

<https://pharmacyindia.co.in/>

**B PHARM**  
**(SEM IV) THEORY EXAMINATION 2022-23**  
**PHYSICAL PHARMACEUTICS II**

**Time: 3 Hours**

**Total Marks: 75**

**Note:** Attempt all Sections. If require any missing data; then choose suitably.

**SECTION A**

<https://pharmacyindia.co.in/>

1. Attempt all questions in brief.

**10 x 2 = 20**

- Define kinematic viscosity.
- Define porosity.
- What is peptization?
- Draw rheogram of plastic fluid.
- What are Newtonian fluids?
- Define Feret and Martin diameter.
- What is rheopexy?
- Name two rotational viscometer.
- Define Hausner's Ratio.
- Give example of Non-Newtonian fluids.

<https://pharmacyindia.co.in/>

<https://pharmacyindia.co.in/>

**SECTION B**

2. Attempt any two parts of the following:

**2 x 10 = 20**

- Differentiate Newtonian and Non-Newtonian liquids.
- What are different methods of determining particle size? Discuss Andreason Pipette method.
- Discuss accelerated stability studies.

**SECTION C**

<https://pharmacyindia.co.in/>

3. Attempt any five parts of the following:

**7 x 5 = 35**

- What is plug flow? Discuss the viscometer which have the disadvantage of plug flow and how will you minimize it.
- Discuss dilatent flow and negative thixotropy.
- What are different flow properties of powder? Discuss.
- Explain various properties of colloids.
- What are colloids write down application of colloids in pharmaceutical system? Discuss briefly about it.
- Write down the ideal characteristics of suspension. Discuss sedimentation parameters.
- Discuss theories of emulsion.

<https://pharmacyindia.co.in/>