Q.25 Explain about Servomechanism. (CO1)

Q.26 Write differences between frequency and time period. (CO4)

Q.27 Explain the First order system. (CO4)

Q.28 Explain the AC position control system. (CO1)

Q.29 Write differences between unit step and ramp signal. (CO4)

Q.30 Discuss about steady state error. (CO4)

Q.31 Discuss about root locus in brief. (CO5)

Q.32 Explain uses of block diagram. (CO3)

Q.33 Discuss about Bode plot in brief. (CO5)

Q.34 Explain different elements of control loop. (CO1)

Q.35 Discuss about electrical system. (CO1)

## SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Explain the Routh Hurwitz criterion of stability. (CO5)

Q.37 Discuss about time response of second order system for unit step input. (CO4)

Q.38 Explain Block Diagram reduction technique. (CO3)





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# Power Electronics
## Subject:- Basic Control Systems

Time : 3Hrs. M.M. : 100

## SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 Human eye can be considered as (CO1)

a) Open loop system b) Closed loop system

c) both d) none

Q.2 Transfer function is used to calculate (CO2)

a) input b) output

c) order d) none of these

Q.3 A system in which output is independent from feedback is called (CO1)

a) Open loop system b) closed loop system

c) both d) none

Q.4 Which system is more sensitive? (CO3)

a) Open loop system b) Closed loop system

c) both d) none

Q.5 Unit of frequency is (CO4)

a) ampere b) volt

c) weber d) Hertz

Q.6 Unit of damping factor is (CO4)

a) ampere b) volt

c) none d) Hertz

Q.7 The motor which runs in steps is called (CO2)

a) Stepper motor b) universal motor

c) Dc motor d) none

Q.8 The stator of synchros is made of (CO2)

a) Aluminum b) brass

c) silver d) silicon steel

Q.9 The unit of Time period is (CO4)

a) Henery b) Watt

c) volt d) Second

Q.10 The number of cycles completed in one second is called (CO4)

a) Frequency b) voltage

c) time period d) none of above



## SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Unit of resistance is_____ (CO1)

Q.12 Define Linear System (CO1)

Q.13 Define Process (CO1)

Q.14 Define amplifier (CO2)

Q.15 Define Error. (CO2)

Q.16 Define damping ratio (CO4)

Q.17 Define stability (CO5)

Q.18 Define Time period (CO4)

Q.19 Define bode plot (CO5)

Q.20 Define resonance (CO1)

## SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Write difference between open loop closed loop system. (CO1)

Q.22 Explain the Laplace transform. (CO1)

Q.23 Discuss about Transfer function. (CO2)

Q.24 Explain Nonlinear control system. (CO1)