

Topic	Task	Date
Thermodynamics-1	Class Notes	Thursday, 9 November 2023
	O-I: 6, 10, 14, 20, 23, 24, 30, 31, 34, 36, 38, 42, 44, 46, 50, 52	Friday, 10 November 2023
	S-I: 1, 2, 12, 17, 20, 28, 31, 34, 38, 42	Saturday, 11 November 2023
		Sunday, 12 November 2023
Thermodynamics-2	Class Notes	Monday, 13 November 2023
	O-I: 1, 2, 5, 9, 11, 13, 17, 21, 24, 25, 26, 27, 28, 30, 32, 35, 39, 42, 43, 47, 48, 49, 50	Tuesday, 14 November 2023
Thermochemistry	Class Notes	Wednesday, 15 November 2023
	O-I: 2, 5, 8, 10, 14, 17, 18, 20, 2, 22, 23, 25, 26, 27, 28, 29, 32	Thursday, 16 November 2023
Thermodynamics & Thermochemistry	JEE MAIN Selected PYQs	Friday, 17 November 2023
Mole Concept	Class Notes	Saturday, 18 November 2023
		Sunday, 19 November 2023
	O-I : 3, 9, 12, 19, 21, 25, 34, 38, 40, 43, 45, 48, 51, 52, 53, 55, 58	Monday, 20 November 2023
Concentration Terms	Class Notes	Tuesday, 21 November 2023
	Live Class For Doubts	Wednesday, 22 November 2023
	O-I : 2, 6, 8, 11, 12, 14, 15, 17, 22, 25, 26, 28, 29, 31, 32, 34, 36 O-II : 17-24	Thursday, 23 November 2023
	JEE MAIN Selected PYQs	Friday, 24 November 2023
Chemical equilibrium	Class Notes	Saturday, 25 November 2023
		Sunday, 26 November 2023
	O-I: 3, 5, 10, 18, 21, 23, 27, 29, 30, 32, 35, 36, 38, 42, 44, 45, 46, 51, 55, 58, 59, 60, 62, 67, 69, 72, 74, 75, 76, 78	Monday, 27 November 2023

Ionic equilibrium	Class Notes	Tuesday, 28 November 2023
	<b>Live Class For Doubts</b>	Wednesday, 29 November 2023
	O-I: 1, 3, 7, 10, 12, 14, 16, 17, 18, 20, 21, 23, 26, 27, 28, 32, 35, 37, 38, 42, 44, 49, 52, 54, 55, 58, 60, 61, 45, 66, 68, 70, 72, 75, 77, 78, 79, 50, 84, 85, 86, 90, 93, 94, 96, 98	Thursday, 30 November 2023
		Friday, 1 December 2023
Equilibrium	JEE MAIN Selected PYQs	Saturday, 2 December 2023
Redox		Sunday, 3 December 2023
	Class Notes	Monday, 4 December 2023
	O-I: 5, 6, 7, 8, 9, 10, 18, 19, 20, 21, 29, 30, 31, 32, 35, 37, 39, 40, 43, 45, 46, 48, 50, 52, 55, 57	Tuesday, 5 December 2023
	<b>Live Class For Doubts</b>	Wednesday, 6 December 2023
Electrochemistry	Class Notes	Thursday, 7 December 2023
	O-I: 2, 3, 8, 10, 13, 16, 17, 18, 21, 25, 26, 32, 32, 35, 36, 40, 43, 45, 47, 49, 51, 54, 56, 60, 62, 64, 65, 67, 70, 72, 73, 74, 75 77, 78, 79, 82, 84, 87, 88, 89	Friday, 8 December 2023
	<b>JEE MAIN Selected PYQs</b>	Saturday, 9 December 2023
		Sunday, 10 December 2023
Kinetics	Class Notes	Monday, 11 December 2023
	O-I: 3, 4, 6, 8, 9, 14, 15, 20, 23, 25, 28, 29, 31, 32, 33, 38, 40, 43, 45, 48, 50, 52, 54, 56, 57, 56, 61, 64, 65, 68, 70, 71	Tuesday, 12 December 2023
	<b>Live Class For Doubts</b>	Wednesday, 13 December 2023
	JEE MAIN Selected PYQs	Thursday, 14 December 2023
Liquid solution	Class Notes	Friday, 15 December 2023
	O-I:2, 3, 5, 7, 15, 18, 19, 21, 22, 24, 26, 29, 32, 33, 37, 40, 44, 46, 49, 51, 53, 57, 58, 64, 66, 67, 68, 71, 73, 75, 77, 79	Saturday, 16 December 2023
		Sunday, 17 December 2023
	JEE MAIN Selected PYQs	Monday, 18 December 2023
Atomic Structure	Class Notes	Tuesday, 19 December 2023
	<b>Live Class For Doubts</b>	Wednesday, 20 December 2023
	O-I: 2, 4, 7, 9, 11, 14, 15, 18, 19, 25, 27, 28, 31, 33, 34, 37, 40, 42, 46, 47, 50, 51, 54, 58, 60, 61, 63, 64, 66, 67	Thursday, 21 December 2023
	JEE MAIN Selected PYQs	Friday, 22 December 2023

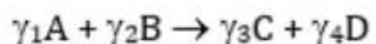
1. NO<sub>2</sub> required for a reaction is produced by the decomposition of N<sub>2</sub>O<sub>5</sub> in CCl<sub>4</sub> as per the equation,  $2 \text{N}_2\text{O}_5(\text{g}) \rightarrow 4 \text{NO}_2(\text{g}) + \text{O}_2(\text{g})$

The initial concentration of N<sub>2</sub>O<sub>5</sub> is 3.00 mol L<sup>-1</sup> and it is 2.75 mol L<sup>-1</sup> after 30 minutes. The rate of formation of NO<sub>2</sub> is:

- (A)  $1.667 \times 10^{-2} \text{ mol L}^{-1} \text{ min}^{-1}$       (B)  $2.083 \times 10^{-3} \text{ mol L}^{-1} \text{ min}^{-1}$   
 (C)  $4.167 \times 10^{-3} \text{ mol L}^{-1} \text{ min}^{-1}$       (D)  $8.333 \times 10^{-3} \text{ mol L}^{-1} \text{ min}^{-1}$

[Jee Main, April 2019]

2. For a given chemical reaction



Concentration of C changes from 10 mmol dm<sup>-3</sup> to 20 mmol dm<sup>-3</sup> in 10 seconds. Rate of appearance of D is 1.5 times the rate of disappearance of B which is twice the rate of disappearance A. The rate of appearance of D has been experimentally determined to be 9 mmol dm<sup>-3</sup> s<sup>-1</sup>. Therefore, the rate of reaction is \_\_\_\_\_ mmol dm<sup>-3</sup> s<sup>-1</sup>. (Nearest Integer)

[JEE Main, June 2022]

3. For a first order reaction, the time required for completion of 90% reaction is 'x' times the halflife of the reaction. The value of 'x' is

(Given: ln 10 = 2.303 and log 2 = 0.3010)

- (A) 1.12      (B) 2.43      (C) 3.32      (D) 33.31

[JEE Main, June 2022]