

MAR THOMA RESIDENTIAL SCHOOL THIRUVALLA  
SECOND TERMINAL EXAMINATION 2019-20

Class: VII

PHYSICS

Marks: 80  
Time : 2hrs

(1\*8=8)

I. Fill in the blanks:

- The speed of light in air is .....
- ..... Is the fastest mode of transfer of heat .
- The boiling point of water and freezing point of water on Fahrenheit scale is ..... to ..... respectively.
- The human body produce sound with the help of .....
- The phenomenon in which the right side of the object appears to be on the left side of its image in a mirror is called .....
- Sound requires a ..... to travel.
- The SI unit of frequency is .....
- Yellow – Red = .....

II. Define the following:

- Superficial expansion
- Vibratory motion
- Contraction
- Periscope
- Membrane Instrument
- Sublimation
- Colour subtraction
- Convection
- Reflection of light
- Thermal equilibrium

(1\*10=10)

III. Differentiate between: (One points each)

- Angle of incidence & Angle of reflection
- Primary colours & Secondary colours
- Sea breeze & Land breeze
- Point of incidence & Plane of incidence
- Good conductors & Bad conductors

(2\*5=10)

IV. Write true or false against the following statements.

- The unit of frequency is Hz.
- Harmonium, Guitar are the reed instruments.
- The three primary colours are red, green and yellow.
- Conduction can happen in vacuum.
- The process of conversion of liquid into gas is called sublimation.

(1\*5=5)

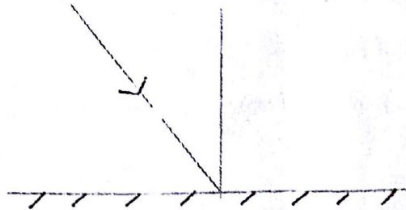
**V. Answer the following questions:**

a) i). State the two laws of reflection .

ii) Copy the diagram given below and draw its reflected ray. Also find

i. angle of reflection .

ii. angle between incident ray and the reflected ray



iii) What are the factors determining the colour of an object?

iv) What are the characteristics of image formed by a plane mirror?

v) Explain how can we get the secondary colours by combining proper primary colours?

vi) How rainbow is formed?

b) i) Write the mathematical relation between Celsius scale and Fahrenheit scale?

ii) What do you mean by anomalous expansion of water?

iii) The normal body temperature in Celsius scale is  $32^{\circ}\text{C}$  . Calculate it in kelvin scale and Fahrenheit scale.

iv) Write any three applications of radiation in daily life situations?

c) i) Convert  $54^{\circ}\text{C}$  in Kelvin scale

ii) Explain conduction using molecular theory.

iii) Define the three methods of heat transfer .

iv) Draw a labelled diagram of thermos flask. Describe its working .

d) i) Write the mathematical relation between frequency and time period ?

ii) What is a sound? How is it produced?

iii) Name four groups of musical instruments. Write two examples of each .

iv) i. Define oscillation , frequency, wavelength, time period and amplitude of a wave.

ii. Draw a wave and mark amplitude and wavelength.