

## Control Systems MCQ Questions and Answers Pdf

1. In control system, excessive bandwidth is not employed because
  - a. Noise is proportional to bandwidth
  - b. It leads to low relative stability
  - c. It leads to slower time response
  - d. Noise is proportional to the square of the bandwidth

Ans: A

2. Open loop transfer function of a system having one zero with a positive value is called
  - a. Zero phase function
  - b. Negative phase function
  - c. Positive phase function
  - d. Non minimum phase function

Ans: D

3. The characteristic polynomial of a system can be defined as
  - a. Denominator polynomial of given transfer function
  - b. Numerator polynomial of given transfer function
  - c. Numerator polynomial of a closed loop transfer function
  - d. Denominator polynomial of a closed loop transfer function

Ans: D

4. Signal flow graph is used to find
  - a. Stability of the system
  - b. Transfer function of the system
  - c. Controllability of the system
  - d. Poles of the system

Ans: B

5. The law/principle in mechanical systems, analogous to Kirchhoff's laws in electrical systems, is
  - a. First law of motion
  - b. Second law of motion

- c. Third law of motion
- d. d's Alembert's principle

Ans: d

6. Time response of an indicating instrument is decided by which of the following systems?
- a. Mechanical system provided by pivot and jewel bearing.
  - b. Controlling system
  - c. Deflecting system
  - d. Damping system

Ans: D

7. In Force-Voltage Analogy

- a. Force is analogous to current
- b. Mass is analogous to capacitance
- c. Velocity is analogous to current
- d. Displacement is analogous to magnetic flux linkage

Ans: C

8. In a servo systems, the device used for providing derivative feedback is known as

- a. Synchro
- b. Servomotor
- c. Potentiometer
- d. Tachogenerator

Ans: D

9. In position control systems, the tachogenerator feedback is used to

- a. Increase the effective damping in the system.
- b. Decrease the effective damping in the system.
- c. Decrease the steady state error.
- d. Increase the steady state error.

Ans: A

10. Two identical first order systems have been cascaded non-interactively. The unit step response of the systems will be

- a. Overdamped
- b. Underdamped
- c. Undamped
- d. Critically damped

Ans: D

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