

2021

$$\boxed{B2-3} \quad 1) \quad z_A^M = \frac{30 \times 0.4}{30 + 10} = \frac{12}{40} = \underline{\underline{0.3}}$$

$$2) \quad E (0.51, 0.44) \quad \text{J.2.} \quad y_A^E = 0.44$$

$$R (0.01, 0.16) \quad \text{J.2.} \quad x_A^R = 0.16$$

$$M (0.25, 0.30) \quad \text{J.2.} \quad x_A^M = 0.30.$$

$$P = E = EM = RM.$$

$$EM^{\delta} = 0.44 - 0.3 = 0.14, \quad RM^{\delta} = 0.3 - 0.16 = 0.14.$$

$$\text{J.2.} \quad P = E$$

$$E = \frac{M}{2} = \underline{\underline{20 \text{ kWol}}} \quad R = \underline{\underline{20 \text{ kWol}}}$$

$$3) \quad x_{\text{~~air~~} }^E = 1 - 0.51 - 0.44 = 0.05.$$

$$\text{J.2.} \quad P^E = 20 \times 0.05 = 1, \quad A^E = 20 \times 0.44 = 8.8$$

$$| \dot{v}_A | = x_{DA} = \frac{8.8}{1 + 8.8} = \underline{\underline{0.898}}$$