**REG.NO:**

**SEMBODAI RUKMANI VARATHARAJAN ENGINEERING COLLEGE**

**ACADEMIC YEAR 2014-2015/ODD SEMESTER**

**CYCLE TEST – I AUG-2014**

**DEPARTMENT OF MECHANICAL ENGINEERING**

**SUBJECT CODE/TITLE:** ME2305 APPLIED HYDRAULICS AND PNEUMATICS

**YEAR/SEM:** III/V **DATE:**

**DURATION:** 1 ½ HOURS **MAX.MARKS:** 50

**Answer ALL the Questions**

**PART A (5X2=10)**

1. Compare hydraulic and pneumatic system?
2. Give the graphical symbol for pressure reducing valve?
3. Define viscosity and bulk modulus of a hydraulic fluid?
4. What are a positive displacement pump and a non-positive displacement pump?
5. Why end cushions are used in cylinders?

**PART B (40 MARKS)**

1. i) With neat sketch explain the hydraulic and pneumatic fluid power system (12)

ii) Discuss the properties of the hydraulic fluids (4)

1. With a neat sketch explain the principle construction working advantages ,limitations and applications of a non-pressure compensated reciprocating vane pump (16)
2. Draw fluid power symbols of any eight different types of valves? (8)