**Control Systems:**

1. Electronic control systems have the serious draw-backs of  
   (a) low reliability (b) operational difficulty (c) temperature sensitiveness (d) all of above
2. The system whose characteristic equation has the following roots is marginally stable  
   (a) -j, j, -1,1 (b) -3,-2,0 (c) -2+3j, -2-3j, -2 (d) -3,-2,-1
3. A phase log compensation will  
   (a) improve relative stability  
   (b)increase the speed of response  
   (c)increase band-width  
   (d) increase overshoot
4. For Nyquist plot we use
5. open loop function
6. closed loop function
7. characteristic equation
8. any of the above

* A system with gain margin close to unity or a phase margin close to zero is

1. highly stable
2. oscillatory
3. relatively stable
4. none of these

* Root locus diagram exhibits the

1. frequency response of a system
2. poles of the transfer function for a set of parameter values
3. bandwidth of system
4. all of the above

* Increase in the gain K makes the system

1. more stable
2. unstable
3. none of above

* The transfer function of a system is used to determine

1. the output for a given input
2. the type of system
3. the input for a given output
4. the steady state gain

* In a servo system the voltage induced in the control transformer rotor is the

1. error voltage
2. driving voltage
3. opposing voltage
4. none of these

* With the feedback system, the transient response

1. decays slowly
2. decays rapidly
3. rises slowly
4. rises quickly