

Q.24 Discuss about Fluid power components in brief.
(CO1)

Q.25 Explain Working of Pneumatic power supply with its
components. (CO2)

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4th Sem / Automation & Robotics

Subject : Fluid Power Systems

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

Q.1 Which type of system uses 'oil under pressure' mean for power transmission? (CO2)

- a) Fluid power system
- b) Hydraulic system
- c) Pneumatic system
- d) Stepper motors

Q.2 The force developed in hydraulic systems is high due to _____ (CO2)

- a) high pressure b) more oil
- c) less pressure d) Less oil

Q.3 The compressed air flows to the actuator through _____ (CO2)

- a) pipes and valves b) shafts
- c) motors d) flow control valve

- Q.4 Newton is the unit of (CO1)
 a) Force b) Flow
 c) power d) energy
- Q.5 Watts is the unit of (CO1)
 a) Force b) Flow
 c) power d) energy
- Q.6 The rate of doing work is (CO1)
 a) energy b) work
 c) power d) torque

SECTION-B

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

- Q.7 Define automation (CO1)
- Q.8 Define flow (CO1)
- Q.9 Define stepper motor
- Q.10 Define air filter (CO3)
- Q.11 Define oil reservoir
- Q.12 Define hydraulic system (CO1)

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SECTION-C

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

- Q.13 Discuss different gas laws. (CO1)
- Q.14 What do you mean by Industrial Prime Movers. (CO1)
- Q.15 Discuss about types of Hydraulic pumps in brief. (CO2)
- Q.16 How the air compressor works. (CO2)
- Q.17 Explain the working of rotary valve. (CO3)
- Q.18 Explain the functioning pilot operated control valve. (CO3)
- Q.19 What do you mean by servo valve. (CO3)
- Q.20 Explain the term fluid Power circuits in detail.
- Q.21 Explain the piston acceleration during working stroke (CO4)
- Q.22 What do you mean by sequencing operation of hydraulic system. (CO5)

SECTION-D

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

- Q.23 Explain the directional control of a single acting cylinder using push button operated 3/2 dc valve. (CO5)

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