

O-I
J-Mains

$$p = K_H \cdot x$$

1 lit

2 mg.

1 lit

$$\frac{\frac{2 \times 10^{-3}}{34} \text{ mol}}{1000/18} = x$$

(10)

$$\frac{5.25}{M} = \frac{1.5}{60}$$

(8)

$$P_s = \frac{\frac{178.2}{18} \times 760}{\frac{18}{180} + \frac{178.2}{18}}$$

$$\frac{9.9}{0.1 + 9.9} \times 760 = \underline{9.9 \times 76}$$

(19)

$$\frac{5}{342} = \frac{1}{M}$$

(26)

$$0.9 = 1 + \left(\frac{1}{n} - 1\right) 0.22$$

$$-1 = \frac{2}{n} - 2$$

$$1 = \frac{2}{n}$$

(28)

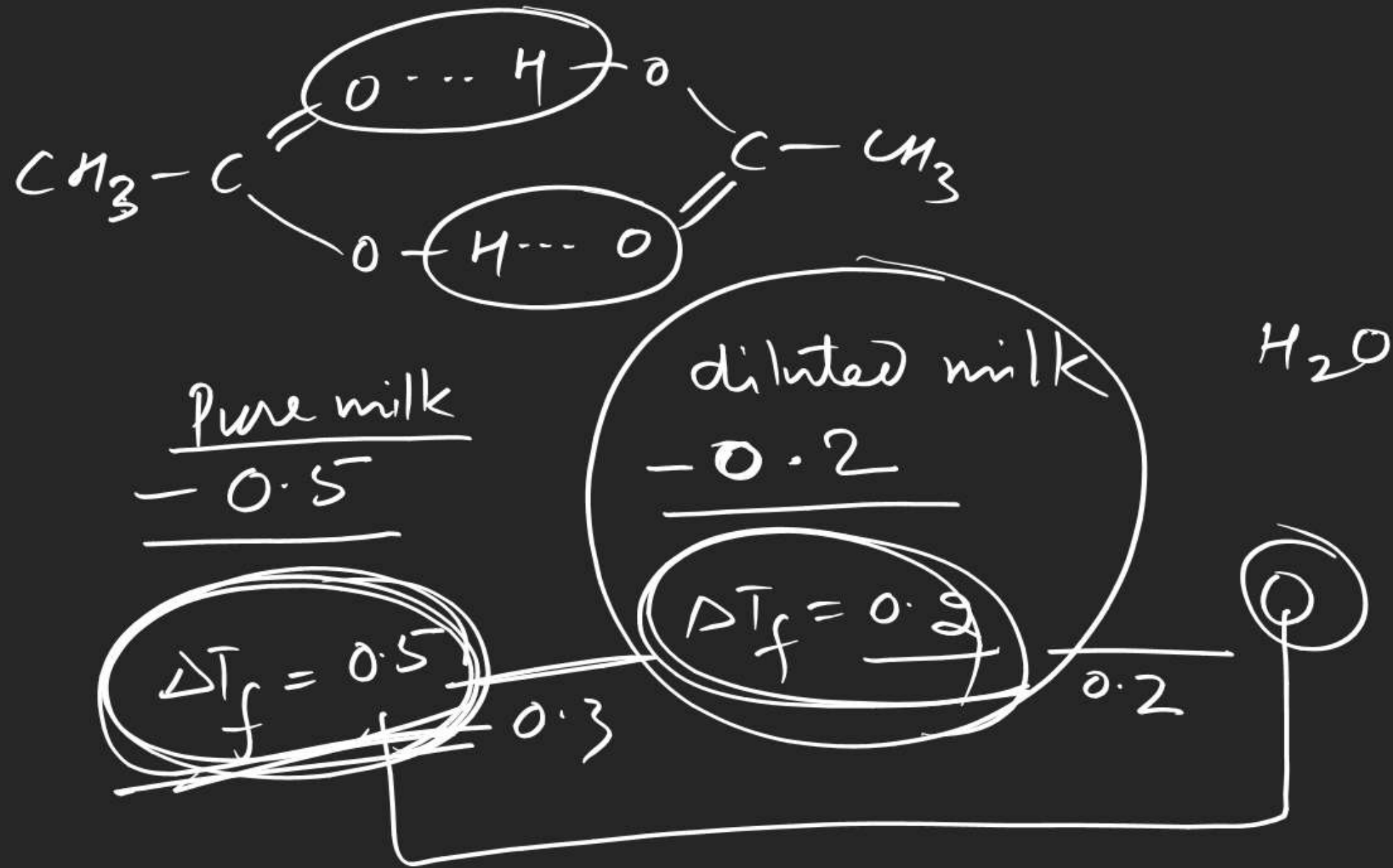
$$5 = 1.86 \times \frac{n}{10}$$

$$\frac{50}{1.86} \times 32$$

$$\frac{nM}{1-\alpha} \rightarrow \frac{M_n}{\alpha/n}$$

$$\frac{\alpha/n}{1-\alpha + \alpha/n} = 0.2$$

44



Mixture diagram:

5 M \downarrow V_1

1 M \downarrow V_2

3 M (circled)

$$\frac{5V_1 + 1V_2}{V_1 + V_2} = 3$$

$$2V_1 = 2V_2$$

$$V_1 = V_2$$

$$(50) \quad P = K_H \chi_{\text{gas}}$$

$$= K_H (1 - \chi_{\text{H}_2\text{O}})$$

$$P = K_H - K_H \chi_{\text{H}_2\text{O}}$$

is cooled
upto -4°C

$$4 = 1.86 \times \frac{0.6}{W} \times 1000$$

$$W = 277.5$$

(60)

$$4 = 1.86 \times \frac{0.75}{W} \times 1000$$

$$W = \frac{750 \times 1.86}{4}$$

$$1000 \text{ gm sol}^n \rightarrow m = 0.75$$

H_2O
 $x \text{ gm}$

sucrose
 $1000 - x \text{ gm}$

$$m = \frac{\frac{1000 - x}{342} \times 1000}{x} = 0.75$$

$$x = 795.86$$

$$\chi_{\text{C}_{12}\text{H}_{22}\text{O}_{11}} = \frac{1000 - 795.86}{342} = 0.6$$

J-Adv
NCERT