(A-9	(5)	No. of Printed page			
(SARDAR PATEL UNIVERSITY				
	M.Sc. 4 th Semester (Surface Coating Technology) Examination (CBCS) Wednesday, April 22 nd , 2015 Time: 2:30 pm to 5:30 pm				
	PS04CSCT02: Technology of Printing Inks & Heavy Duty Protective Coatings				
NB	(1) Marks allotted to the question are on its RHS				
			with the help of neat sketches & chemical		
	equations				
Q.1	Choose the correct option				
(1)	Which printing process has water fount	ain?		(
` '	a) Letterpress		Offset Lithography	`	
	c) Flexographic	-	Gravure		
(2)	Which of the following is a Reverse Prir	•		(
(~)	a) Letterpress	_	Offset Lithography	•	
	c) Flexographic		Gravure		
(3)	Which Printing Process has a Squeeze	,		(
(0)	a) Screen		Offset Lithography	,	
	c) Flexographic		Gravure		
(4)	In printing process the printing a			(
('/	a) Letterpress		Offset Lithography	'	
	c) Flexographic	•	Gravure		
	Which one of the following corrosion leaves behind a porous weak metal after corrosion				
(5)	process?		bermid a perous weak metal after corresion	(
	a) Uniform	b)	Selective Leaching		
	c) Exfoliation	d)	•		
(6)	Crevice corrosion is caused by	u)	Calvarile	(
(0)	a) metallic contact between two	b)	high water velocity	,	
	different metals	IJ)	riigit water velocity		
		٩)	deposits, debris on a metallic surface		
(7)	antifouling coating can be c			(
(1)	a) Foul release	b)	Self polishing	'	
	c) Insoluble matrix	d)			
	To make a coating impervious to corrosive species pigment/extender should				
(8)	be used?	NVC	species pignientrextender snould	(
	a) Lithopone	b)	Pyrophillite		
	c) MIO	d)	• •		
	C) WIIC	u)	Zino Ontonie		
Q.2	Answer any seven of the following			/4	
1		hial	kness in microns in various printing processes.	(1	
2	What are the different letter press printi		· · · · · · · · · · · · · · · · · · ·		
3	Distinguish between Paint and Printing				

4 5 6	What is meant by 'offset' in OSL printing? What is the purpose of the addition of wax in printing inks? Corrosion reaction in different environment?			
7	What is tuberculation?			
8	Give characteristics on heavy duty protective coatings?			
9	What is shop primer?			
Q.3(a)		(6) (6)		
(b)				
4.3	OR	(6)		
(D) -	Explain about water fountain in offset lithographic printing process. What are sheet fed and web fed lithography printing inks?			
Q.4(a)	What are the different methods by which Ink dry? Explain.	(6) (6)		
(p)	Describe and illustrate a Gravure printing process.			
	OR	(6)		
(b)	Describe and illustrate a Flexographic printing process.			
Q.5(a)	What is corrosion cell? Explain different types of corrosion cell?			
(p)	•	(6)		
	i. Microbiologically Influenced Corrosion			
	ii. Pitting corrosion			
41.5	OR			
(b)	Write short note on Galvanic corrosion?	(6)		
Q.6(a)		(6)		
	according to SSPC-paint 20? Explain their corrosion protection mechanism in detail?			
(b)	Give short note on any one			
	i. Write in brief about different environment as classified in ISO 12944			
	ii. Compare solventless and solventborne epoxy systems. OR			
(b)	Give short note on any one			
	i. Different methods of corrosion control			
	ii. Coal Tar Epoxy			
	iii. In tabular form selection of coating systems for different environment			

