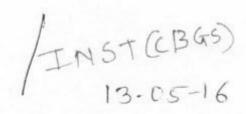
## Industrial Process Control sem-VII



QP Code: 31259

	(2.11)	f 1 007
	(3 Hours) [Total I	Marks: 80]
N.B:	(1) Question No.1 is compulsory.	
	(2) Answer any three questions from Question Nos. 2 to 6.	
	(3) Assume suitable data if necessary.	
,	COLD CI CII	9
1	answer any FOUR of the following questions:-	2
	<ul><li>(a) Explain the measures provided for Hazard free plant.</li><li>(b) With the flow sheet symbol of distillation explain the</li></ul>	5
	significance of column pressure control.	
	(c) Explain HTST and HHST milk pasteurization techniques.	5
	(d) Define shrinking and swelling effects in boiler.	5
	(e) Explain the crystallization curve.	5
2	(a) State the types of evaporator and justify the need of selective	e 10
2	control scheme.	5 10
	(b) Discuss feed forward and bypass control scheme of H.E.	10
3 .	(a) Draw a neat block diagram of refinery process and explain instrumentation involved it.	10
	(b) Define intrinsic safety. Explain hazardous area classification per IEC and NEC standards.	as 10
4	a) Explain any two types of dryer with their control strategies.	10
	<ul> <li>b) With the help of diagram explain evaporating crystallizer and control.</li> </ul>	d its 10
5	a) Explain the instrumentation involved in iron and steel industr	ry. 10
	b) Explain the runaway reaction. Discuss the temperature control	The Victorian Control of the Control
	scheme for reactor.	
10		20
6	Vrite comprehensive notes on :- (any TWO)	20
	<ul> <li>a) Safety interlocks in fired reboiler.</li> <li>b) 80/20 rule in intrinsic safety circuit design.</li> </ul>	
	c) Gas turbine operation and control requirement.	

FW-Con. 9946-16.