

Roll No. 

Total No. of Pages : 02

Total No. of Questions : 24

B. Pharma (2012 to 2016) (Sem.-4)

**PHARMACEUTICS-V****(Physical Pharmacy)**

Subject Code : BPHM-405

M.Code : 46235

Time : 3 Hrs.

Max. Marks : 80

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of FIFTEEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.

**SECTION-A****Answer briefly :**

1. What are Isotonic Solutions?
2. Differentiate between bulk density and true density.
3. What is triple point? Explain it with the help of diagram.
4. Define Thixotropy.
5. What are Surface Active Agents?
6. Explain the plug flow.
7. Define Angle of Repose.
8. Explain Polymorphism.
9. Differentiate between adsorption and absorption.
10. Differentiate between amorphous and crystalline forms.
11. What are Pharmaceutics?



12. Define Inclusion complexes and mention two examples.
13. Draw the figures representing pseudo plastic and plastic flow.
14. Mention the Arrhenius equation and its utility.
15. Define Relative Humidity.

#### SECTION-B

16. Explain Eutectic Mixtures.
17. Define Ideal Properties of Powder.
18. What are Newtonian and Non- Newtonian types of flow? Show the different plots for rate of shear vs. shearing stress.
19. Enlist HLB classification.
20. Pharmaceutical Applications of complexes.

#### SECTION-C

21. Describe different factors affecting drug stability.
22. Discuss different types of Newtonian systems and differentiate between them.
23. Write different methods to determine interfacial tension and surface tension.
24. Define Polymorphism. Explain its relevance in pharmacy.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**