.Afr

## V. P. & R. P. T. P. Science College

Vallabh Vidyanagar - 388120 Internal Test - October 2019 **B. Sc. 5<sup>th</sup> Semester - US05CINV02** (Control technique-1) Day and Date: Thursday, 03/10/2019 Time: 11:00 am to 12:15 pm



## Maximum Marks: 25

[05]

24

## Que 1 Objective Type Questions.

1	: time within which no control action takes place.		
	a) Control lag	b) Process lag	
	c) Dead time	d) Self-regulation	
2	: usually not used alone.		
	a) Proportional control mode	b) Integral control mode	
	c) Derivative control mode	d) On-off control mode	
3	Instrument air system is used with type control system.		
	a) Optical	b) Mechanical	•
	c) Hydraulic	d) Pneumatic	
4	Gas has highest susceptibility to magnetic field.		
	a) Nitrogen	b) Oxygen	
	c) Carbon dioxide	d) Carbon monoxide	
5	Variable under control is known as		
	a) Set point	b) Controlled variable	
	c) Controlling variable	d) Zero	
	ä		
Que 2	Write a detailed note on ON-OFF control system. Explain what neutral zone is.		[05]
	OR		
	Explain floating control mode in detail.		
	· · · · · · · · · · · · · · · · · · ·		
Que 3	Discuss proportional control mode. What is offset?		[05]
	OR		
	Give an account of integral control mode. W	Vhat is integral time?	
			TO F1
Que 4	With necessary diagram, write on instrume	ent air system distribution.	[05]
	OR		
	Explain compressor cooling in detail.		
0	Muite a nate on nonemagnatic awagen angle		[05]
Que 5	Write a note on paramagnetic oxygen analy OR	yzer.	[05]
		ante	
	Give an account of magnetic wind instrume	:1115.	

Best Wishes