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210		210			_	: Che		1	210		210	
210		210			_	3 Hoi			210		210	
						ırks :						
				Ques	tion	Code	: Y52	8				
P	∖nsw	er Part-A	whic	n is c	ompi	ulsory	/ and	any f	our f	rom F	Part-B.	
		_	jures ir		_		_			rks.		
		A	Answer	all pa	rts of	a ques	stion a	t a pla	ice.			
210		210		210		2	210		210		210	
			Part	- Δ (Δ	nswe	r all the	e anes	stions)	١			
1.		Answer th									2 x 10	
	(a)	The princi		_	-	•	-		•	ine ga	S	
	` '	by mercury					•			3		
		i.	saturate	ed Na(Cl solu	tion on	ly					
		ii.	saturate	ed Na(CI solu	tion wit	h solid	l NaCl	make-	·up		
210			solid Na				210		210		210	
			90-92 %									
	(b)	Solvay pro					of soda	ash				
			can use	_								
			requires		elect	ric pov	ver th	an mo	dified	Solva	ıy	
			process		ina NII I	4 ماما	:01.00-4					
			does no all of the			3 piant	invest	ment				
210	(c)	Slaked lim		210		2	210		210		210	
	(6)		e is pio hydroge		•	icklime						
			hydratic		•		•					
			dehydra									
			dehydro				me					
	(d)	Contact pr						huric	acid vi	elds		
	`~'								- J.			

i.

iii. iv.

i.

ii.

(f)

210

Tallow refers to

80% H₂SO₄ only

95% H₂SO₄ only

90% H₂SO₄ only

oil of animal origin

iv. a mixture of vegetal Hydrogenation of edible oils

98% H₂SO₄ and higher

oil derived from soyabean

oil derived from groundnut a mixture of vegetable oils 210

210		ii. decrea iii. is an ei	ses their meltin ises their meltir ndothermic rea utocatalytic rea	ng point action	210	210	21
	(g)	Fourdrinier mach i. in the n ii. in the n iii. in the n	ine is used nanufacture of nanufacture of nanufacture of	paper synthetic det sugar	ergent		
	(h)	Gluten is	manufacture of	uyes			
210	(11)	i. 210 protein ii. fat	no acid	210	210	210	21
		iv. carboh					
	(i)	For the manufacthe temperature i i. 120-13	ture of ethands kept at	^ -	ation of molasse	S,	
210		ii. 60-65 iii. 20-30 iv. 175-18	210	210	210	210	21
	(j)	Which of the follo i. Glucos ii. Cellulo iii. Starch iv. Sucros	se se	ccharide ?			
			210			240	0.4
210		210	210	210	210	210	21
210 2.		Answer the follo	owing questio	ns:		2 x 10	21
	(a)	Answer the folio Write the effect o during the produc	owing question of temperature option of sulphul	ns : on the conver ric acid.	sion of SO_2 to SC	2 x 10	21
	(b)	Answer the followite the effect of during the product Which catalyst is chemical reaction	owing question of temperature of temperature of the cition of sulphure used for hydrons involved in the comparison.	ns: on the conver ic acid. ogenation of content in the preparation	sion of SO_2 to SO_2	2 x 10 O ₃	21
2.		Answer the following the effect of during the product Which catalyst is chemical reaction. Name different types and determined the catalyst is chemical reaction.	owing question of temperature of temperature of the cition of sulphur used for hydrons involved in the cition of detergences.	ns: on the convertic acid. ogenation of contention of contention of the preparation dents. Mention	sion of SO_2 to SO_2	2 x 10 0 ₃ e	
	(b)	Answer the followite the effect of during the product Which catalyst is chemical reaction	owing question of temperature of temperature of the cition of sulphur used for hydrons involved in the cition of detergonds.	ns: on the convertic acid. ogenation of contents of the preparation dents. Mention outred?	sion of SO_2 to SO_2	2 x 10 0 ₃ e	21
2.	(b) (c) (d) (e)	Answer the following the effect of during the product Which catalyst is chemical reaction. Name different type of soap and determined the why bleaching agents. Classify the parequirement.	owing question of temperature of temperature of temperature of the second of the secon	ns: on the convertic acid. ogenation of contents. Mention uired? What one according	rsion of SO ₂ to SO oil? Write down the of this catalyst. In the various use are the traditions to the use	2 x 10 D ₃ e es al	
2.	(b) (c) (d) (e) (f)	Answer the following the effect of during the product Which catalyst is chemical reaction. Name different tyof soap and determined why bleaching agents. Classify the parequirement. Why beating is re	owing question of temperature of temperature of temperature of the suspension of pulp is required in the negative of t	ns: on the convertic acid. ogenation of contents. Mention uired? What one according	rsion of SO ₂ to SO oil? Write down the of this catalyst. In the various use are the traditions to the use	2 x 10 D ₃ e es al	
2.	(b) (c) (d) (e) (f) (g)	Answer the following the effect of during the product Which catalyst is chemical reaction. Name different type of soap and determined bleaching agents. Classify the parequirement. Why beating is reclassify the dyes.	owing question of temperature of temperature of temperature of the second of the secon	ns: on the convertic acid. ogenation of contents. Mention uired? What one according	rsion of SO ₂ to SO oil? Write down the n of this catalyst. In the various use are the traditionate to the use of f paper?	2 x 10 03 e es al	
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2. 210	(b) (c) (d) (e) (f) (g) (h) (i) (j)	Answer the follow Write the effect of during the product Which catalyst is chemical reaction. Name different by of soap and determined why bleaching agents. Classify the parequirement. Why beating is reclassify the dyes What are the by-write down differed Write the uses of the product of th	bwing question of temperature of temperature of temperature of the sused for hydrons involved in the sused for this caper products of suggested in the manufact ocess with a new antages and of the manufact ocess with a new antages and of the manufact ocess with a new antages and of the manufact ocess with a new antages and of the manufact ocess with a new antages and of the manufact ocess with a new antages and of the manufact ocess with a new antages and of the manufact ocess with a new antages and of the manufact ocess with a new antages and other thems.	on the convertic acid. Ogenation of che preparation dents. Mention wired? What a according manufacture of production dehyde resin. In four quesure of caustic eat flow sheet	rsion of SO ₂ to SO oil? Write down the nof this catalyst. In the various use are the traditionate to the use of paper? ? Write their uses of polyethylene. stions) soda and chloring.	2 x 10 03 e es al of	21

4.	(a)	Discuss in detail the manufacture of sulphuric acid by contact process with a neat flow sheet.	10	
210	(b)	Write the chemical reactions involved in Dual processfor manufacture of soda ash. What are the major engineering problems in this process?	210 05	2
5.	(a) (b)	With a neat flow diagram describe in detail about extraction of vegetable oil from oil seed along with its purification. How glycerine is recovered as by-product from soap and fatty	10	
	(D)	acids? Explain with the help of a flow diagram.	05	
210 6.	(a)	Discuss in detail the Kraft pulping process with a neat flow sheet.	1 0	2
	(b)	Compare between the sulphate and sulphite pulping processes for pulp manufacture.	05	
7.	(a) (b)	Describe the manufacture of starch with the help of a flow diagram. Mention the derivatives of starch. What are the major engineering problems involved in sugar	10 210	2
	` '	manufacture from sugar cane.	05	
8.	(a)	Describe the manufacture of industrial alcohol from molasses with a neat flow sheet. Mention the chemical reactions involved		
	(b)	in this process. Write chemical reactions, properties, and uses of Urea	10	
210	` '	Formaldehyde. 210 210 210	210 05	2
9.	(a)	Describe the manufacture of Nylon 6,6 with a neat flow diagram. Write properties and uses of both nylon 6 and nylon		
	(b)	6,6. Describe the manufacture of polystyrene with a neat flow	10	
	()	diagram.	05	
210		210 210 210 210	210	2

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