Q.4

Ko of Sanghmani Ltd.

W.N.1 Ke of Samsui Ltd = 16%.

Samsui Ltd. is an all Equity firm

∴ Ko of samsui Ltd. = [Wd x Kd] + [We x Ke]

= 0 + (1 x 16)

= 16%.

∴ Ko of Sanghmani Ltd = 16%

Ke of Sanghmani Ltd:

$$Ko = [Wd \times Kd] + [We \times Ke]$$

$$0.16 = \left[\frac{1}{3} \times 0.1\right] + \left[\frac{2}{3} \times Ke\right]$$

$$0.16 = 0.0333 + \frac{2}{3} \times Ke$$

$$0.16 - 0.0333 = \frac{2}{3} \times ke$$

$$0.1267 = \frac{2}{3} \times ke$$

$$0.3801 = 2ke$$

$$\therefore ke = \frac{0.3801}{2}$$

$$ke = 0.1900$$

$$= \boxed{19\%}$$