

Pramukh Swami Science and H D Patel Arts College
Bachelor of Vocation
Pharmaceutical Chemistry Semester-I
Mid SEM Examination, November 2015
Pharmaceutical Calculations (PC-111)

Time: 2 hrs

02/11/2015

Marks: 60

Q-1 Answer any 12 Questions. [1 mark each] (12)

1. Normality is symbolized by _____
(a) d (b) b (c) N (d) M
2. Graphical presentation of data is important. True/False (Reason).
3. Unit of ppb is _____
(a) kg/lit (b) cm/inch (c) gm/mole (d) none of these
4. Define: - Density.
5. Match the following

HNO ₃	Nitrus Acid
	Nitric Acid
	Nitrate Acid
	Nitrogen Acid
6. Unit of Specific gravity is _____
(a) cm/inch (b) gm/mole (c) Kg/lit (d) none of these.
7. 1 cm = _____ mm.
8. 197000 can also be written as _____ X 10⁻²
9. A semisolid does not have molecular weight (True/False).
10. Match the following

ppm	parts per million
	parts per mole
11. 0.1 N H₂SO₄ solution is equal to _____ M H₂SO₄ solution.
12. If we will remove two decimal from seventy five thousand liters, then it becomes _____.
13. 0.2 N KOH is equal to _____ % KOH.

Q-2 Answer any 5 Questions.**[4 mark each] (20)**

1. State the importance of logarithms & find out the answer of $7.124 \div 2.568$ through logarithm.
2. Present this value through bar graph: - Water 72 ml, Toluene 12 ml, Ethyl Acetate 2 ml and Ether 14 ml.
3. 0.1 M $\text{Na}_2\text{Cr}_2\text{O}_7$ in 250 ml is there, if we will dissolve it in more 750 ml then what will be the molarity of the newly formed solution.
4. What is the cost of 1 pint of methanol, specific gravity 0.791, bought at \$17.82 per pound? (1 pint = 473 ml, 1 pound (lb) = 454 gm)
5. Define percentage dilution. How to make 5.91 % iodine solution 325 ml water.
6. 750 ppm sodium hydroxide solution in water is present; how many % and how many normal the same solution is?

Q-3 Answer any 4 Questions.**[7 mark each] (28)**

1. What is ppm concentration? If 10mg of KBr dissolved in 100 ml water then how many ppm it will become and convert it into ppb also.
2. Discuss atomic and molecular weight & find out the molecular weight of $\text{K}_2\text{Cr}_2\text{O}_7$.
3. What is graphical presentation giving its detail by the types of different graphs.
4. How to make 5 N H_2SO_4 ? And convert it into molar, ppm and ppb also.
5. What is gravity? Discuss it through proper example.

Atomic Weights:

H-1, C-12, O-16, Na-23, S-32, Cl-35.5, K-39, Cr-52.

-----BEST OF LUCK-----