

**GUJARAT TECHNOLOGICAL UNIVERSITY****Pharm D – 1<sup>st</sup> Year • EXAMINATION – SUMMER • 2015****Subject Code: 818802****Date: 21-05-2015****Subject Name: Pharmaceutics****Time: 10.30 am – 01.30 pm****Total Marks: 70****Instructions:**

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

- Q.1** (a) Explain following terms with suitable examples, **06**  
 (i) Accumulation, (ii) Synergism, (iii) Antagonism.
- (b) What are the precaution to be taken by pharmacist to avoid possibility of error while dispensing a prescription? **04**
- (c) What are factors affecting children dose? Discuss them with suitable examples. **04**
- Q.2** (a) Write exhaustive note on historical background and development of Indian Pharmaceutical Industry. **06**
- (b) Write a brief note on Eutectic mixture. **04**
- (c) Give justification for following statement: **04**  
 (i) Starch and talc are suitable additives for dusting powders.  
 (ii) Citric acid is basic ingredient for compounding of effervescent granules.
- Q.3** (a) Define dentifrices or tooth powder. What are their ideal characteristics and practical aspect of compounding? **06**
- (b) What are the advantage, disadvantage and formulation aspects of throat paint? **04**
- (c) What is monophasic liquid dosage forms? Discuss various problem in their formulation. **04**
- Q.4** (a) Write a note on introduction and development of Indian national formulary. **06**
- (b) Differentiate flocculated and deflocculated suspension. **04**
- (c) Define Creaming. Discuss factors affecting the rate of creaming of an emulsion. **04**
- Q.5** (a) What is ideal suppository base? How suppositories are evaluated? **06**
- (b) Write general preparation of suppository. Give importance of displacement value. **04**
- (c) Define & classify solutions with suitable examples. Explain in detail the principle involved in Iodine Tincture. **04**
- Q.6** (a) How many tablets will be required to make half gallon of 1 in 500 solution? Each tablet containing 17.5 grain of  $KMnO_4$ . **06**
- (b) Define decoction. Describe in brief about Maceration process of extraction. **04**
- (c) Write a short note on absorbable sutures. **04**
- Q.7** (a) How many ml of water should be mixed with 30gm of 40% sulfuric acid and 50 gm of 60% sulfuric acid to make 10% acid? **06**
- (b) Classify various types of incompatibilities. Discuss therapeutic incompatibilities in brief. **04**
- (c) How will you handle following prescription? **04**  
 Recipe, Quininae sulphatis 4 grains  
 Acidi sulphurici dil 10 minims  
 Potassii iodide 20 grains  
 Aquam ad... 1 fl. oz.  
 Signa: Cochleare amplum quartis horis sumendum Mitte: 3 fl. oz.