30/12/2022 Total No. of printed pages = 4 BP 502 T Roll No. of candidate 2022 B.Pharm 5th Semester End-Term Examination Pharmacy INDUSTRIAL PHARMACY-I BINA CHOWDHURY CENTRAL LIBRARY (GIMT & GIPS) Azara, Hatkhowapara, (New Regulation) Guwahati -781017 Full Marks - 75 Time - Three hours The figures in the margin indicate full marks for the questions. Multiple choice questions (MCQ) 1. $(20 \times 1 = 20)$ The optimum moisture content of capsule shell ranges between (i) (a) 10-20% (b) 20-25% 12-15% (c) (d) None of the above Partial or complete separation of top or bottom crowns of a tablet is (a) Lamination (b) Mottling (c) Capping (d) Picking (iii) According to BCS classification, class II drugs have High solubility/High permeability (a) (b) Low solubility/High permeability Low solubility/Low permeability (c) High solubility/Low permeability (iv) The relationship between pH, solubility and pKa value of an acidic drug is

given by

Bragg's equation

All of the above

Noye's Whitney equation

Henderson Hasselbalch equation

(a)

(b)

(c)

(d)

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	(V)	which among the following is not a glass test							
		(a)	Water attack test	(b)	Arsenic limit test				
	*	(c)	Light transition test	(d)	Water vapor permeability				
	(vi)	Tonicity modifier used in parenteral preparations is							
		(a)	Glycine	(b)	Sodium citrate				
		(c)	Pectin	(d)	Dextrose				
	(vii)	ii) Substances intended to promote ejection of tablets after compression dies are called							
		(a)	Glidants	(b)	Antiadherents				
		(c)	Lubricants	(d)	All of the above				
	(viii)	Sele	enium sulphide is added to the	sham	ipoo as				
		(a)	Conditioning agent	(b)	Anti-dandruff agent				
		(c)	Thickening agent	(d)	Preservative				
	(ix)	Pharmaceutical powders are sterilized by							
		(a)	Dry heat	(b)	Ionizing radiation				
		(c)	Moist heat	(d)	Combination of all the above				
	(x)	(x) Which of the following techniques can measure the heat loss a by the product?							
		(a)	XRD	(b)	SEM				
		(c)	DSC	(d)	FT-IR				
	(xi)	Diff	ferent crystalline forms of same	stances are known as					
		(a)	Polymorphs	(b)	Solvates				
		(c)	Polymer	(d)	Crystal				
(xii) In tablet granulation method, magnesium stearate is used as									
		(a)	Disintegrating agent	(b)	Adsorbent				
		(c)	Diluent	(d)	Lubricant				
	(xiii	(xiii) Avicel PET 101 is used in pelletization as							
		(a)	Agglomeration inducer	(b)	Filler				
		(c)	Plasticizer	(d)	Surfactant				
					G C				

	(a)	100 μm	(b)	50 μm			
	(c)	20 μm	(d)	70 μm			
(xv)	11.5	test is prelimin	ary test	for rabbit pyrogen test			
	(a)	Sham test	(b)	LAL test			
	(c)	Elisa	(d)	Crack test			
(xvi) Apparatus used for evaluation of flash point in Aerosol							
	(a)	Hydrometer	(b)	Pressure gauge			
	(c)	Cascade impactor	(d)	Standard tag open cup			
(xvi	i)Dic	hlorotetrafluroethane is als	o known	as			
	(a)	Prop-11	(b)	Prop-113			
	(c)	Prop-12	(d)	Prop-114	8 150 700		
(xviii)Trituration method is used when ointment base is ——————————————————————————————————							
	(a)	Soft, soluble	(b)	Hard, soluble			
	(c)	Soft, insoluble	(d)	Hard, insoluble			
(xix) Enteric coating of tablets protect drugs from							
	(a)	Acidic environment of stor	mach				
	(b)	Alkaline environment					
	(c)	Intestinal enzymes			STATE OF		
	(d)	Blood					
(xx)	Rot	cosort machine is used to so	rt out				
į	(a)	Coated tablets	(b)	Filled ampoules			
	(c)	Filled capsules	(d)	Sealed containers			
Short questions (Any seven): $(7 \times 5 = 35)$							
(a)	Des	scribe various quality contr	ol tests fo	or glass.			
(b)	Wr	ite a note on containers and	l closure	s of parenteral products.			
(c)	Wr	ite note on physics of tablet	compres	ssion.			

- (d) Write a short note on BCS classification of drugs and its significance in preformulation studies.
- (e) Discuss briefly about the composition and preparation of shampoo.
- (f) Quality control tests for parenteral products
- (g) Describe the components of an aerosol packaging with diagram.
- (h) Discuss various in process and final product quality control tests for hard gelatin capsules.
- (i) Highlight different pelletization techniques.
- 3. Long questions (Any two)

 $(2 \times 10 = 20)$

- (a) What are various tablet defects and how they may be rectified? Explain in details.
- (b) Define preformulation study and write down the objectives and goals of preformulation study. Mention different physical properties considered for preformulation study in the development of solid dosage forms.
- (c) What is packaging and classify it. Write in brief note on hydrolytic resistance test IP for glass containers.

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