

Item Text	Option Text 1	Justification Image for Option 1	Option Text 2	Option Text 3	Option Text 4
Regenerative feedback implies feedback with	Oscillations		Step input	Negative sign	Positive sign
The ratio controller	Can be used with any combination of related process variables		Has one measurement input and two outputs	Can be used for even-numbered ratios	Must always employ the derivative mode in the controller
A significant characteristic of some processes is the tendency to adopt a specific value of the controlled variable for nominal load with no control operations.	Regulation		Self Regulation	Transient	Non-Transient
The on-off controller is a _____ system.	Digital		Linear	Non linear	Discontinuous
_____ technique is not applicable to nonlinear system ?	Nyquist Criterion		Quasi linearization	Functional analysis	Phase-plane representation
An increase in gain, in most systems, leads to	Smaller Damping Ratio		Constant Damping Ratio	Larger Damping Ratio	Zero Damping Ratio
Ratio control is used where:	Fuel Must Be Precisely Rationed For Economy		A "Wild Flow" Variable Sets The Gain Of The Controller	One Variable Is Controlled In Proportion To Another	Process Data Is Communicated In A Digital Format

The most dramatic application of feedforward techniques has occurred in their application to:	Heat exchangers		Level processes	Flow processes	Distillation columns
Fast, self-regulating processes typically respond well to aggressive control action.	Nonlinear		Derivative	Proportional	Reset
The primary controller in a cascade control system must always be tuned:	Faster Than The Secondary		Using The Ziegler-Nichols Method	With The Same Parameters As The Master	After The Secondary Is Tuned
A duplex controller has the following number of inputs:	One		Two	Three	Four
Feedback control system is basically	High pass filter		Low pass filter	Band pass filter	Band Stop filter
Primary purpose of using Feedback is	To reduce the sensitivity of the system to parameter variations		To increase the bandwidth of the system	To reduce the noise and distortion of the system	To increase stability of the system
The Evaluation criteria of how well the control system is working is	Ensuring the stability		Evaluating Steady state response	Evaluating the response to setpoint changes and transient effects	All of the above
Processes always require some degree of control action to achieve setpoint.	Integrating, Derivative		Integrating, Feedforward	Self-regulating, Proportional	Self-regulating, Integral
A first order dynamic linear system with a proportional controller exhibits an offset to a unit step input. The offset can be reduced by	Decreasing the proportional gain		Adding derivative mode	Adding integral mode	Increasing the proportional gain
A condition where integral control action drives the output of a controller into saturation is called:	Self-bias		Wind-up	Repeat	Noise

Ziegler Nichols method is also called as _____	Open loop transient response method		Frequency response method	Damped oscillation method	Ultimate cycling method
The primary controller in a cascade control system must always be tuned:	Faster Than The Secondary		Using The Ziegler-Nichols Method	After The Secondary Is Tuned	With The Same Parameters As The Master
Automatic control system in which output is a variable is called	Closed loop system		Servomechanism	Automatic regulating system	Process control system