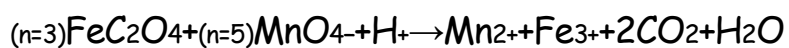
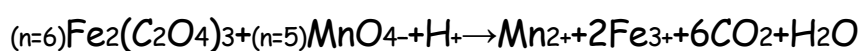


QUESTION 7 :

1 mole of equimolar mixture of $\text{Fe}_2(\text{C}_2\text{O}_4)_3$ and FeC_2O_4 requires X moles of KMnO_4 in acid medium for complete reaction. The value of X is:

Answer: (option 1) 0.9

The reactions are given below:



Equivalents of oxidising agent = equivalents of reducing agent

Total equivalents of $(\text{Fe}_2(\text{C}_2\text{O}_4)_3 + \text{FeC}_2\text{O}_4)$ = equivalents of KMnO_4

$$\therefore (0.5 \times 6) + (0.5 \times 3) = (x \times 5)$$

Moles of $\text{KMnO}_4 = x = 0.9$.