

## P38/HSC254/EE/20160518

Time : 3 Hours

Marks : 80

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### Instructions :

1. All Questions are Compulsory.
  2. Each Sub-question carry 5 marks.
  3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.
  4. Question paper of 80 Marks, it will be converted in to your programme structure marks.
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1. Solve any **four** sub-questions.
  - a) Write a note on preformulation of parenterals. 5
  - b) Describe in detail the routes of administration of parenterals. 5
  - c) What are the different methods of chemical sterilization? 5
  - d) How sterility tests for parenterals performed? 5
  - e) Write a note on various vehicles used for small volume parenterals. 5
2. Solve any **four** sub-questions.
  - a) What are the ingredients of Total Parenterals Nutrition? 5
  - b) Describe various types of ophthalmic dosage forms. 5
  - c) What are various types of glass used for parenterals? What are the tests used to evaluate them? 5
  - d) Write a note on laminar air flow system. 5
  - e) Write in detail formulation of parameters for ophthalmic, preparations. 5

3. Solve any **four** sub-questions.
- a) Write in detail formulation of vanishing creams. 5
  - b) Write in detail various types of ingredients used in depilatories. 5
  - c) What are the steps involved in manufacturing of lipsticks? 5
  - d) Write a note on various ingredients of Nail Lacquers. 5
  - e) Write a note on eye mascara. 5
4. Solve any **four** sub-questions.
- a) Write a note on after shave preparations. 5
  - b) Describe the basic formulation of moisturizers. 5
  - c) What are various types of cleansing creams? Write a note on the same. 5
  - d) What is the use of sunscreen preparations? What is Sun Protecting Factor? 5
  - e) Write formulation of antiperspirants. 5

