



PAPER SOLUTION



From Meerut

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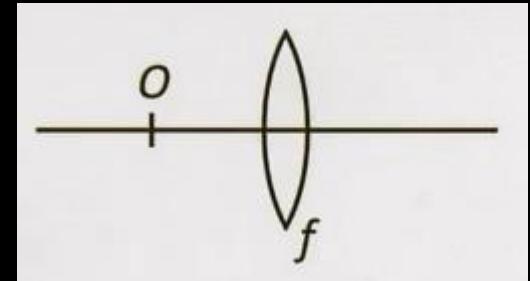
CVPS INTEGRATED STAR COURSE



JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. When an object is kept at distance 8 cm and 24 cm from a convex lens magnitude of magnification is same in both cases. Find focal length of the lens.

- A** 32 cm
- B** 8 cm
- C** 24 cm
- D** 16 cm



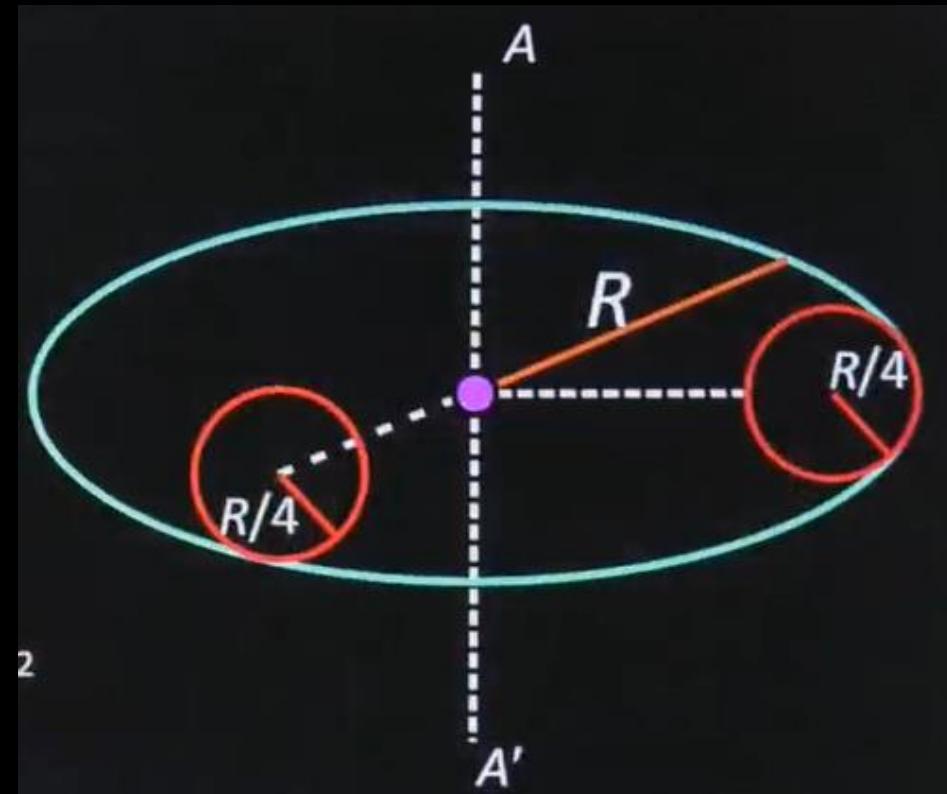
Ans. (D)



JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. From a uniform disc of radius R and Mass M two small discs of radius $R/4$ is being cut as shown in figure. Find the moment of inertia of the system about axis AA' .

- A** $\frac{79}{128} MR^2$
- B** $\frac{79}{2568} MR^2$
- C** $\frac{109}{256} MR^2$
- D** $\frac{109}{128} MR^2$



Ans. (C)



JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. A parallel plate capacitor with plate separation 5mm is Charged by a battery. On introducing a mica sheet of 2 mm and maintaining the connections of the plates with the terminals of the battery, it is found that it draws 25% more charge from the battery. The dielectric constant of mica is __

- A** 1.0
- B** 2.0
- C** 1.5
- D** 2.5

Ans. (B)



JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. When an unpolarized light falls at a particular angle on a glass plate (placed in air). It is observed that reflected beam is completely polarized the angle of refracted beam with respect to the normal is _____
 $\tan^{-1}(1.52) = 57.3^0$, "refractive index of air and glass 1.00 and 1.52

- A** 57.3
- B** 32.7
- C** 30
- D** 60

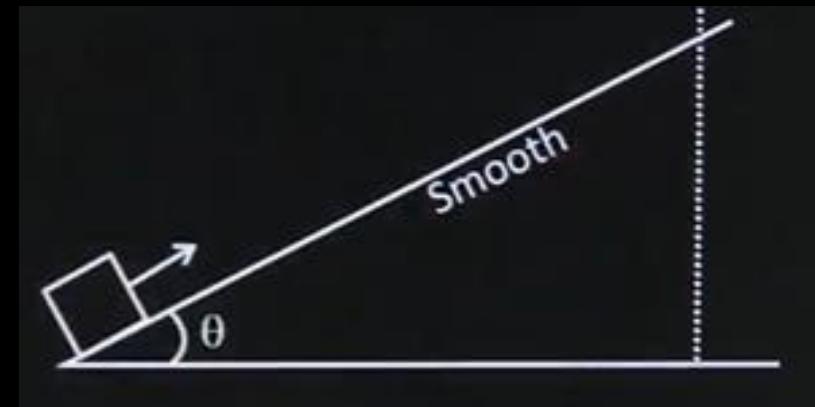
Ans. (B)



JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. A body is projected up the smooth incline plane having angle of inclination θ with the horizontal as shown in the figure. Find the distance covered before stopping

- A** $\frac{u^2}{2g \cos \theta}$
- B** $\frac{u^2}{2g}$
- C** $\frac{u^2}{2g \sin \theta}$
- D** $\frac{u^2}{2g \tan \theta}$



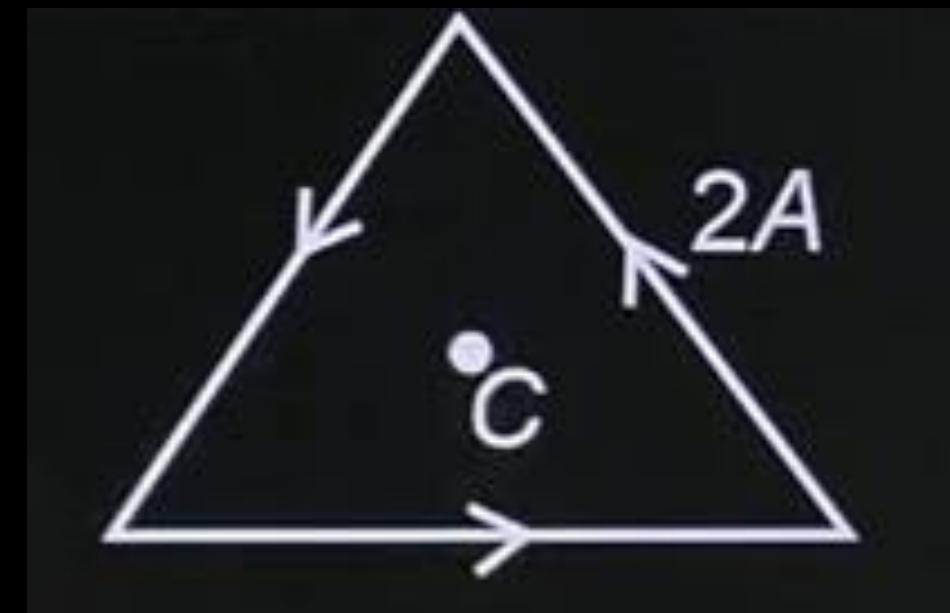
Ans. (C)



JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. In equilateral triangular frame, then is current of $2A$. The side of frame is $4\sqrt{3}$ cm. Magnetic field at center C is

- A** $30\sqrt{3} \mu T$
- B** $10\sqrt{3} \mu T$
- C** $3\sqrt{10} \mu T$
- D** $10\sqrt{10} \mu T$



Ans. (A)



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#Q. A prism of angle 75° and refractive index $\sqrt{3}$ is coated with thin film of refractive index 1.5 only at the back exit surface. To get total internal reflection (T/R) at the back exit surface, the incident angle must be _____
($\sin 15^\circ = 0.25$, $\sin 25^\circ = 0.43$)

- A** $\angle 15^\circ$
- B** 15°
- C** $> 25^\circ$
- D** b/w 15° and 20°

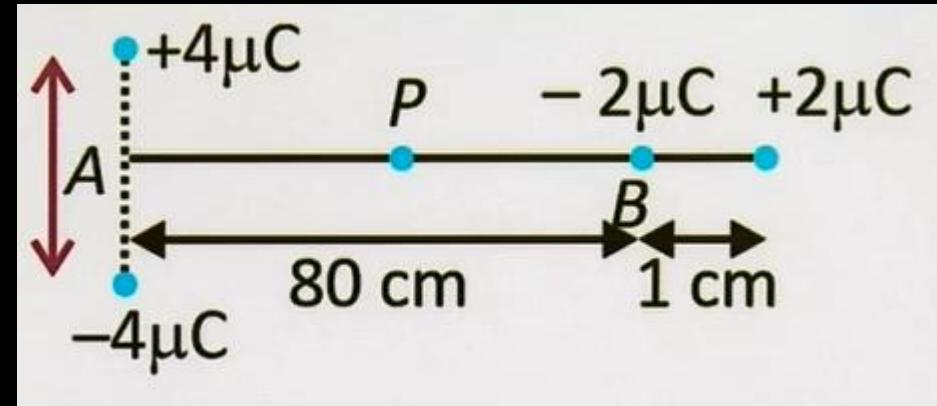
Ans. (C)



JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. Four chargers are kept as shown in the figure. Find magnitude of electric field at point P. P is mid-point of line AB.

- A 180 kV/m
- B 270 kV/m
- C $\frac{45\sqrt{5}}{8} \text{ kV/m}$
- D $60\sqrt{3} \text{ kV/m}$



Ans. (C)



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#Q. One mole of diatomic gas is expanding isothermally from V to $2V$ at 27°C . If the magnitude of work done by the gas in this case is same as the work done in adiabatic process where initial temperature is 27°C and final temperature is $T^\circ\text{C}$. Find the value of T .

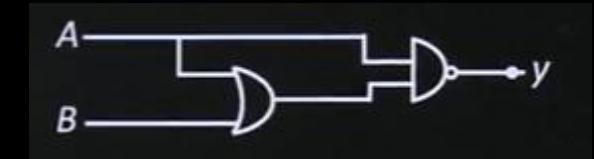
- A** -37°C
- B** -57°C
- C** -35°C
- D** 0°C

Ans. (B)



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#Q. Find the truth table for the given circuit.



A

A	B	Y
0	0	1
0	1	1
1	0	0
1	1	0

B

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

C

A	B	Y
0	0	1
0	1	0
1	0	1
1	1	0

D

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	1

Ans. (A)



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#Q. An air bubble is moving upward from the bottom of lake having temperature 17°C . At the top the temperature of lake (and bubble) is 27°C . Assume no significant change in the density of the lake water upto its depth of 5m find the ratio of volume at top to bottom of the bubble.

- A** 1.25
- B** 1.75
- C** 1.55
- D** 1.85

Ans. (C)



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#Q. A metallic sphere of diameter 2 mm and density 10.5 g/cm^3 is dropped in glycerin having viscosity 10 poise and density 1.5 g/cm^3 . The terminal velocity attained by the sphere is ____ cm/s.

$$\pi = \frac{22}{7}, g = 10 \text{ m/s}^2$$

- A** 2.0
- B** 1.0
- C** 1.5
- D** 3.0

Ans. (A)



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#Q. EMF of two cells are measured using potentiometer method. If the balance lengths are 200 cm and 150 cm respectively. If the least count is 1 cm then find % error in calculating $\frac{E_1}{E_2}$

- A** 1.2%
- B** 1.16%
- C** 0.50%
- D** 0.75%

Ans. (B)



JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. A man jump from a plane, after 2 seconds he open parasuits due to which if he retarded with 3 m/s^2 When the man is at 10 m height from ground its speed is 5 m/s. Find height of the plane when he jumped.

- A** 92.5 m
- B** 90 m
- C** 85 m
- D** 0.75 %

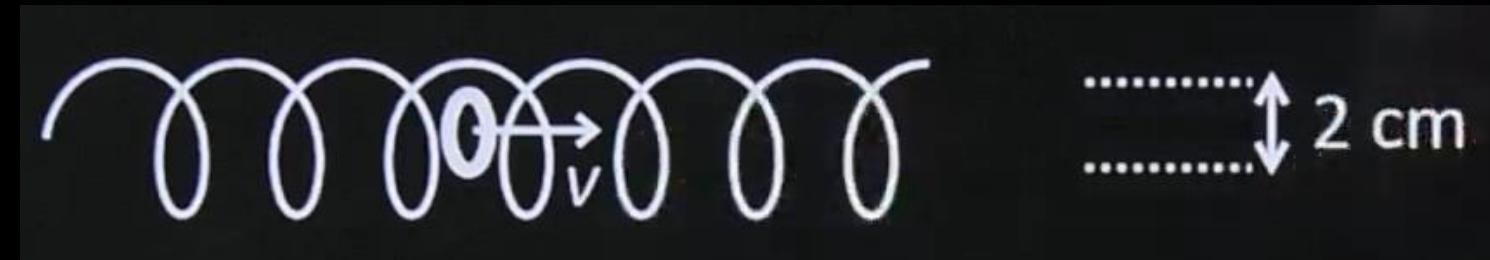
Ans. (A)



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#Q. In a long solenoid of cross-section radius of 2 cm and of 500/cm turns density. A ring moves with constant speed 10 cm/s with axis coinciding with a axes of solenoid. The radius and resistance of ring is 1 cm and 10 Ω . Find heat dissipated in ring while it transverse 10 cm of distance. The current

- A** $300 \mu J$
- B** $200 \mu J$
- C** $700 \mu J$
- D** $850 \mu J$



Ans. (B)