K B Raval College of Pharmacy
Second Sem. (B. Pharm.)
Internal Mid Sem. Exam.
Physical Pharmaceutics

Date: 08/04/2009 **Time: 11 to 12 pm**

Marks: 20

Q-1 Any one **2**

1. The following data apply to 1 g sample of granular powder.
   Volume of solid alone=0.3 cm3/g;Volume of intraparticle pores=0.1 cm3/g
   Volume of spaces between particles= 1.6cm3/g
   What are the specific true volume vs, the specific granule volume Vg, the specific bulk volume Vb?
2. Make the following solution isotonic with respect to ideal membrane.

Phenacaine hydrochloride	0.06g
Boric acid	0.30g
Sterilized distilled water to make	100 ml

Q-2 Any four **16**

1. Importance of micrometrics in pharmacy and Optical microscopy short note for determination of particle size.
2. Describe the solubility of gases in liquids.
3. Thixotropy in formulation
4. Falling sphere viscometer
5. Classify the method for adjusting tonicity and pH and explain the tonicic equivalent method

Q-3 Calculate the ideal solubility of thymol expressed as mole fraction at 40 ^{0}C and convert it into molalities and weight percent where heat of fusion of thymol is 4126 cal/mole, the melting point is 51.5^{0}C and m.w is 150.2 g/mol the melting point of salol is 42^{0}C and its m.w is 214.2 g/mole. **2**

Best of luck