

Roll No.					Total No. of Pages: 02	2
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Total No. of Questions: 18

B.Tech. (AE) (2012 to 2017) (Sem.-7)
HYDRAULIC & PNEUMATICS SYSTEM FOR AUTOMOBILE

Subject Code: BTAE-701 M.Code: 71817

Time: 3 Hrs. Max. Marks: 60

### **INSTRUCTIONS TO CANDIDATES:**

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt ANY FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt ANY TWO questions.

### **SECTION-A**

## Write briefly:

- 1. Draw the symbol of reservoirs.
- 2. What is fluid power plumbing requirement?
- 3. List some circuits which can be performed by both pneumatic and hydraulic systems.
- 4. Draw pneumatic symbol of air motor.
- 5. List different types of lubricators used in hydraulic systems.
- 6. Brief about pilot operation
- 7. What are the elements of pneumatic systems?
- 8. What are applications of pneumatic system?
- 9. Write short note on AC and DC motors.
- 10. Illustrate solenoid operated four-way three position valves.

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### **SECTION-B**

- 11. What are DCV? Explain any two.
- 12. Describe grounded chair representation for material system.
- 13. Illustrate the working of two position spring offset four-way pneumatic valve.
- 14. What is impulse operation? Explain in detail.
- 15. Write note on accumulator and what are its types.

# **SECTION-C**

- 16. Discuss about rules and reduction of block diagram.
- 17. Describe pressure regulating hydraulic circuit.
- 18. a) With the help of neat diagram explain working of double acting cylinder.
  - b) Explain the importance of piping layout in pneumatics systems.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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