

SHANTILAL SHAH ENGINEERING COLLEGE BHAVNAGAR
INSTRUMENTATION & CONTROL ENGINEERING

GTU MID SEM EXAMINATION-WINTER-2019 SYLLABUS

SEMESTER: BE-5TH

SUBJECT NAME: Process Control System

SUBJECT Code: 2151705

Chapter No.	Topic
1	Introduction : Introduction of process control, Control Objectives, Servo regulatory control, Classification of process variable
2	Model of some chemical process system : Modelling Basic, Degree of Freedom, Mass Balance , Energy Balance, Linearization of Non-linear system, Modeling of Level tank system, Continuous stirred tank heater, Continuous stirred tank reactor, Transfer Function
3	Element of process Control : Introduction, Dead Time, Interacting & Non-interacting system, Self-regulation, inverse response, integrating system,
5	Common Controller Modes : Controller mode, ON OFF, Multi position, time proportional controller, theory proportional, integral & derivative modes, PI, PD & PID controller, Dynamic behavior of closed loop system with P,I,D, PI, PID modes.
8	Some advanced control techniques : Cascade Control