ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Subject- Physics   Worksheet- 22   Class – IX
Date -22.04.2020
Chapter- Pressure in liquids

- **Q Answer the following questions   (MCQ) :**   **(1×15):**

Q1. SI unit of pressure is

    A. Ohms
    B. Pascal
    C. Joules
    D. Watts

Q2: Air is result of

    A. Magnetic force
    B. electric force
    C. contact force
    D. gravitational force

Q3: A girl of mass 40 kg wears heels with an area of 1 cm² in contact with the ground, the pressure on the ground is (take earth's gravitational field strength)

    A. 4×10^{-5}
    B. 4×10^{4}
    C. 4×10^{5}
    D. 40×10^{5}

Q4: In symbols, pressure is equal to

    A. A/F, where A is area and F is force
    B. F/A, where F is force and A is area
    C. d/F, where d is distance and F is force

D. F/d, where F is force and d is distance

Q5: The pair of two hollow cups is termed as

A. Galileo hemispheres
B. Isaac hemispheres
C. Albert hemispheres
D. Magdeburg hemispheres

Q6. The formula for pressure in liquids is

A. p = hPg, where h is height, P is density and g is gravity
B. p = Pg/h, where P is density, g is gravity and is height
C. p = hg/P, where h is height, g is gravity and P is density
D. p = hP/g, where h is height, P is density and g is gravity

Q7.ascal is not used in terms of

A. atmospheric pressure
B. pressure in liquids
C. pressure in solids
D. any kind of pressure

Q8: Atmospheric pressure is calculated by the

A. height of water column in barometer
B. height of mercury column in barometer
C. height of lime column in the barometer
D. height of oil column in the barometer

Q9. Amount of pressure of liquid increases with

A. volume
B. base area

C. mass
D. depth

Q10: Pressure in liquids is defined by the formula

A. p = h/ρg
B. p = ρ/hg
C. p = g/ρh
D. p = ρPg

Q11: In a typical hydraulic press, a force of 20 N is exerted on the small piston of area 0.050 m². The force exerted by the large piston on the load if it has an area of 0.50 m² will be

A. 200 N
B. 100 N
C. 50 N
D. 10 N

Q12. rectangle-shaped open-to-sky tank of water has a length of 2 m and a width of 1 m. If the atmospheric pressure is assumed to be 100 kPa and thickness of the tank walls is assumed to be negligible, force exerted by the atmosphere on the surface of water would be

A. 20 kN
B. 50 kN
C. 100 kN
D. 200 kN

Q13: In physics, pressure is defined as

A. P = A × F
B. P = A/F
C. P = F/A
D. P = F/d

Q14: In a weather map, the lines joining all those regions with the same atmospheric pressure are called

A. Bars
B. Millibars
C. Isobars
D. None of the above

Q15: 1 mmHg is equal to

A. 1 atm
B. 1.013×10^5 Pa
C. 133.29 atm
D. 1.316×10^{-3} atm   Teacher- Piyali Halder