

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE)
B.Tech.Sem - VII MECHANICAL : WINTER- 2022
SUBJECT : INDUSTRIAL FLUID POWER

Day : Monday

Time : 02:30 PM-05:30 PM

Date : 19-12-2022

W-13460-2022

Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat diagram **WHEREVER** necessary.
 - 4) Use non-programmable calculator is **ALLOWED**.
 - 5) Assume suitable data, if necessary.
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Q.1 What are the types of contamination? Explain any two types of source of contamination and contamination control. (10)

OR

Q.1 What are the types of seals used in hydraulic system? Sketch any four types of dynamic seals and explain their applications. (10)

Q.2 What is the use of temperature switches in hydraulic circuit? Explain any two types of temperature switches with neat sketch. What is the role of pressure switch? (10)

OR

Q.2 What are the various function of hydraulic accumulators? Explain with a help of hydraulic circuit use of accumulator as a shock absorber or pressure surge damping device. (10)

Q.3 What is a directional control valve? Classify direction control valves. Explain the functions of check valve used in hydraulic system with simple circuit. (10)

OR

Q.3 What is the function of pressure sequencing valve? Draw simple sketch and symbol and explain its working. State its applications. (10)

Q.4 Explain Meter-in for Extension, uncontrolled during Retraction and Meter-in for Retraction uncontrolled during extension with hydraulic circuit diagram. (10)

OR

Q.4 What is a regenerative circuit? Draw and explain regenerative circuit used in hydraulic system with neat sketch. (10)

Q.5 Draw a simple sketch and explain the compressed air generation system and compressed air distribution system in pneumatics. (10)

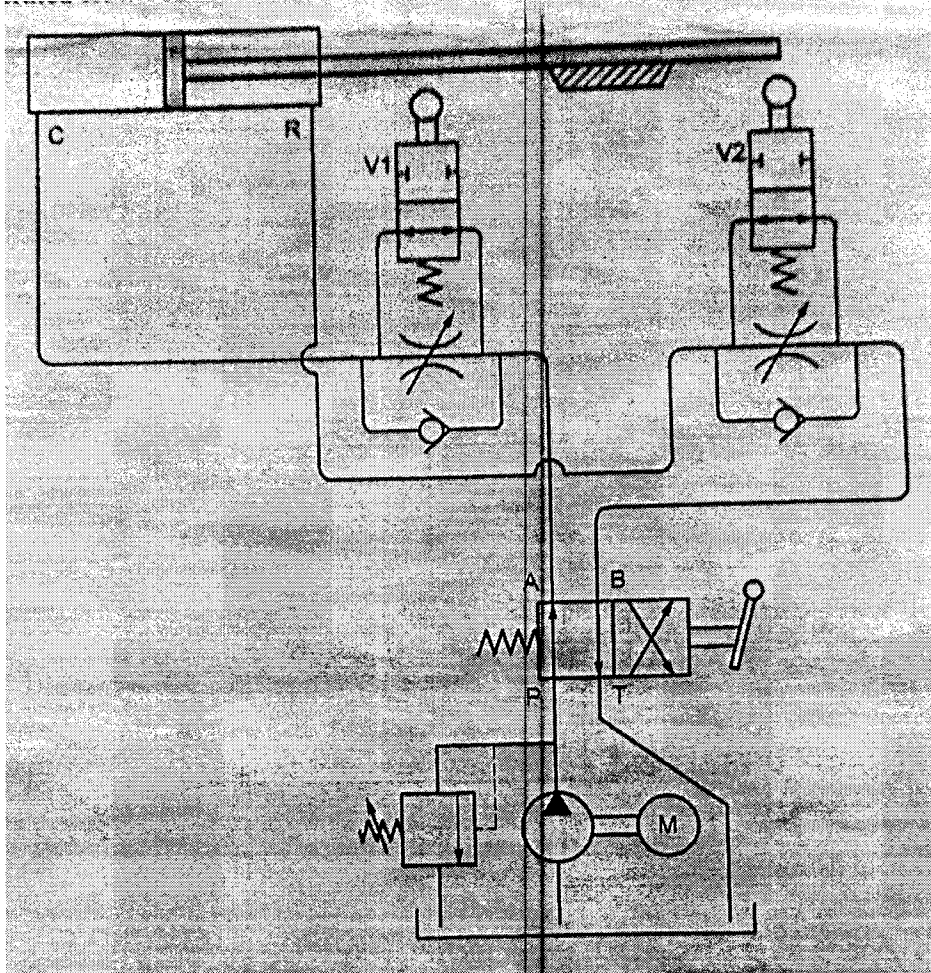
OR

Q.5 Explain with neat sketch pressure regulating valves and speed regulating methods used in pneumatics. (10)

(P.T.O.)

Q.6 Sketch and analyze the hydraulic circuit shown in figure No.1 and label the components (10)
components.

Q No. 6
figure No. 1



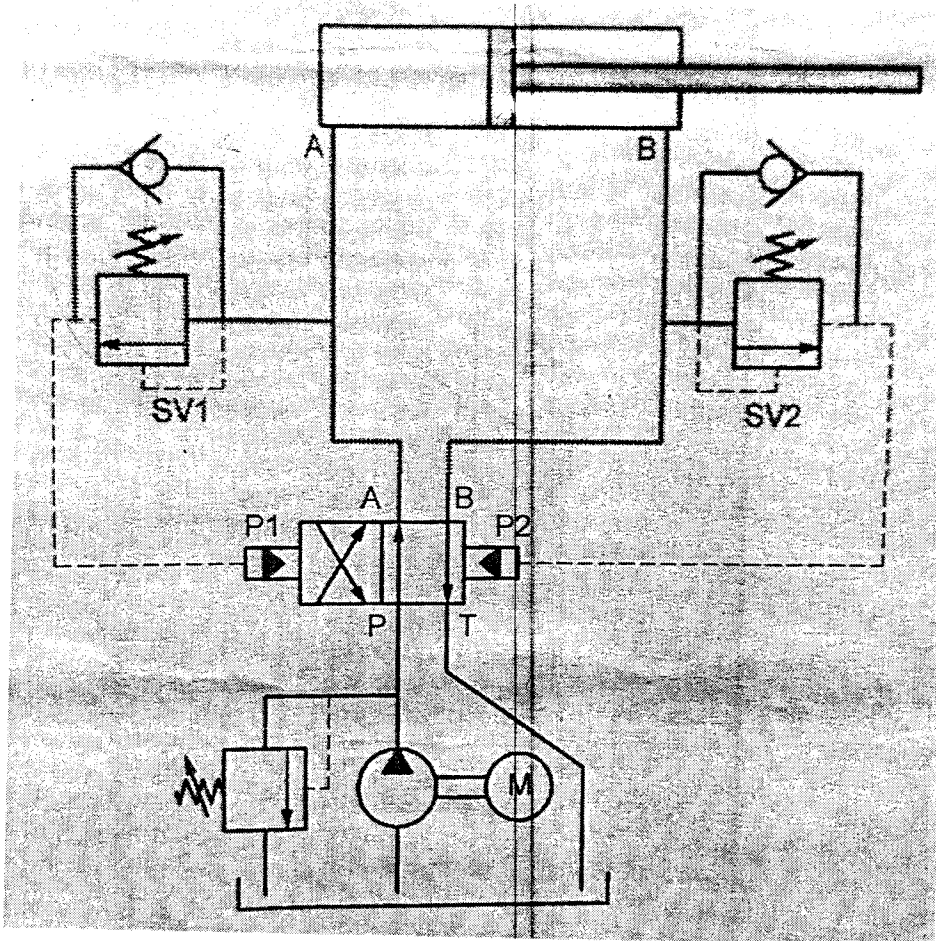
(P.T.O.)

OR

Q.6

Sketch and analyze the hydraulic circuit shown in figure No.2 and label the components. (10)

Q. No. 6
figure No. 2



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