

(b) Find the Z transform (Inverse) of the following - 8

(i) $\frac{2Z}{(2Z-1)^2}$ (ii) $\frac{3Z^2 + 2Z + 1}{Z^2 + 3Z + 2}$

Or

5 (a) State and explain the initial and final value Theorem for Z-transform 8

(b) Find the Z- domain transfer function of following S- Domain transfer functions -

(i) $\frac{S}{S^2 + \omega^2}$ (ii) $\frac{a}{S^2 - a^2}$ 8
