



SSLC PRE MODEL EXAMINATION – 2023

PHYSICS

Total Score :- 20

Time :- 45 minutes

(English)

Answer any TWO from 1 to 3(1 SCORE)

1. $V_S < V_P$ is related with which transformer ?
2. Give the name of the mirror which is used as rear view mirror in vehicles
3. Optical fibre cable is working underphenomenon of light

Answer any TWO from 4 to 6 (2 SCORE)

4. Find the number of images formed by two plane mirrors which are placed at an angle of 120°
5. Find the power of convex lens of focal length 50 cm
6. Correct the statement if wrong

Velocity of light through a medium increases when refractive index of the medium increases

Answer any TWO from 7 to 9 (3 SCORE)

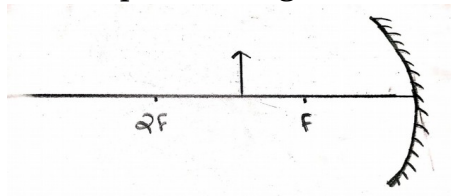
7. Match the following

A	B	C
Plane mirror	Converges distant rays to the principal focus	Used as rear view mirror
Convex mirror	Image is erected ,virtual and same size as that of object	Used in headlight of vehicles
Concave mirror	Image is diminished, erected and virtual	For observing the face

8.a. Draw the graphical representation of emf obtained from battery

b. write the differences of the above graph from the graphical representation of emf obtained from AC generator

9.a. complete the figure



b. If the position of the object is shifted to F, will the image be formed? Validate your answer

Answer any TWO from 10 to 12 (4 SCORE)

10. a.If 5 CFL of 40w runs for 5 hours a day in a house, what is the electricity consumption in a month?

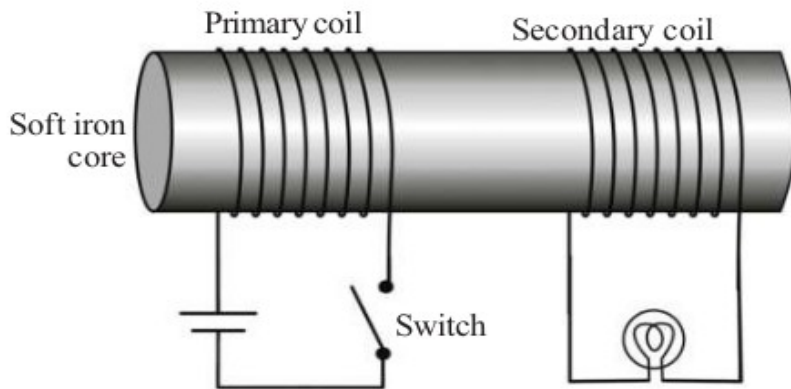
b.If we replace all CFL by LED bulb of 3 W, what is the reduction in electricity consumption per month?

11.a.write the lens equation

b.When an object is placed 30 cm in front of a convex lens, a real image is obtained 60 cm from the lens. What is the focal length of this lens?

c.calculate the magnification

12.



a.Does the bulb light up when the switch is turned on?

b.Does the bulb light up if the switch is left on?

c.Does the bulb light up when the switch is turned off?

d.What must be done to make the bulb glow continuously?

e.By what name is this phenomenon known? Explain