

Printed Pages : 3



EMT601

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 141601

Roll No.

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B. Tech.

(SEM. VI) THEORY EXAMINATION, 2014-15
PNEUMATICS & HYDRAULICS

Time : 3 Hours]

[Total Marks : 100

SECTION - A

Part - A

Attempt all parts of following question.

4×5=20

- (1) Explain Newton's law of viscosity?
- (2) Difference between steady and unsteady flow.
- (3) Explain gear pump. What are the advantages?
- (4) Explain lobe pump. What are the major advantages over other?
- (5) Explain solenoid valve and its use.

SECTION - B

Part - B

Attempt **any two** questions.

2×10=20

- (1) Difference between shuttle valve and pressure reducing valve.
- (2) what is cylinder cushion? What is its purpose?
- (3) Explain any two control valves with diagram.

SECTION - C

Part - C

Attempt **any two** questions.

2×10=20

- (1) Describe 'meter-in' and 'meter- out' circuit in speed control system.
- (2) What is difference between single acting and double acting cylinder?
- (3) What is servo valve? What does it works?

SECTION - D

Part - D

Attempt **any two** questions.

2×10=20

- (1) Write shorts on air filter and air regulator?
- (2) Describe air motor. What are the difference between air motor and electric motor?
- (3) Explain air-oil reservoir. What are its requirements?

SECTION-E

Part - E

Attempt **any two** questions.

2×10=20

- (1) Explain the common problem in pneumatic system.
 - (2) What is four-way, spring centered, three position valve?
 - (3) Write short notes on pipe fitting and cylinder mounting.
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