No. of Printed Pages : 4
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125956/105956

5th Sem. / Power Elex.

Subject : Basic Control System

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

Q.1 a) Closed loop.

b) Lap lace Transform.

c) Rise time.

d) Back lash.

e) Error.

f) Test signal.

g) Feed back.

h) Block diagram.

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.3 Explain the Automatic Controlled Closed loop system with diagram.

Q.4 Explain the stepper motor in detail.

Q.5 Explain the block diagram reduction techniques.

Q.6 What is stability? Explain Routh Hurwitz criterion to find the stability.

Q.7 Write a short note on the following:-

(a) Amplidyne.

(b) Standard test Signals.

i) Time Constant.

j) Resistance.

k) Control system.

l) Saturation.

m) Linear Control System.

n) Summing Point.

o) SFG.

p) Amplifier.

q) Peak time.

r) Feed Forward Control.

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

Q.2 i) Explain the basic element of control system.

ii) Draw manually controlled closed loop system.

iii) Explain servo-mechanism in brief.

iv) Explain Steady state error.

v) Explain magnetic amplifier.

vi) Discuss the first order control system.

vii) What do you mean by Time Constant?

viii) Explain open loop control system.

ix) Discuss the linear control system.

x) Explain the Mason's gain formula.

xi) Explain blocks in cascade.

xii) What do you mean by signal flow graph? Explain.

xiii) Explain the ac position control.

xiv) Explain the DC servomotor in brief

xv) Discuss the Error Constant.