2-phenyl ethyl alcohol                               | 8 |  |  |
| OR |    |  |   |  |  |
|    | c) | Write a note on Geraniol?  | 4 |  |  |
|    | d) | Discuss importance of rose oil in cosmetic industry?   | 4 |  |  |
|    | e) | Write a note on Jasmone?   | 4 |  |  |
|    | f) | Discuss the importance of: i) Civetone ii) Eugenol   | 4 |  |  |
| 5. |    | Solve Any four.  |   |  |  |
|    | a) | What is HIV-AIDS related drugs. Give uses.   | 4 |  |  |
|    | b) | What are antipyretic agents.   | 4 |  |  |
|    | c) | Write a note on Vitamin C.   | 4 |  |  |
|    | d) | What are antibiotics.  | 4 |  |  |
|    | e) | Give uses of shaving creams.   | 4 |  |  |
|    | f) | What is the composition of Face powder.  | 4 |  |  |
|    | g) | Give importance of Jasmone.  | 4 |  |  |
|    | h) | Write a note on Rose oil.  | 4 |  |  |

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