

PYQSide

JEE MAIN REDOX REACTIONS — EQUIVALENT CONCEPT IN REDOX TITRATIONS — PYQS

Max. Marks: 16

Questions: 4

Section A (MCQ)

- Q.1** In order to oxidise a mixture of 1 mole each of FeC_2O_4 , $\text{Fe}_2(\text{C}_2\text{O}_4)_3$, FeSO_4 and $\text{Fe}_2(\text{SO}_4)_3$ in acidic medium, the number of moles of KMnO_4 required is

[JEE Main 2026 (Online) 4th April Morning Shift]

- (1) 3 (2) 2 (3) 5 (4) 7

Scan or tap for the
full solution



Section B (Numerical)

- Q.2** 500 mL of 0.2 M MnO_4^- solution in basic medium when mixed with 500 mL of 1.5 M KI solution, oxidises iodide ions to liberate molecular iodine. This liberated iodine is then titrated with a standard x M thiosulphate solution in presence of starch till the end point. If 300 mL of thiosulphate was consumed, then the value of x is _____.

[JEE Main 2026 (Online) 6th April Evening Shift]

Scan or tap for the
full solution



- Q.3** 500 mL of 1.2 M KI solution is mixed with 500 mL of 0.2 M KMnO_4 solution in basic medium. The liberated iodine was titrated with standard 0.1 M $\text{Na}_2\text{S}_2\text{O}_3$ solution in the presence of starch indicator till the blue color disappeared. The volume (in L) of $\text{Na}_2\text{S}_2\text{O}_3$ consumed is _____. (Nearest integer)

[JEE Main 2026 (Online) 28th January Morning Shift]

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- Q.4** 200 cc of $x \times 10^{-3}$ M potassium dichromate is required to oxidise 750 cc of 0.6 M Mohr's salt solution in acidic medium. Here x = _____.

[JEE Main 2026 (Online) 23rd January Evening Shift]

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ANSWER KEY

Section A (MCQ)

Ques.	1														
Ans.	2														

Section B (Numerical)

Ques.	2	3	4						
Ans.	1	3	375						