JEE Main 2024 Daily Practice Questions

Physics:

Ques. The surface area of a balloon of spherical shape being inflated, increases at a constant rate. If initially, the radius of the balloon is 3 units and after 5 seconds, it becomes 7 units, its radius after 9 seconds is:

1. 9

2. 10

3. 11

4. 12

Ques. Bag A contains 2 white, 1 Black, and 3 red balls and Bag B contains 3 black, 2 red, and n white balls. One bag is chosen at random and 2 balls drawn from it at random, are found to be 1 red and 1 black. If the probability that both balls come from Bag A is 6/11, then n is equal to:

1. 13

2. 6

3. 4

4. 3

Ques. Two identical cells each of emf 1.5 V are connected in parallel across a parallel combination of two resistors each of resistance 20 Ω. A voltmeter connected to the circuit measures 1.2 V. The internal resistance of each cell is:

1. 2.5 Ω

2. 4 Ω

3. 5 Ω

4. 10 Ω

Chemistry:

Ques. If a rocket runs on a fuel ($C_{15}H_{30}$) and liquid oxygen, the weight of oxygen required and CO_2 released for every litre of fuel respectively are:

(Given: Density of the fuel is 0.756 g/ mL)

1. 1188 g and 1296 g

2. 2376 g and 2592 g

3. 2592 g and 2376 g

4. 3429 g and 3142 g

Ques. Given below are the oxides:

Na_2O, As_2O_3, N_2O and Cl_2O_7

Number of amphoteric oxides is:

1. 0

2. 1

3. 2

4. 3

Ques. The highest industrial consumption of molecular hydrogen is to produce compounds of elements:

1. Carbon

2. Nitrogen

3. Oxygen

4. Chlorine

Mathematics:

Ques. The number of distinct real roots of the equation $x^7-7x-2=0$ is:

1. 5

2. 7

3. 1

4. 3

Ques. Let the points on the plane P be equidistant from the points (-4, 2, 1) and (2, -2, 3). Then the acute angle between the plane P and the plane $2x+y+3z= 1$ is:

1. $\pi/6$

2. $\pi/4$

3. $\pi/3$

4. $5\pi/12$

Ques. The number of 7 digit numbers which are multiples of 11 and are formed using all the digits 1, 2, 3, 4, 5, 7, and 9 is: