Time: Three Hours

Answer each group in separate answer script

Full Marks: 100

Answer the following questions (at least two from the following group):

Group A

1. Define emulsion. Classify emulsion. What do you mean by emulgents? Classify them with examples. How will you detect various types of emulsion? Describe various stability problems of emulsion and their solutions.

$$2+1+1+3+5+8= 20$$

2. Define ointment. Classify ointment bases. Give the ideal characteristics of hydrocarbon bases. Classify them with characteristics. How will you prepare plastibase? Why is it named so? What is lanolin? Give its use.

$$2+1+5+5+3+2+1+1= 20$$

3. What are the reasons for caking of suspension? Write a note on sedimentation parameters. Write the characteristics of flocculated and deflocculated suspensions. How will you induce flocculation of deflocculated particles?

$$4+6+6+4 = 20$$

B. PHARMACEUTICAL TECHNOLOGY FIRST YEAR SECOND SEMESTER-2017

Subject: PHARMACEUTICS-II   Time: Three hours   Full marks: 100

(Answer any five questions taking al least two from each group)

Group: B

4. a) What do you mean by hydrocolloids?

   b) Write different source of hydrocolloid.

   c) Distinguish between process of thickening and process of gelation.

   d) Discuss the applications of hydrocolloids as i) tablet binder, ii) suspending agent, iii) sustained release matrix material, iv) muco-adhesive agent.   2+6+(2×2)+(2×4)=20

5. a) What is the basic difference of suppositories and pessaries?
   b) Classify the bases of suppository with example.
   c) Write the reason of the followings:
      i)   Cocoa butter base shows polymorphism.
      ii) Heat treatment of gelatin is needed before preparation of glycero-gelatine pessaries.
      iii) Synthetic fatty bases are better stable than cocoa butter base.

   d) Write the importance of mould calibration and displacement value during formulation development of suppositories.

   e) You are supposed to prepare cocoa butter suppository each containing 300 mg active medicament by using 1 gm mould. If the displacement value of the medicament is 3, then calculate the average weight of the suppositories.

   f) Write the weight uniformity test of suppositories.   1+2+ (1.5×3)+(2.5× 2)+5+2.5=20

6. a) Define jelly.
   b) Write about the following jelling agents: gelatin, carbomer, Na-carboxymethyl cellulose, sodium alginate.
   c) Write the general method of preparation of jelly.
   d) Answer the following:

      i) Why benzoic acid is not added as preservative in Tragacanth jelly?

ii) Why small amount of Ca-salt is added in sodium alginate jelly?

iii) Why large amount of glycerol is added in gelatinised starch jelly?

iv) How does carbopol 934 is converted into gel?

v) Why tragacanth is less popular as gelling agent?

e) How will you prepare sodium alginate jelly?   2+8+2+5+3=20