

6. Use of *I*-control along with *P*-control facilitates CO3- R
 (a) elimination of offset (b) reduction of offset
 (c) reduction of stability time (d) none of these
7. The phenomenon of cavitation is related to _____ CO4- R
 (a) Pascal law (b) Bernouli's theorem (c) Newton's law (d) Hooks law
8. In Electro-Pneumatic Direction control valves the actuation is done CO4- R
 by which of the following?
 (a) Lever (b) Push button (c) Solenoid (d) Relay
9. The control configuration with primary loop and secondary loop is CO5- R
 known as _____
 (a) Cascade control (b) Split range control
 (c) Ratio control (d) Feed forward control
10. Control valve sizing depends on CO5- R
 (a) Cv factor (b) Flow rate (c) Fluid property (d) Line pressure

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Derive the transfer function for interactive capacities of two tank CO1- App (8)
 system
12. Describe the characteristics of P, PI and PID modes of controller. CO2- App (8)
13. Discuss the controller settings using Ziegler-Nichols continuous CO3- U (8)
 cycling method and write its limitations.
14. Explain the operation of pneumatic actuators with and without valve CO4- U (8)
 positioner
15. Explain the concept of ratio control with an example CO5- U (8)