

Program: Instrumentation Engineering
Curriculum Scheme: Rev2016/2012
Examination: Third Year, Semester V
Course Code: ISC503 and Course Name: Control System Design

Time: 1 hour

Max. Marks: 50

For the students:- All the Questions are compulsory and carry equal marks .

Q1.	The solution of state equation can be determined from_____.
Option A:	State transition matrix
Option B:	Diagonal matrix
Option C:	Gilbert's method
Option D:	Kalman's method
Q2.	Ziegler-Nichol's tuning methods are used to design PI controller for a plant whose mathematical model is _____.
Option A:	Known only
Option B:	Unknown only
Option C:	Known as well as Unknown
Option D:	In differential equation form only
Q3.	In which compensator, pole is closer to the origin in S-plane.
Option A:	Lead Compensator
Option B:	Lag Compensator
Option C:	Lead-Lag Compensator
Option D:	Feedback Compensator
Q4.	The diagonalizing matrix can be estimated from_____
Option A:	Eigen values only
Option B:	Eigen vectors only
Option C:	Both eigen values and eigenvectors
Option D:	State transition matrix
Q5.	Conventional control theory is applicable to_____ systems.
Option A:	Liner
Option B:	MIMO
Option C:	Time varying
Option D:	Non-linear
Q6.	Modern control theory is applicable to_____ systems.
Option A:	Time invariant
Option B:	MIMO
Option C:	Linear
Option D:	SISO
Q7.	Design of compensators in frequency domain are based on _____.
Option A:	Root locus
Option B:	Bode plot

Option C:	Polar plot
Option D:	Nyquist plot
Q8.	Design of compensators in time domain are based on _____.
Option A:	Root locus
Option B:	Bode plot
Option C:	Polar plot
Option D:	Nyquist plot
Q9.	In autonomous system, _____ is absent.
Option A:	State vector
Option B:	Control input
Option C:	Output vector
Option D:	System matrix
Q10.	In Non-autonomous system, _____ is present.
Option A:	State vector
Option B:	Control input
Option C:	Output vector
Option D:	System matrix

Note: Similarly there will be 25 questions in total.