Code : 15AT41T

Register Number | | | | | | | | | | |

IV Semester Diploma Examination, Nov./Dec. 2018

FLUID POWER TRANSMISSION & CONTROL SYSTEM

Time : 3 Hours] **[Max. Marks : 100**

Instructions : (1) Answer any **six** full questions from Part – **A** and each question carries **five** marks.

(2) Answer any **seven** full questions from Part – **B** and each question carries **ten** marks.

PART – A

1. Explain Pascal's law with example. 5

2. List the application of fluid power engineering in industries. 5

3. Write the functions of valves. 5

4. List the preventive measures of hydraulic system. 5

5. Explain the functions of air lubricator. 5

6. Draw the basic pneumatic circuit and label the parts. 5

7. Draw pneumatic system components symbols for 5
   (a) Air compressor
   (b) Air motor
   (c) Single acting cylinder
   (d) Accumulator
   (e) Filter

8. List the common faults in pneumatic system. 5

9. List the advantages of combined system. 5

PART – B

10. Explain the construction and working of ball valve with a sketch.

11. Explain working of 2/2 direction control valve with a neat sketch.

12. Explain the working of pressure control valve with a neat sketch.

13. Explain working of gear pump with a neat sketch.

14. Explain the working of meter in circuit.

15. Explain hydraulic brake system circuit of an automobile and label the parts.

16. Explain working of reciprocating type air compressor with a neat sketch.

17. Explain properties of air.

18. Explain control of double acting cylinder using 4/2 DCV with circuit diagram.

19. Explain working of mechanical hydraulic servo system with circuit diagram.