

Samanta Chandrasekhar Institute of Technology and Mangement

INTERNAL EXAM :1

SEM: 6TH

SUB: CSE

FULL MARK :10

Answer all the question:

(5*1=5)

Q1 (i) What is Signal flow graph ?

(II) Define Transfer Function ?

(III) Define the Rise time in a transient response of 2nd order System ?

(IV) Define the term steady state error ?

(V) What is the advantage of SFG ?

Q2) Explain the feedbacks in a closed loop control system (2.5)

Q3) Explain all the rules for reduction of Block diagram ,used in Control system in details ? (2.5)

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INTERNAL EXAM :2

SEM: 6th

SUB: CSE

FULL MARK :10

Answer all the question:

(5*1=5)

Q1 (i) Define Gain and Phase crossover frequency?

(II) Define phase margin. Is it positive or negative for stable Feedback system ?

(III) What is corner frequency in Bode plot?

(IV) What are the frequency domain specifications?

(V) How are the breaking points of the Root Locus method?

Q2) An unity feedback control system has an open loop transfer

$$G(s) = \frac{K}{(s)(s^2 + 4s + 13)}$$

Find the (i) Centroid of asymptotes

(ii) Breakaway point

(2.5)

Q3) Write a brief note on Constant M-circles with the help of polar Plot?

(2.5)