

MARTHOMA RESIDENTIAL SCHOOL, KUTTAPUZHA
ANNUAL EXAMINATION, MARCH 2018

CLASS VII

PHYSICS

MARKS:80

TIME:2hrs

I Answer the following in one statement(10x1)

1. What is the commercial unit of electricity?
2. State whether speed is a scalar or vector quantity
3. On which effect of electric current does a fuse wire function
4. What will happen to the beam of light which falls on a transparent surface
5. What will be the acceleration of a body moving with a uniform velocity?
7. What kind of energy transfer takes place in a solar cell
8. State the direction of flow of electric current in a circuit
9. Why are dry cells called so?
10. Which waves are used in SONAR

II. Give reason for the following (4x2)

1. Containers of solar cooker painted black
2. An echo is not heard in a small room
3. We cannot see the moon during the time of lunar eclipse
4. Earth wire is connected to the outer part of an electric appliance

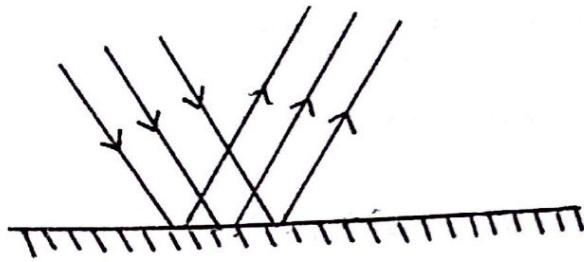
III. Define the following terms (8x1 1/2)

- (a) Convection. (b) Audible sound (c) Electroplating (d) See breeze
(e) Lateral inversion (f) Shadow (g) Electromagnet (h) Point of incidence

IV. Answer the following questions in short(10x2)

1. Why does air rise on heating?
2. State the role of ventilations in houses
3. Of what material is a fuse wire made? Why is it used in circuits?
4. What do you mean by mechanical effect of electric current?
5. What are the conditions for conduction of heat?
6. How does a real image form? Write two properties of real image
7. Draw an electric circuit with components switch, ammeter, cell and Bulb

8. Identify the type of reflection and mirror used in the following diagram



9. Classify the following materials as transparent, translucent and opaque

Glass, metals, mica, pure water

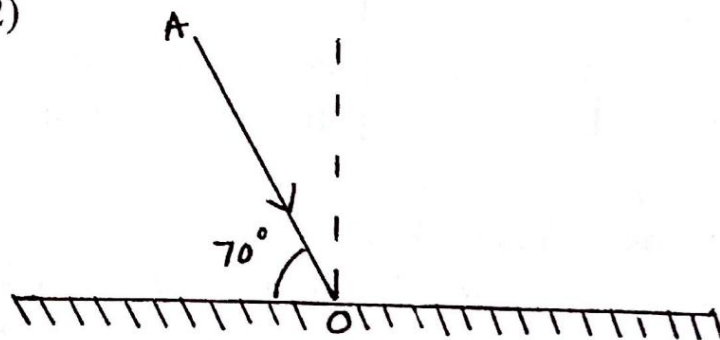
10. How is sound propagated through air?

V. Differentiate the following (5x2)

1. Ray of light and beam of light
2. Series and parallel circuit
3. Uniform and non uniform motion
4. Acceleration and retardation
5. Luminous and non luminous body

VI. Solve the following

1. Complete the ray diagram given below. Name and find the angle of reflection (2)



2. A CFL of 15 W is switched on for 10 hours per day. How much electrical energy is consumed in the month of June. How much would it cost if Rs. 5 for each unit(2)

3. A car starts from rest and acquired a maximum velocity 40km/hr in 10s. Find the acceleration of the car (2)

4. A body vibrates 100 times in a second. Find its frequency and time Period (2)

VII. Answer the following questions in detail

1. Write down any three hazards of electricity and precautions to be taken while using electricity. (3)

2. What is a periscope? State the principle and uses of a periscope(3)

3. Explain the formation of solar eclipse with a neat labelled diagram(4)