



PAPER SOLUTION

From Meerut

JEE MAIN 2026

JAN

28

SHIFT

1st

Aryan Agarwal

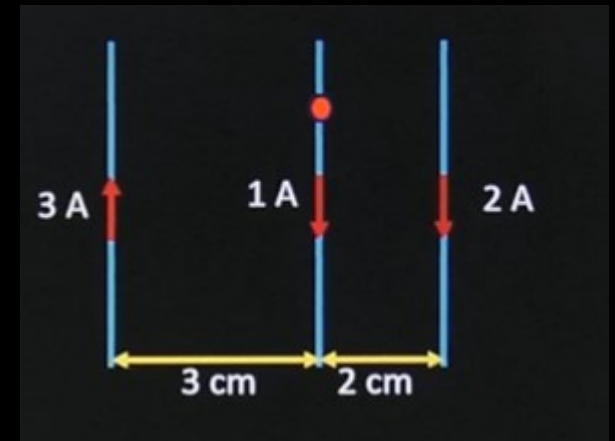
Founder and CEO

CVPS INTEGRATED STAR COURSE



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. There are three long parallel wires in a plane as shown. Find force on 15 cm of length of middle wire.



A $5 \mu\text{N}$

B $7 \mu\text{N}$

C $6 \mu\text{N}$

D $1 \mu\text{N}$

(Ans :C)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Equation of an EMW in a medium is given by $E = 2\sin(2 \times 10^{15}t - 10^7x)$. Find refractive index of the medium.

A $3/2$

B 2

C $5/3$

D $4/3$

(Ans :A)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. For a circular coil of radius R , center is $B_0 = 16 \mu\text{T}$. What will be the magnetic field on axis at a distance $x = \sqrt{3}R$

- A** $1/4 \mu\text{T}$
- B** $1/2 \mu\text{T}$
- C** $4 \mu\text{T}$
- D** $2 \mu\text{T}$

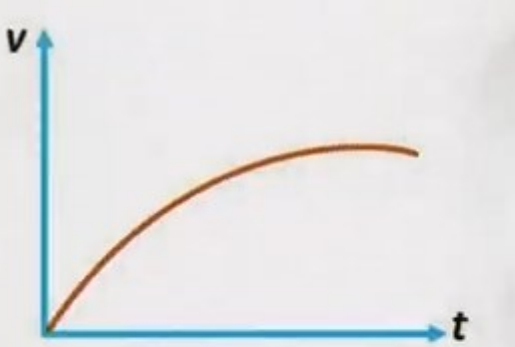
(Ans :D)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. An object is being dropped from height h above the ground. Apart from force of gravity additional drag force, $F = -kv$ acts on the object. Find the graph of v versus t .

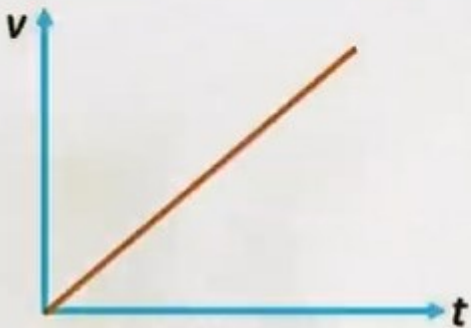
A



B



C



D



(Ans :A)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Electric current in a circuit is given by $i = i_0 \left(\frac{t}{T} \right)$, Find rms current for period $t = 0$ to $t = T$.

A $\frac{i_0}{\sqrt{5}}$

B $\frac{i_0}{\sqrt{2}}$

C $\frac{i_0}{\sqrt{3}}$

D $\frac{i_0}{2}$

(Ans :C)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Position of a particle is given by $x = A \sin(\omega t)$ potential energy is minimum at $t = (T/2\beta)$, where T is time period. Find minimum value of positive β .

- A** $1/2$
- B** $1/3$
- C** 1
- D** $1/6$

(Ans :C)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. A tap is at a height of 5 m from ground. Water drops are falling from it at regular interval. When 1st drop hits the ground 6th droplet is just about to fall. Find the height of 4th droplet from ground when 1st droplet hits the ground.

A 4.2 m

B 3.2 m

C 4 m

D 3 m

(Ans :A)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. If 10 kg of ice at -10°C is mixed with 100 kg of water at 25°C , then resultant temperature in equilibrium for mixture shall be $\left(s_i = \frac{1}{2} \text{ cal/gm-}^{\circ}\text{C}, s_w = 1 \text{ cal/gm-}^{\circ}\text{C}, L_f = 80 \text{ cal/gm}\right)$

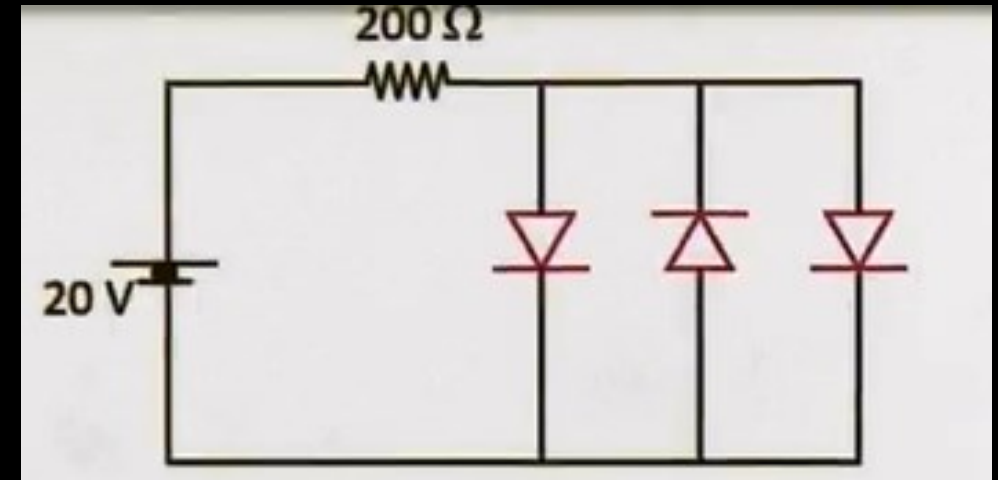
- A** 0°C
- B** 15°C
- C** 12.5°C
- D** 5°C

(Ans :B)



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#Q. The threshold voltage for the diodes is 0.7 volt. Then current through diodes (from left to right) in given circuit is:



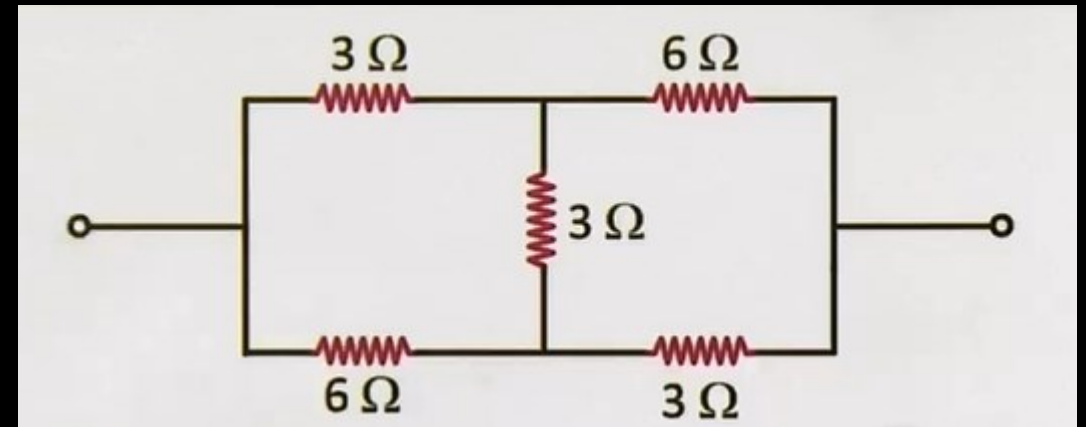
- A** Zero, Zero, Zero
- B** 48.25 mA, zero, 48.25 mA
- C** 32.23 mA, 32.23 mA, 32.23 mA
- D** 50 mA, Zero, 50 mA

(Ans :B)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Find equivalent resistance of the given circuit.



A 6.4 Ω

B 4.2 Ω

C 7 Ω

D 5 Ω

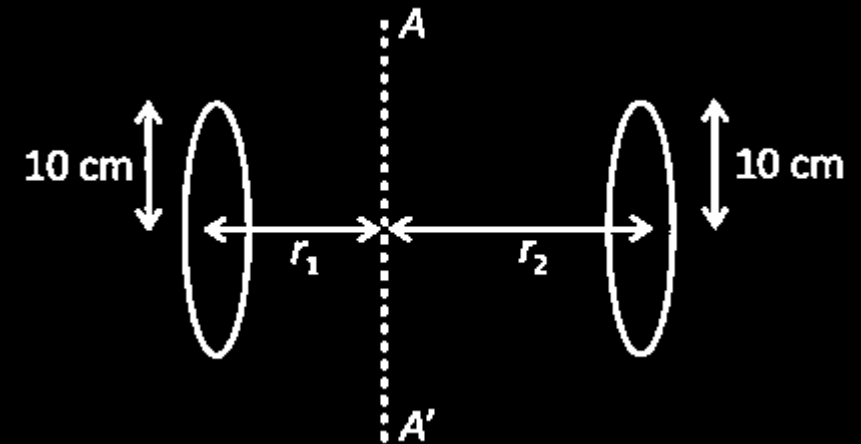
(Ans :B)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. For the given situation shown in figure two disks each of mass $m = 600$ grams are rotating about a fixed axis AA' . Radius of each disk is $r_0 = 10$ cm and they are at distance $r_1 = 10$ cm and $r_2 = 20$ cm from the axis AA' . Torque acting about the axis is 45×10^2 dyne-cm. Find angular acceleration in rad/sec^2 .

- A** $\frac{140}{9} \text{ rad/sec}^2$
- B** $\frac{160}{9} \text{ rad/sec}^2$
- C** $\frac{170}{11} \text{ rad/sec}^2$
- D** $\frac{150}{11} \text{ rad/sec}^2$



(Ans :D)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Find the ratio of de-Broglie wavelength associated with deuteron with kinetic energy of K and α -particle with kinetic energy of $2K$.

A $2\sqrt{2} : 1$

B $\sqrt{2} : 1$

C $2 : 1$

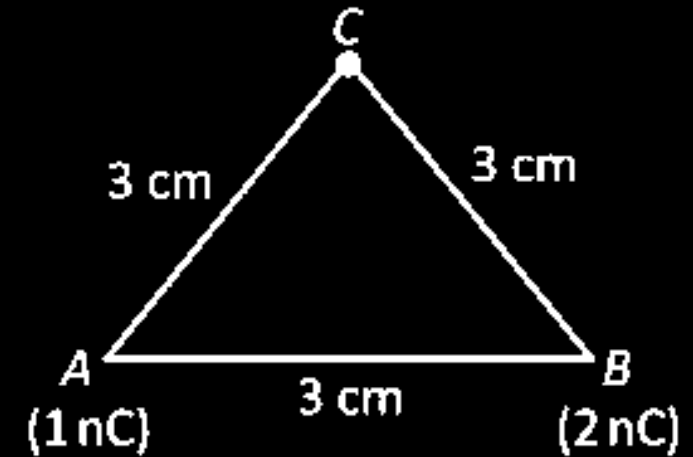
D $1 : \sqrt{2}$

(Ans :C)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Find the work done by external agent in moving a 3 nC charge from a large separation to point C.



A $8.1 \mu J$

B $12 \mu J$

C $2.7 \mu J$

D $9 \mu J$

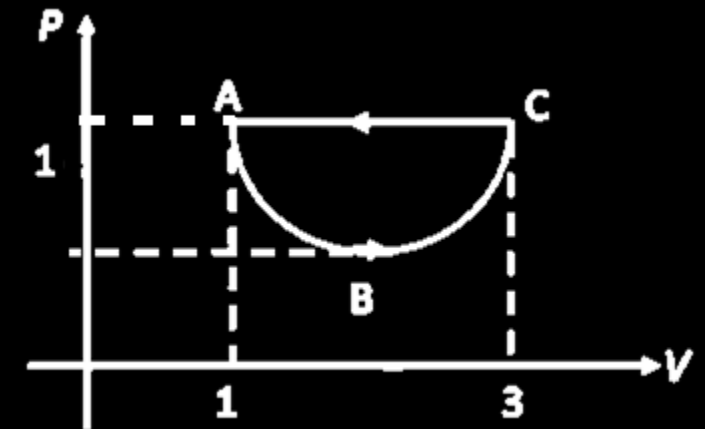
(Ans :C)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Process ABC represents a parabolic section given by $(V - 2)^2 = 4(P - 1)$ in given cyclic process then work done by gas in process is:

- A** $-1/3$ units
- B** $-1/6$ units
- C** $-1/2$ units
- D** $-2/3$ units



(Ans :B)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Statement-I: When a planar wavefront passes through a prism then its wavefront doesn't change, but when planar wavefront passes through a smaller slit wavefront becomes cylindrical.
Statement-II: If distance between slits is decreased and screen distance is increased then fringe width increases.

- A** Both statement-I and statement-II are correct
- B** Both statement-I and statement-II are incorrect
- C** Statement-I is correct but statement-II is incorrect
- D** Statement-I is incorrect but statement-II is correct

(Ans :A)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. In a vernier callipers when nothing is placed between the jaws zero of vernier scale is ahead of zero of main scale and 4th division coincides with one of the main scale. Now when a thin cylindrical wire is kept in the gaps then main scale reading is 15 and 5th vernier division matches with one of the main scale marking. Find the diameter of wire.
(Main scale marking = 1 mm & LC = 0.1 mm)

- A** 15.9 mm
- B** 14.9 mm
- C** 15.8 mm
- D** 15.1 mm

(Ans :D)



JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Two identical cells with same emf Σ and internal resistance r respectively are given. When cells are connected in series and when they are in parallel in both cases they drive equal current I in external resistance of 6Ω . Find the value of internal resistance r .

(Ans :6)