Q.5 Explain construction and working of steppes motor.

Q.6 Explain closed loop system in details.

Q.7 Explain the time response specification in detail.

3rd Sem. / I.C / E.I

Subject : Basic of Control System/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) Linear system

b) Feed back

c) Relay

d) Transduces

e) Mason's gain formula

f) Transfer function

g) Servo motor

h) Maximum over shoot

i) Motor

j) S.F.G.

k) Comparator

l) Open look control

m) Error signal

n) Amplifier

o) Ramp function

p) Time constant

q) Second order system

r) Rise time.

SECTION-B

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

Q.2 i) Explain basic elements of control system

ii) Explain an electrical system

iii) What is magnetic amplifier

iv) What is root locous ?

v) What do you mean by error constant ?

vi) Explain automatic control system in brief.

vii) Explain block diagram reduction in brief

viii) What is open loop control system ?

ix) What do you mean by time constant ?

x) Explain servo motor in brief.

xi) What is transfer function ?

xii) Explain the linear system.

xiii) Explain the first order system.

xiv) Discuss the AC position control system.

xv) What is steady state error.

SECTION-C

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

Q.3 Explain manually controlled closed loop system in details.

Q.4 What is stability ? Explain routh-Hurwitz criterian in details.