R10

SET - 1

I B. Pharmacy I Semester Supplementary Examinations, February - 2020
PHYSICAL PHARMACY-I

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks
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1.	a)	Discuss the first law of thermodynamics and its limitations.	(8M)
	b)	Explain the bending forces between the molecules.	(7M)
2.	a)	Discuss the applications of dipole moment.	(8M)
	b)	Define Snell's law. Discuss the determination method for Refractive index.	(7M)
3.	a)	Explain the concept of hydrogen bong and its application.	(7M)
	b)	State Gibb's Phase rule and discuss about Phenol - water system.	(8M)
4.	a)	Discuss about (i) Heat engine (ii) entropy.	(8M)
	b)	Describe how Dielectric constant helps in selection of a solvent for the solubility of the drugs.	(7M)
5.		What is cube lattice? Mention its types and their characteristics and significance.	(15M)
6.	a)	What are Ideal solutions and real solutions?	(9M)
	b)	Write note on freezing point depression.	(6M)
7.		Discuss about types of Free energy and its applications.	(15M)
8.	a)	Discuss about molecular weight determination by using osmotic pressure.	(8M)
	b)	Discuss about (a) enthalphy (b) Spontaneous process.	(7M)