



# PAPER SOLUTION

From Meerut

**JEE  
MAIN**

**JAN**

**23**

**SHIFT**

**2<sup>nd</sup>**

**2026**

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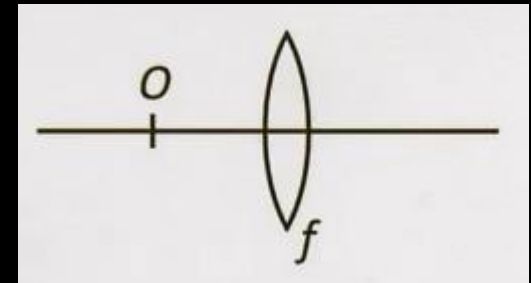
Founder and CEO

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

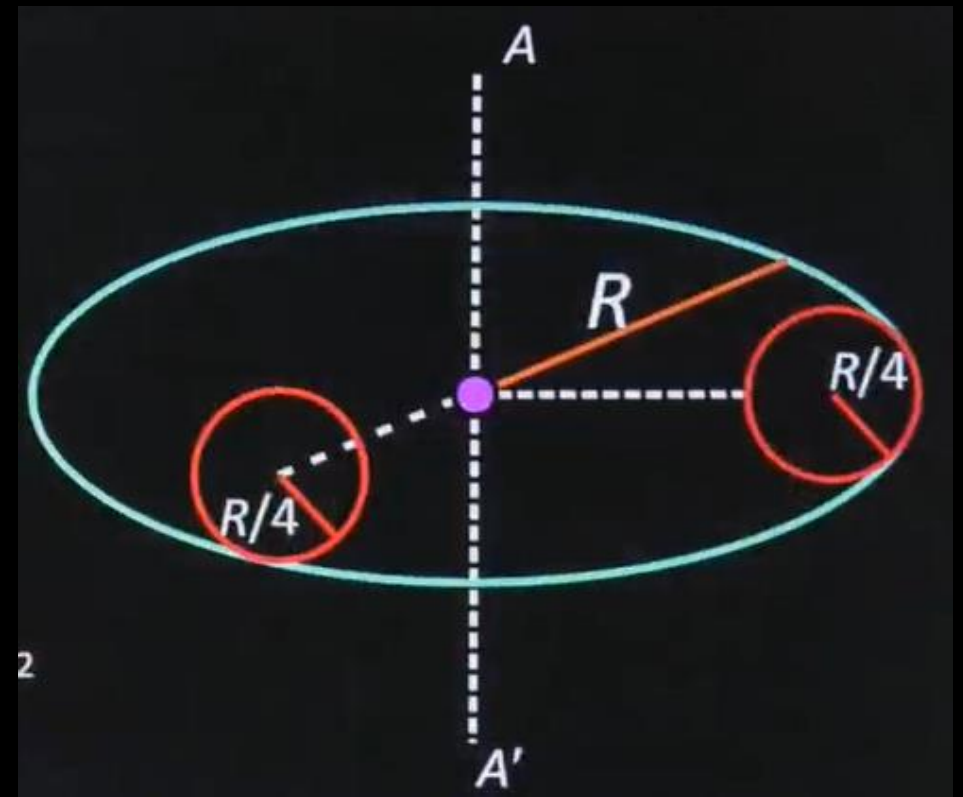
**Ans. (D)**



# 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 \_\_\_\_  
 $\tan^{-1}(1.52) = 57.3^\circ$ , "refractive index of air and glass 1.00 and 1.52

**A** 57.3

**B** 32.7

**C** 30

**D** 60

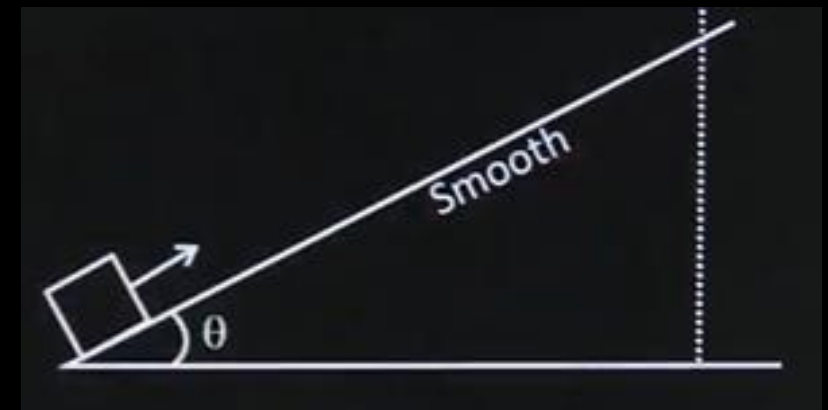
**Ans. (B)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#Q.** A body is projected up the smooth incline plane having angle of inclination  $\theta$  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**  $\frac{u^2}{2g \tan \theta}$



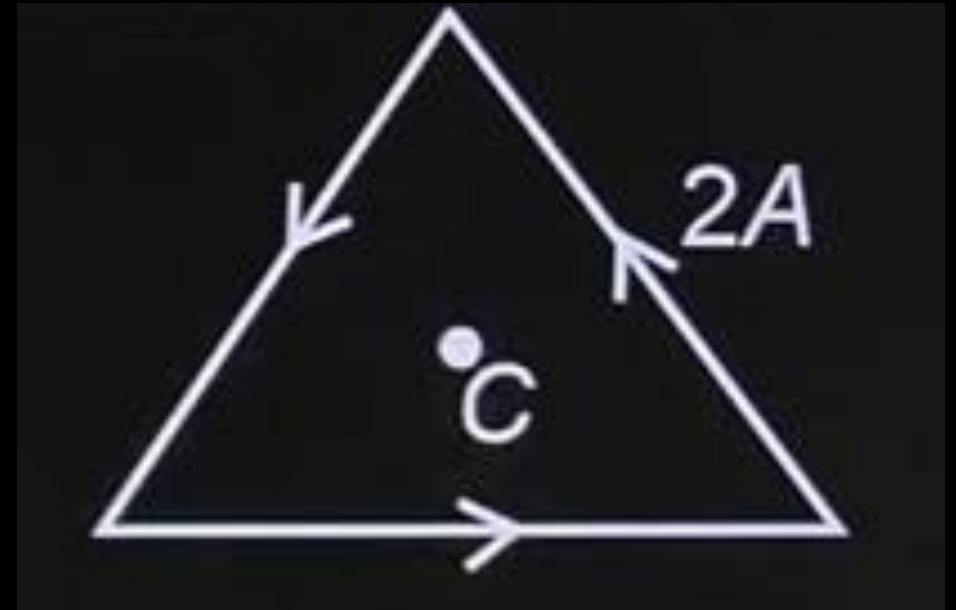
**Ans. (C)**



# 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)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#Q.** A prism of angle  $75^\circ$  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**  $15^\circ$
- C**  $> 25^\circ$
- D** *b/w*  $15^\circ$  and  $20^\circ$

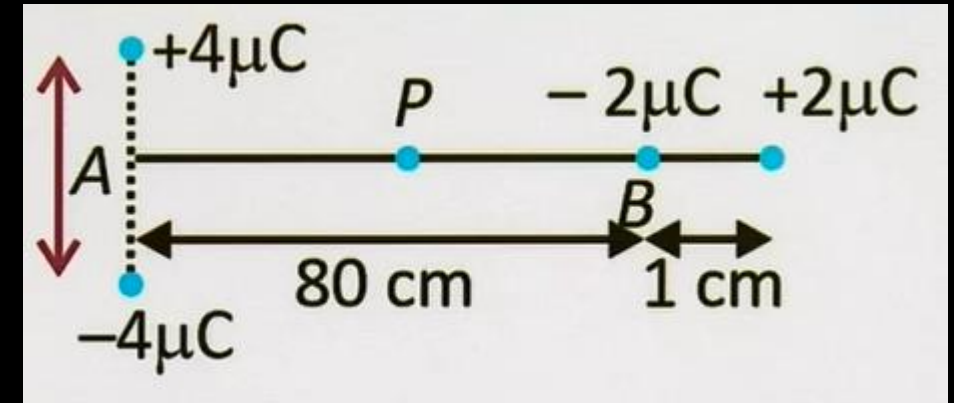
**Ans. (C)**





# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

**#Q.** Four charges 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**  $\frac{45\sqrt{5}}{8}$  kV/m
- D**  $60\sqrt{3}$  kV/m

**Ans. (C)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#Q.** One mole of diatomic gas is expanding isothermally from  $V$  to  $2V$  at  $27^\circ\text{C}$ . 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  $27^\circ\text{C}$  and final temperature is  $T^\circ\text{C}$ . Find the value of  $T$ .

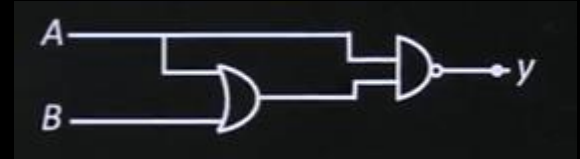
- A**  $-37^\circ\text{C}$
- B**  $-57^\circ\text{C}$
- C**  $-35^\circ\text{C}$
- D**  $0^\circ\text{C}$

**Ans. (B)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#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)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#Q.** An air bubble is moving upward from the bottom of lake having temperature  $17^{\circ}\text{C}$ . At the top the temperature of lake (and bubble) is  $27^{\circ}\text{C}$ . 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)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#Q.** A metallic sphere of diameter 2 mm and density  $10.5 \text{ g/cm}^3$  is dropped in glycerin having viscosity 10 poise and density  $1.5 \text{ g/cm}^3$ . 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)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#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  $3 \text{ m/s}^2$  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 %

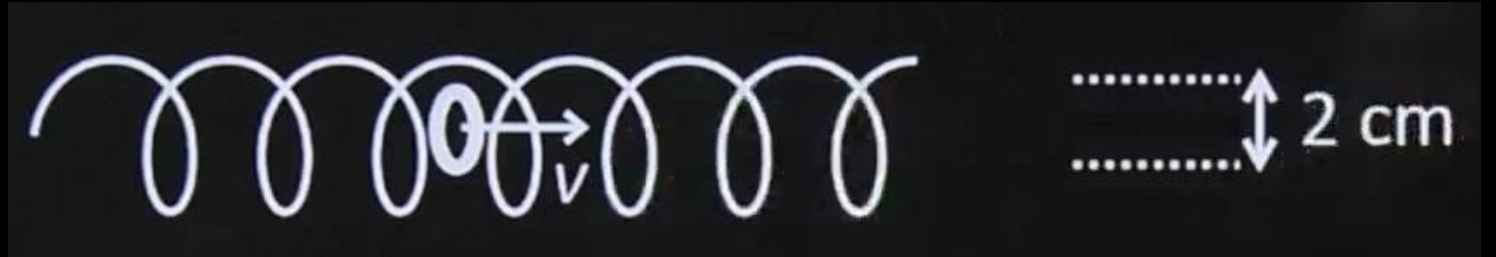
**Ans. (A)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#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  $10\ \Omega$ . 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)**