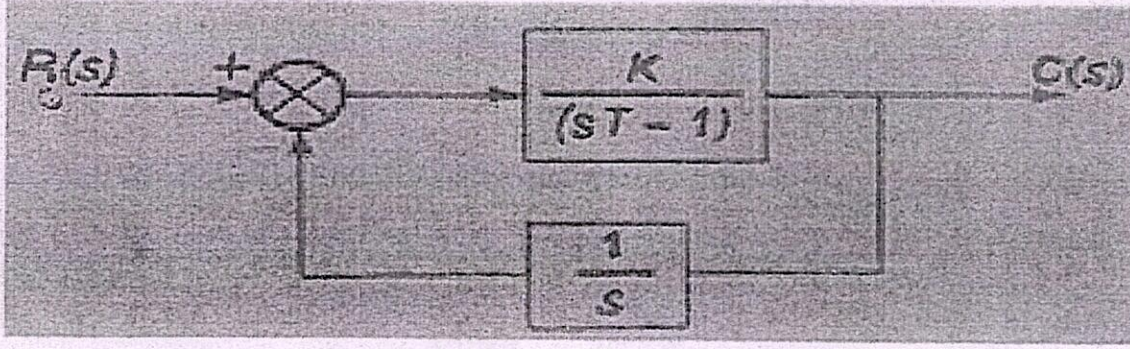


(2)

UNIT - II

5	<p>(a) A close loop control system is described by the block diagram given in Fig-3. Determine the stability using Nyquist criterion.</p>  <p style="text-align: center;">Fig-3</p>	(5)
6.	<p>(b) Explain Lag-lead compensation.</p> <p>(a) Briefly describe how the zeros of the open-loop system affect the root locus and the transient response.</p> <p>(b) What are techniques used for deriving state-space equations?</p>	(5) (5)
7	<p>(a) Under what conditions can inspection of the signal-flow graph of a system yield immediate determination of observability?</p> <p>(b) Briefly describe the configuration of an observer.</p> <p>(c) Explain Robust control System.</p>	(2) (3) (5)