



## **DIPLOMA IN PRODUCTION ENGINEERING**

### **CENTRALIZED QUESTION BANK**

**1025234640 - APPLIED HYDRAULICS AND PNEUMATICS**

**DIRECTORATE OF TECHNICAL  
EDUCATION GOVERNMENT OF  
TAMILNADU**

## **DIPLOMA END SEMESTER / YEAR EXAMINATION – APRIL 2025**

**Course :** Production Engineering

**Subject :** Applied Hydraulics and Pneumatics

**QP Code :** 1025234640

**Time : 3 Hours**

**Date :**

**Session: Max Marks:100**

### **Answer The Following Questions**

- 1 Construct a hydraulic circuit to control hydraulic motor.
- 2 Construct a hydraulic circuit to control double acting cylinder.
- 3 Construct a meter-in and meter-out circuit to control the speed of double acting hydraulic cylinder.
- 4 Construct a hydraulic circuit to automatically operate a double acting cylinder using PLC kit.
- 5 Construct a hydraulic circuit to sequentially operate a double acting cylinder and a motor using PLC kit.
- 6 Construct a pneumatic circuit to control single acting and double acting cylinder.
- 7 Construct a meter-in and meter-out circuit to control the speed of double acting pneumatic cylinder.
- 8 Construct a pneumatic circuit to automatically operate (single cycle) a double acting cylinder using limit switch.
- 9 Construct a pneumatic circuit to automatically operate a double acting cylinder using PLC kit.
- 10 Construct a pneumatic circuit to sequentially operate a double acting cylinder and a motor using PLC kit.

### **Allocation of Marks**

<b>Sl. No</b>	<b>Description</b>	<b>Marks</b>
1	Aim & Apparatus Required	5
2	Circuit Diagram	20
3	Connections/ Execution	25
4	Output /Result	10
5	Record of Work done	40
<b>Total</b>		<b>100</b>