**B.Pharm 3rd Semester Examination**

**Subject- Physical Pharmaceutics-I (BP302T)**

 **Full mark- 75 Time – 3 hours**

 **Answer all the questions.**

**1. Define (10x2=20)**

**(a) Solubility (b) Buffer Solution**

**(c) pH (d) Dielectric Constant**

**(e) Complexation (f) Common ion effect**

**(g) Micrometrics (h) Buffer Capacity**

**(i) Protein Binding (j) Isotonic Solution**

**Q. 2. Answer any two questions. (2 x 10=20)**

**(a) Discuss in detail about derived properties of powder.**

**(b) Briefly discuss about it Handerson – Hasselbalch equation**

**(c) Derive Scatchard plot in detail.**

**Q. 3. Answer any seven questions. (7x5=35)**

**(a) Real solution and Ideal solution**

**(b) Sublimation**

**(c) Optical Rotation and application**

**(d) Determination of particle Size by sedimentation technique.**

**(e) Buffered Isotonic Solution**

**(f) Classification of complexation**

**(g) Particle size and distribution**

**(h) Triple point and Critical point**

**(i) Polymorphism**