

LEVEL -8

PHYSICS

FINAL TERM REVISION WORKSHEET -1

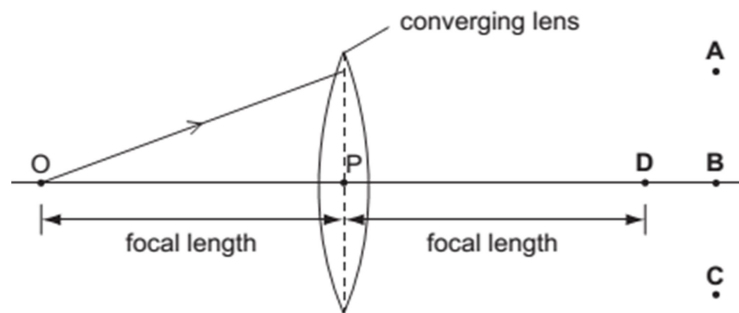
TOPIC : CHAPTER -13

LIGHT

SECTION A

MULTIPLE CHOICE QUESTIONS

1. In the diagram, the distance OP is the focal length of the converging lens. One ray of light from O is shown. Through which point will this ray pass, after refraction by the lens?



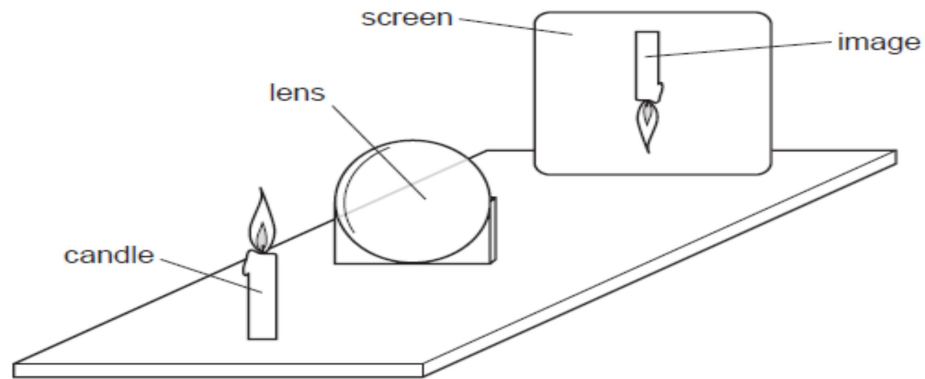
2. The diagram shows the image of a clock in a plane mirror.



What time is shown in the clock?

- A 02:25 B 02:35 C 09:25 D 09:35

3. A thin converging lens is used to produce, a focused image of a candle on a screen.

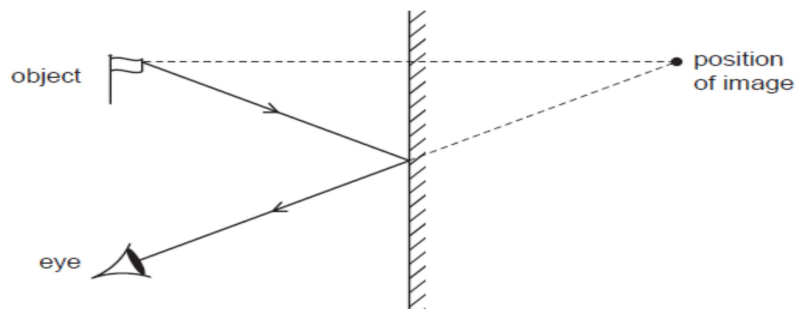


Various focused images are produced on the screen by moving the lens and the screen backwards and forwards.

Which statement is **always** correct?

- A The image is at the principal focus (focal point) of the lens.
- B The image is bigger than the object.
- C The image is closer to the lens than the object is.
- D The image is inverted.

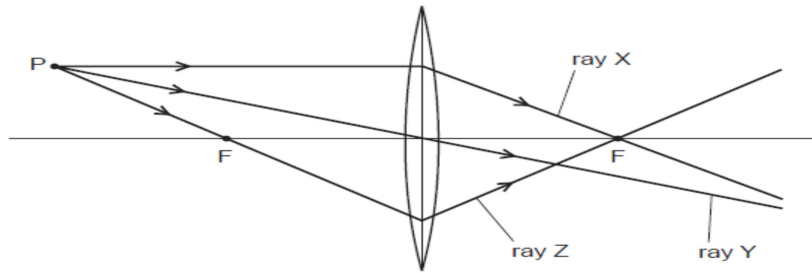
4. The image formed by a plane mirror is upright.



What are the other characteristics of the image?

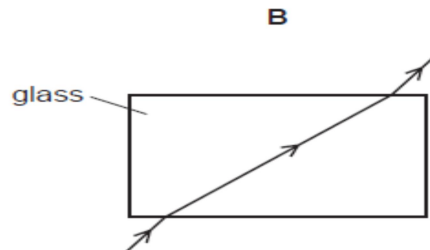
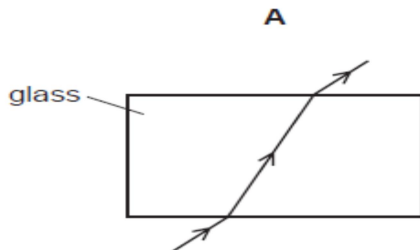
	laterally inverted (left to right)	magnified (larger than the object)	virtual
A	no	yes	yes
B	yes	no	no
C	yes	no	yes
D	yes	yes	no

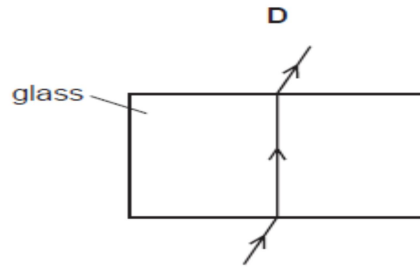
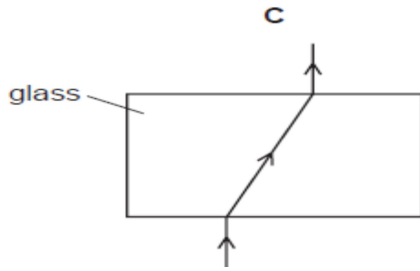
5. A student draws three rays of light from point P through a converging lens. Each point labeled F is a principal focus of the lens.



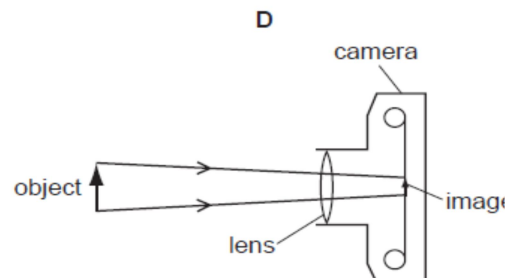
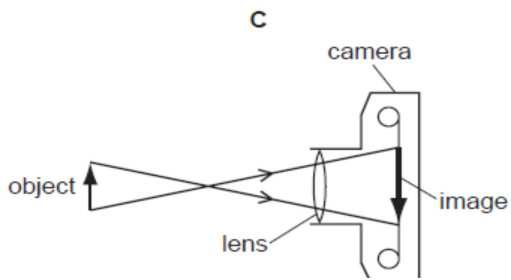
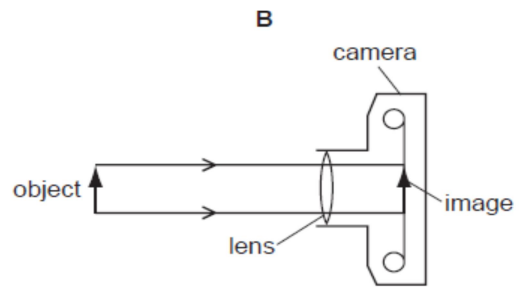
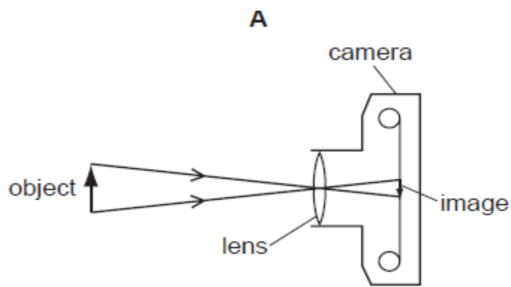
Which of the rays are drawn correctly?

- A** ray Y only
 - B** ray Z only
 - C** ray X and ray Y
 - D** ray X and ray Z
6. Which diagram shows how a ray of light could pass through a glass block in air?

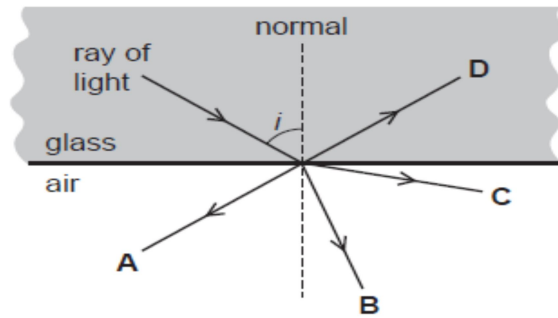




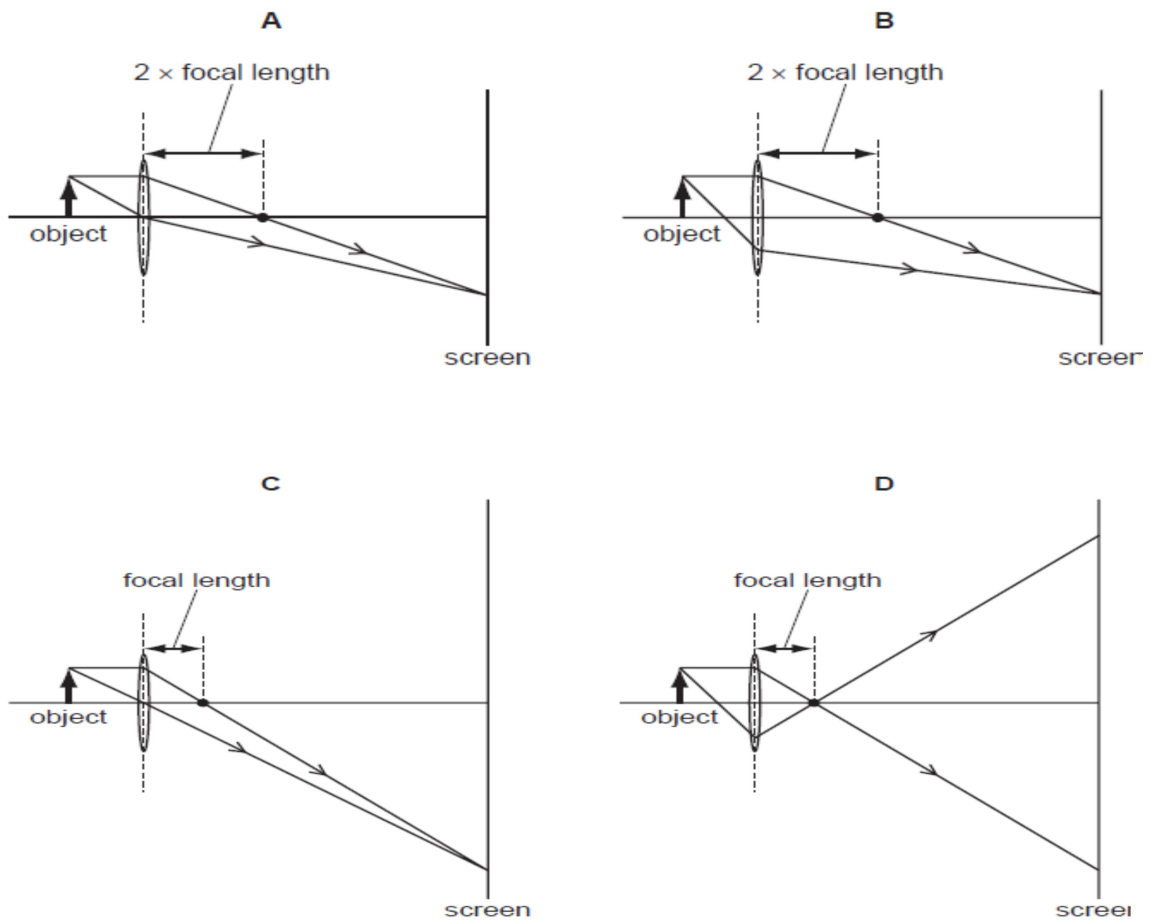
7. Which diagram correctly represents rays of light passing through a converging lens in a camera?



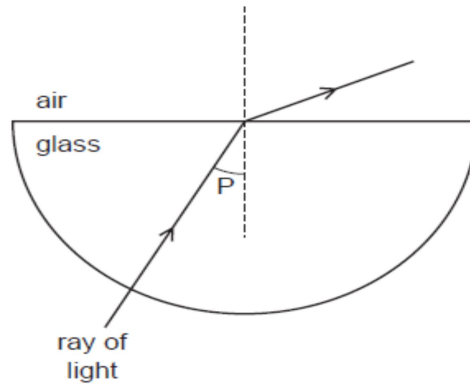
8. Which arrow correctly shows the direction of the ray after it leaves the edge of the glass?



9. Which diagram shows how an image of an object is formed on a screen by a converging lens?



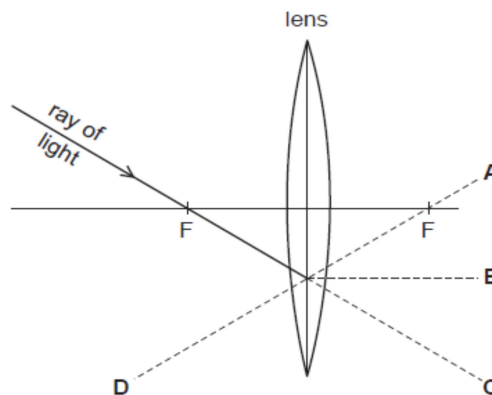
10. The diagram shows a ray of light passing through a semicircular glass block into air.



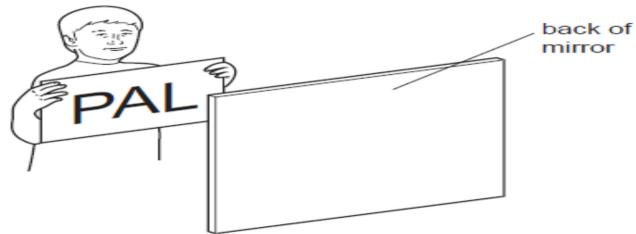
Which row gives the correct name for angle P and states how angle P compares with critical angle?

	name of angle P	angle P compared with the critical angle
A	angle of incidence	larger than the critical angle
B	angle of incidence	smaller than the critical angle
C	angle of refraction	larger than the critical angle
D	angle of refraction	smaller than the critical angle

11. The diagram shows the path of a ray of light passing through a principal focus F of a lens. Which broken line shows the direction of the ray after it leaves the lens?



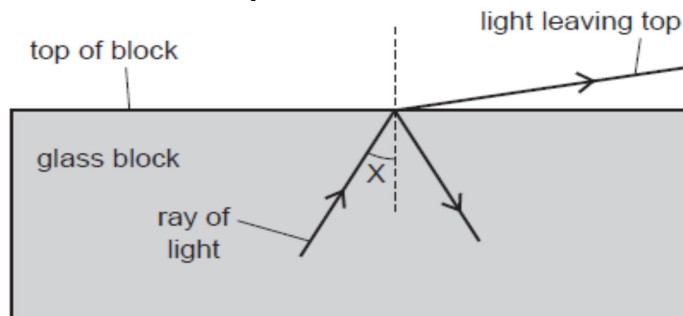
12. A piece of paper has 'PAL' written on it. A student holds the paper in front of a plane mirror.



What does the student see?



13. A scientist is trying to direct a ray of light through a glass block without any light leaving the top of the block. However, some light does leave the top.



The scientist changes angle X and stops the ray of light leaving the top. Which row in the table describes the change to angle X and the name of the effect produced?

	change to angle X	name of effect produced
A	decrease	total internal reflection
B	decrease	total internal refraction
C	increase	total internal reflection
D	increase	total internal refraction

14. Rays of light enter and leave a box.



What could be inside the box to make the rays behave as shown?

- A. a converging lens**
- B. a parallel-sided glass block**
- C. a plane mirror**
- D. a triangular prism**