

SECTION-D

No. of Printed Pages : 4

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Roll No.

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Write the working of cascade control system with the help of an example.

Q.24 Explain the concept of Interlocking and sequencing circuit.

Q.25 Explain principle of operation and working of diaphragm operated control valve.

4th Sem / I&C

Subject : Process Control

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 In switches, NC stands for

- a) Normally closed b) Not clear
- c) Never closed d) None of these

Q.2 Which fluid is used in hydraulic power systems ?

- a) Water
- b) Oil
- c) Non-Compressible Fluid
- d) All of these

Q.3 In Integral Control mode

- a) Offset = Maximum b) offset = Zero
- c) Error = Maximum d) Error = Zero

Q.4 Air conditioner is an example of

- a) Open loop control system
- b) Closed loop control system
- c) Both A and B
- d) None of above

Q.5 Which valve is most commonly used in house hold-application?

- a) Solenoid b) Diaphragm operated
- c) Glove valve d) None of these

Q.6 In a PID control D stands for

- a) Derivative b) Degree
- c) Delay d) All of these

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Draw symbol of temperature switch

Q.8 Define Process control

Q.9 Write any one application of solenoid valve

Q.10 Define actuator.

Q.11 Draw symbol of limit switch

Q.12 Write the full form of PD controller.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 write a short on pressure switch

Q.14 Explain the concept of flapper nozzle system.

Q.15 Draw and explain characteristics of PI control mode

Q.16 Describe the principle of hydraulic valve.

Q.17 Write different process variable and their units.

Q.18 Describe the concept of ON-OFF control system.

Q.19 Explain ratio control system with the help of an example.

Q.20 Explain the concept of I/P converter.

Q.21 Write a short note on ball valve.

Q.22 Differentiate between pneumatic and hydraulic control systems.