

## JEE Main 2024 Daily Practice Questions

### Physics

**Ques.** A wire with a resistance of 5 ohms is redrawn to increase its length 5 times. What is the final resistance of the wire?

1.  $25\Omega$
2.  $16\Omega$
3.  $125\Omega$
4.  $32\Omega$

**Ques.** Find the velocity of the particle if the position of the particle is given by  $x=2t^2$  at  $t=2$  sec.

1. 8 m/s
2. 4 m/s
3. 16 m/s
4. 32 m/s

**Ques.** A particle performing SHM with amplitude  $A$  starts from  $x=0$  and reaches  $x=A/2$  in 2 s. Find the time required for the particle to go from  $x= A/2$  to  $x=A$ .

1. 1.5 s
2. 4 s
3. 6 s
4. 1 s

## Chemistry

Ques. Arrange the following elements in increasing order of metallic character:

1.  $\text{Si} < \text{Mg} < \text{Be} < \text{K}$
2.  $\text{Be} < \text{Mg} < \text{Si} < \text{K}$
3.  $\text{Si} < \text{Be} < \text{Mg} < \text{K}$
4.  $\text{K} < \text{Mg} < \text{Si} < \text{Be}$

Ques. Which of the following elements is the weakest reducing agent in an aqueous solution?

1. Na
2. K
3. Li
4. Rb

Ques. The final oxidation number of Cr when  $\text{K}_2\text{Cr}_2\text{O}_7$  is used in an acidic medium during titration.

1. +6
2. +2
3. +3
4. +4

## Mathematics

Ques. Number of numbers between 5000 and 10000 by using the digits 1, 3, 5, 7, and 9 without repetition is equal to:

1. 120

2. 72

3. 12

4. 6

**Ques.** A triangle is formed with an x-axis, y-axis, and line  $3x+4y+60$ . A point P (a,b) lies strictly inside the triangle such that a is a positive integer and b is a multiple of "a". Find such a number of points (a,b).

**Ques.** In a city, 25% of the population is a smoker and a smoker has 27 times more chance of being diagnosed with lung cancer. A person is selected at random and found to be diagnosed with lung cancer. If the probability of him being a smoker is  $K/40$ , find the value of K.