

JEE Main 26th Feb Shift 1 Physics Memory-Based Questions

If λ_1 and λ_2 are wave length of the 3rd lyman and 1st paschen series then find $\lambda_1 : \lambda_2$

- A. 1 : 3
- B. 7 : 135
- C. 7 : 108
- D. 108 : 7

Ans. B

A-material has normal density ρ and bulk modulus K. The increase in the density of the material when it is subjected to an excess pressure 'p' from all sides is

- A. $\frac{\rho}{\rho K}$
- B. $\frac{K\rho}{\rho}$
- C. $\frac{P\rho}{K}$
- D. $\frac{K\rho}{p}$

Ans. C

Four identical solid spheres each of mass M and radius a are fixed at four corners of a light square frame of side length b such that centres of spheres coincide with corners of square. Find out the moment of inertia of system about one side of the square frame.

Ans. $\left[\frac{8}{5}Ma^2 + 2Mb^2 \right]$

In young's double slit experiment two slits separated by 2mm and a screen is placed 1m away from the slits. If light used is of $\lambda = 500 \text{ nm}$. Then fringe separation will be.

- A. 1mm
- B. 0.75 mm
- C. 0.50 mm
- D. 0.25 mm

Ans. D

An alternating current is given by equation $i = i_1 \sin \omega t + i_2 \cos \omega t$. The rms value of current will be

A. $\frac{1}{\sqrt{2}}(i_1^2 + i_2^2)^{\frac{1}{2}}$

B. $\frac{1}{\sqrt{2}}(i_1 + i_2)$

C. $\frac{1}{2}(i_1^2 + i_2^2)^{\frac{1}{2}}$

D. $\frac{1}{\sqrt{2}}(i_1 + i_2)^2$

Ans. A

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Ans. A

More Questions will be Added Soon

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