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Total No. of Pages : 02

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 :**

1. 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.



**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.**

