Pramukh Swami Science & H.D. Patel Arts College, Kadi
Bachelor of Vocation Pharmaceutical Chemistry Semester- I
Internal Examination, November -2018,
(PC-111) Basic Pharmaceutical Calculations

Time: 2 hours **15/11/2018** **Total Marks: 60**

Que-1. Answer any 12 questions. Each question carries 1 mark [12]

1. Unit of Normality is _____.
   a) cm/inch b) gm/mole
   c) kg/lit d) all of this
2. Volume can be measured by specific gravity.,(True/False).
3. Give Define: - Density.
4. 1 letter = _____ ml.
5. Match the Following.

	parts per trillion
ppm	parts per million
	parts per mole

6. Graphical representation gives approximate information (True/False).
7. Give the definition of dilution?
8. What is a Rational number?
9. Which scales are commonly used for Temp.?
10. 197000 can also written as _____ $\times 10^{-2}$
11. 10 mm = _____ cm
12. _____ gm weight required for prepare a 0.1 N NaOH Solution in 1 liter.
13. Define: Molarity.

Que.2. Answer any five questions. Each question carries 4marks [20]

1. If 10 gm of salt is dissolved into 70 gm of water then find the concentration of resultant solution in % by percent mass?
2. Solve for x in the equation $5^{5x+8} = 5^{x2+3x}$.
3. Define the Variable? Explain its types.
4. What is the dilution factor if you add 0.2 ml of a stock solution to 3.8 ml of diluent?
5. How to make 2 molar solution of $kMnO_4$ in 500 ml?
6. Short note on percentage calculations.

Que.3. Answer any four questions. Each question carries7 marks [28]

1. (a) Convert 4.5 km to ml

   (b) Convert 65 miles/hour to feet/sec (1 mile = 5280 feet)
2. What is a mixing dilution? How to calculate the Molarity of mixing solution 1 contain 50ml of 0.15 M HCl and solution 2 contain 120 ml of 0.05 M HCl?
3. Explain Step in Sample design.
4. What is specific gravity? Discuss it through appropriate example.
5. What is graphical presentation gives its details by the types of different graphs.