

# Pramukh Swami Science and H D Patel Arts College

Bachelor of Vocation

Pharmaceutical Chemistry Semester I

Mid SEM Examination, November 2015

Subject: PC112 (Pharmaceutics Basic Principles)

Time: 2 hrs

Date: 03/11/2015

Marks: 60

**Q.1 Answer any 12 questions. Each question carries 1 mark.**

**[12\*1=12]**

1. If water is solvent then pseudo polymorphism is known as .....
  - A. Glissades
  - B. Hydrates
  - C. Solvates
  - D. All Of Above
2. If value of reynold's no. is  $< 2100$ , then type of flow will be \_\_\_\_\_
3. Define: Polymorphism
4. \_\_\_\_\_ and \_\_\_\_\_ dosage form must be sterile one.
5. How will you differentiate true Polymorph & Pseudo-polymorph?
6. Write down whether the following statement is true or false.  
As the temperature increases, rate of physicochemical reactions of polymorphs increases.
7. What are the example of biphasic liquid dosage form.
8. Match of the followings:

Dosage form	Physical state
1) Tablet	a) Gas
2) Suppositories	b) Solid
3) Elixir	c) Semi solid
4) Aerosol	d) Liquid
9. Define: Fluid flow.
10. Explain that reynold's no. is unitless.
11. Write down the full form of DSC and API.
12. How will you measure pressure in the pipe.
13. IR analysis is used to determine .....
  - A. Types of bond & Functional Group
  - B. Change in volume caused by thermal heat
  - C. Change in weight in retention to change in temperature
  - D. None of one

**Q.2 Answer any 5 questions. Each question carries 04 marks**

**[5\*4=20]**

1. Define and classify polymorphs in detail.
2. Explain measurement of Reynold no. along with its importance.
3. Write down a note on solid dosage form (explain any two dispensing product with uses/application).
4. Write a note on different types of pressure.
5. Write down difference between flocculated and deflocculated suspension.
6. Write down comparison (difference) between solid, liquid and gas.

**Q.3 Answer any 4 questions. Each question carries 07 marks**

**[4\*7=28]**

1. Write down a short note on types of fluid flow in detail.
2. Classify dosage form in detail with examples.
3. Enlist different factors affecting polymorphism. Explain any three in detail.
4. Write a note on intermolecular forces exerted by compound (types with example).
5. State and explain following gas laws:
  - 1) Boyle's law.
  - 2) Charles's law.
  - 3) Gay-Lussac's law.
  - 4) Avogadro's law.

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*Best of Luck*

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