

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM.-SEMESTER-VII- EXAMINATION –SUMMER-2017

Subject Code: 270002

Date: 01/05/2017

Subject Name: Pharmaceutical Technology – I

Time: 02:30 PM to 05:30 PM

Total Marks: 80

Instructions:

- 1. Attempt any five questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

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| Q.1 | (a) Describe large scale production of suspension and how they are evaluated. | 06 |
| | (b) Differentiate elixirs and syrups. Name the sweeteners used in syrups for sugar restricted patients. | 05 |
| | (c) Enlist commonly used preservatives in pharmaceutical preparation. Write the mode of action of preservatives. | 05 |
| Q.2 | (a) Explain the sources of contamination and the methods to prevent them. | 06 |
| | (b) Comment: Prefilled syringes are more user convenience. | 05 |
| | (c) Enumerate the quality control tests on sterile dosage forms. | 05 |
| Q.3 | (a) Define Pharmaceutical aerosols. Write the distinct advantages of aerosol dosage form. | 06 |
| | (b) Describe the aerosol valve assembly with diagram. | 05 |
| | (c) Write the pharmaceutical applications and evaluation of aerosols. | 05 |
| Q.4 | (a) Describe the mechanism of drug penetration process in detail. | 06 |
| | (b) Justify Displacement value is having more significance in suppository calculation. | 05 |
| | (c) Explain the various factors influencing the drug penetration. | 05 |
| Q.5 | (a) Write in detail about the parenteral additives with example and give the special precautions in handling of ophthalmic products. | 06 |
| | (b) How the ampoules are sealed ? Write the faults sealing and methods to detect them. | 05 |
| | (c) Write a note on freeze dried products. | 05 |
| Q. 6 | (a) Define dialysis and explain the methods of dialysis. Write the composition of dialysis fluids. | 06 |
| | (b) Differentiate microemulsions and multiple emulsions. Write the stability problems associated with emulsions. | 05 |
| | (c) Write a note on isotonic solution. | 05 |
| Q.7 | (a) Classify the surfactants with example and write its pharmaceutical applications. | 06 |
| | (b) Differentiate ointments, creams and pastes with their specific advantages. | 05 |
| | (c) Explain the manufacturing methods of aerosols. | 05 |