FUSCO'S SCHOOL (ICSE)
Indiranagar, Bangalore
Half Yearly Examination 2016-17
Subject : PHYSICS

Class: VII   Marks:80

I.   Fill in the blanks   **(10)**

1. The SI unit of mass is ....
2. The SI unit of weight is......................
3. The SI unit of density is ....
4. The mass is measured accurately by ....balance
5. The distance travelled in a unit time in a specified direction is called................
6. The negative acceleration is called.....................
7. Solids expand ....than liquids
8. A device used for the measurement of temperature is ....
9. The SI unit of heat is ....
10. The most important naturally occurring source of heat is ....

II.   Choose the correct answer   **[10]**

1. The process of heat for that involves the movement of a liquid or a gas is called ....(convection/conduction)
2.   When a substance is heated its density ....(increases / decreases)
3. A hydrometer is used to measure ....(density/mass)
4. Mass is a ....(scalar/vector) quantity
5. The bird flying in the sky possesses the motion called............(random/oscillatory)
6. Heat is a form of................(energy/force)
7. Sound cannot travel through......................(solid/vacuum)
8. Echo is a type of ....(reflected/refracted) sound
9. Sound is praoduced when objects.......................(vibrate/displaced)
10. The unit of frequency of sound is..............(second/hertz)

III.   Match the following   **[5]**

1.Acceleration	-	kelvin
2. Velocity	-	m/s^2
3. Displacement	-	newton
4. Force	-	m/s
5.Temperature	-	metre

b) Define the following .   **[5]**

i) Acceleration   ii)velocity

iii) Ultrasonic sound   iv)sonic sound

v)Infrasonic sound

IV. Give reason   [5x2=10]

    1.Between railway tracks a small gap is left

    2.A glass stopper , when it gets struck to the neck of the bottle , is heated first in order to open it.

    ,3. If you want to hear a train approaching from far away, why is it more scientific to put the ears to the track

    4.Suppose you are on a pleasure trip to the moon. A hammer drops out of your hand on a metal plate. Will you hear the bang?why?

    5. Why are cooking vessels blackened at the bottom?

SECTION   B

V .Write any two differences between the following   [5x2=10]

    a)Heat and temperature

    b)Evaporation and boiling

    c)speed and velocity

    d)High pitch sound and low pitch sound

    e)Musical sound and noise

VI. a) i)Define mass. ii)Why do we keep a physical balance in the laboratory?   [3]

    b) i) Define density. Why does an iron needle sink but an iron ship float in water? [3]

    c)i)Define weight. State its SI unit. ii)differentiate between mass and weight by giving any two examples   [4]

VII. a) Define conduction, convection and radiation   [3]

    b) Draw a neat labelled diagram of a thermos flask   [3]

    c) Explain how the three modes of transfer of heat is prevented in thermos flask[4]

VIII. a) Draw neat labelled diagrams of three scales of thermometers.   [3]

    b) Convert 100^0C into Fahrenheit scale and Kelvin scale   [3]

    c)i)Convert 36km/h to m/s

    ii) Calculate the mass of air in a room of length, breadth, and height 6m, 5m, and 4m, respectively. The density of air is 1.2 kg/m^3.   [4]

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