

**C.U.SHAH UNIVERSITY****Summer Examination-2019****Subject Name: Physical Pharmaceutics II - Theory****Subject Code: BP403T****Branch: B.Pharm****Semester: 4****Date: 22/04/2019****Time: 02:30 To 05:30****Marks: 75**

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

<b>Q-1</b>	<b>Attempt the following questions:</b>	<b>(20)</b>
<b>A</b>	Briefly explain protective colloidal action.	<b>2</b>
<b>B</b>	Briefly explain Newton's law of flow with its equation.	<b>2</b>
<b>C</b>	Discuss the factors affecting viscosity.	<b>2</b>
<b>D</b>	Give ideal properties of suspension.	<b>2</b>
<b>E</b>	Differentiate flocculated and deflocculated suspension.	<b>2</b>
<b>F</b>	What are the types of emulsion?	<b>2</b>
<b>G</b>	What is Micromeritics?	<b>2</b>
<b>H</b>	Explain Particle Number.	<b>2</b>
<b>I</b>	Define Half life and Shelf life.	<b>2</b>
<b>J</b>	Explain Pseudo zero order reaction.	<b>2</b>

**Attempt the following questions:**

<b>Q-2</b>	<b>Attempt <u>any two</u> of following:</b>	<b>(20)</b>
<b>A</b>	Explain Lyophilic, Lyophobic and Association colloids.	<b>10</b>
<b>B</b>	Explain non Newtonian type of flow with rheograms, mechanism and suitable examples.	<b>10</b>
<b>C</b>	Explain the formulation of suspension.	<b>10</b>
<b>Q-3</b>	<b>Attempt <u>any Seven</u> of following:</b>	<b>(35)</b>
<b>A</b>	Discuss the optical and kinetic properties of the Colloids.	<b>5</b>
<b>B</b>	Write a note on Thixotropy (Gel-sol-Gel Phenomena)	<b>5</b>
<b>C</b>	Classify various viscometers for measurement of viscosity. Describe any one viscometer to find out viscosity of non Newtonian fluids.	<b>5</b>
<b>D</b>	Explain Stoke's law for sedimentation.	<b>5</b>
<b>E</b>	Write a note on physical stability of emulsion.	<b>5</b>
<b>F</b>	Explain Coulter counter method for determining particle volume.	<b>5</b>
<b>G</b>	Write a note on Derived properties of powders.	<b>5</b>
<b>H</b>	Explain Hydrolysis as chemical degradation and its preventive measures.	<b>5</b>
<b>I</b>	Write a note on accelerated stability study.	<b>5</b>

