

SECTION-B

- 2 a) What is boiler feed water and boiler corrosion? (4)
- b) Explain any two methods of water softening. (4)
- 3 Give protective measurement of corrosion. (8)
- 4 Give flow diagram of LC instrument. (8)
- 5 Can we use a copper vessel to store 1 M Ag NO₃ solution? ($E_{\text{Cu}^{+2}/\text{Cu}}^{\circ} = +0.34\text{V}$;
 $E_{\text{Ag}^{+1}/\text{Ag}}^{\circ} = +0.80\text{V}$) (8)

SECTION-C

- 6 Give the difference between fluorescence and phosphorescence. (8)
- 7 Give principle and application of IR. (8)
- 8 Explain the no of signals and hyperfine structure with suitable examples. (8)
- 9 Explain phase diagram of one component system- water and carbon dioxide. (8)