SSLC PRE MODEL EXAMINATION-2023

PHYSICS   Total Score:**20**
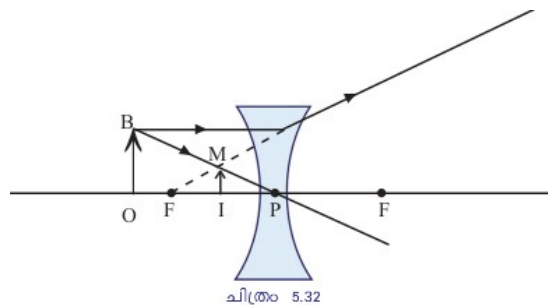
Time:45 minutes   (ENGLISH)

Answer any TWO from 1 to 3(1 SCORE)

(1). Read the following and correct it if you find any mistake

"Inductor is a device that working under mutual induction phenomenon

(2)The magnification produced by a mirror is +1, What does it mean?

(3) What is the refractive index of air?

Answer any TWO from 4 to 6 (2 SCORE)

(4) Write two possibilities to flow excess current through household circuits ?

(5) Write two situations in daily life to experience refraction ?

(6) Observe the following figure and write two features of image?
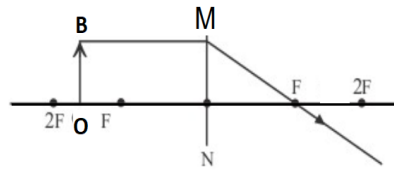

ചിത്രം 5.32

Answer any TWO from 7 to 9 (3 SCORE)

(7) Calculate the distance to image when an object is placed 20cm in front of aconcave mirror of 15cm?

(8)Refractive index of media glass and water are given in the table below .

Medium	Refractive index
Glass	3/2
Water	4/3

Velocity through water is $2.25 \times 10^{8} m/s$

(a) Calculate the velocity of light through vaccum?

(b) Calculate the velocity of light through glass?

(**9**)   MN represents a lens.

(a)Identify the type of lens?

(b)What are the features of images?

(c) Complete the above figure with the lens you identified?

Answer any TWO from 10 to 12 (4 SCORE)

10)A dental doctor is using a lens of focal length 8cm .

(a) what is the minimum distance between the tooth an lens to see the tooth clearly? Give reason .

(b)Name the type of lens used by the doctor.

(11) Two coils are wound over a soft iron core side by side .one is connected to a cell and battery in series and the second coil is connected to a bulb.

   (a) What do you observe when the switch is turn on and off simeltaniously?

   (b) what do you observe when the switch is continuously on?

   (c) At what time the flux change occurs ,Write two situations when an emf is

   induced in the second coil ?

(12) An object of height 3cm is placed 30cm away from a convex lens of focal length.

(a)Calculate the image distance?

(b)Write the features of image formed?

(c)Calculate the height of image?

****