Fifth Semester B.E. Degree Examination, Dec.2018/Jan.2019

Hydraulics and Pneumatics

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

PART – A

- Explain the structure of hydraulic power system with neat sketch and explain any one application of hydraulic system. (20 Marks)
- 2 a. Explain working of single acting and double acting cylinder. (10 Marks)
 - b. Explain any ten symbolic representation of hydraulic actuators. (10 Marks)
- 3 a. Explain working of POPPET valve with neat sketch. (10 Marks)
 - b. Explain working of Needle valve with neat sketch. (10 Marks)
- Explain briefly about the speed control system of hydraulic circuit with neat sketch.

 (20 Marks)

PART - B

- 5 a. Explain working of pressure switches with neat sketch. (10 Marks)
 - b. Explain briefly about trouble shooting. (10 Marks)
- 6 a. Explain structure of pneumatic system with line diagram. (10 Marks)
- b. Explain working of rodless cylinder with its construction. (10 Marks)
- 7 a. Explain construction and working of time delay valve. (10 Marks)
 - b. Explain briefly about logic gates used in pneumatic system. (10 Marks)
- 8 a. Explain pilot assisted solenoid control of directional control valves. (10 Marks)
 - b. Explain construction and working of lubricator with neat sketch. (10 Marks)

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