Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Pharmaceutics I **Semester: I**
Program: B. Pharm. **Time: 03 hrs.**
Course Code: BP103T **Max. Marks: 75**
Instructions: All the sections are compulsory.

SECTION A

S. No.	CO		Marks
		Answer all the questions.	**20**
1.	**CO3**	Which of the following is a synthetic suspending agent? A. Bentonite B. Gum acacia C. Gum Tragacanth D. Tween 80	**1**
2.	**CO1**	Which government body regulate the pharmacy education in India? A. Pharmacy Council of India B. Medical Council of India C. Drug Technical Advisory Board D. Para-medical Council of India	**1**
3.	**CO3**	Coalescence is the incompatibility observed in…….. A. Suppositories B. Powders C. Eye Drops D. Emulsions	**1**
4.	**CO3**	Which of the following is biphasic liquid dosage form? A. Emulsion B. Elixir C. Solution D. Mouth washes	**1**
5.	**CO2**	Freezing point depression method is used for calculations required for …... A. Melting point B. Molecular weight C. Isotonicity of the solutions D. Dose of drug for children	**1**
6.	**CO4**	Cold Compression Method is used in preparation of …… A. Suppositories B. Oral Suspensions C. Tablets D. Emulsions	**1**
7.	**CO3**	Rate of sedimentation is governed by…. A. Noyes-Whitney Equation B. Stoke's Law C. Newton's Law of gravity D. Fick's Law of diffusion	**1**
9.	**CO2**	Differentiate between syrup and elixirs.	**2**
8.	**CO2**	What are dusting powders?	**1**
10.	**CO1**	Match the following: i) 1 quart a) 0.06 mL ii) 1 drop b) 5 mL iii) 1 grain c) 40 fl ounces iv) 1 teaspoonful d) 60 mg	**2**
11.	**CO2**	How EDTA (ethylene diamine tetra acetate) acts as an anti-oxidant in liquid formulations?	**2**
12.	**CO4**	What is physical incompatibility and enlist its types with example.	**2**

13.	**CO1**	Give significance of inscription in prescription.	**2**
14.	**CO2**	Enlist any four advantages of powder.	**2**
SECTION B			
Answer any two questions of the following.			**20**
1.	**CO5**	a. Explain the mechanisms followed by drug for dermal penetration after application of semi-solid to the skin? b. What are the factors that influence the penetration of drug through skin?	**5+5**
2.	**CO2**	a. Calculate the amount of sodium chloride required to prepare 100 mL isotonic solution of 0.5 % of ephedrine chloride and 0.5% chlorobutol. (Freezing point depression of 1 % w/v each of ephedrine chloride and chlorobutol is -0.165 ^{0}C and -0.138 ^{0}C). b. Calculate and write down the formula for the preparation of 1 pint of above solution containing all the ingredients.	**6+4**
3.	**CO4**	What are the pharmaceutical incompatibilities? Explain how the incompatibilities affect the therapeutic values of drugs with appropriate examples.	**10**
SECTION C			
Answer any seven questions of the following.			**35**
1.	**CO3**	a. Differentiate between flocculated and deflocculated suspensions. b. How will you maintain the state of controlled flocculation in suspensions?	**3 + 2**
2.	**CO1**	Explain the role of pharmacist in society?	**5**
3.	**CO5**	What are the parameters to evaluate the quality of semisolids?	**5**
4.	**CO2**	What are physical techniques to enhance the solubility of drugs in vehicle in the preparation of liquid dosage forms?	**5**
5.	**CO1**	Explain various factors that affect the posology.	**5**
6.	**CO3**	How will you identify different types of emulsions?	**5**
7.	**CO4**	a. What is displacement value? b. Calculate the displacement value of zinc oxide in theobroma oil suppositories containing 40 % zinc oxide. Weight of 4 suppositories is 11.74 g where these suppositories were prepared in 2 g mold.	**2 + 3**
8.	**CO3**	Elaborate on various instabilities encountered preparation of suspensions.	**5**
9.	**CO1**	Write down various mathematical formulae for calculation of the dose for children from the dose of drugs for adults?	**5**
		Total	**75**