EXERCISE – II OLYMPIAD

Q.1 If a given force is applied on a smaller area of contact the pressure exerted by it
(A) decreases
(B) increases
(C) does not change
(D) none of these

Q.2 A camel can walk/run in deserts very easily as compared to horse, donkey etc., because is –
(A) feet are smaller
(B) weight is lesser
(C) feet are broader
(D) heavier body

Q.3 The SI unit of pressure is
(A) atmosphere (B) pascal
(C) cm of mercury (D) mm of mercury

Q.4 Pressure is defined as
(A) force
(B) force × distance
(C) force per unit area
(D) force × area

Q.5 Pressure can be measured in the units of
(A) Newton/m^2 (B) Pascal
(C) Both A & B (D) none of these

Q.6 Approximate value of pressure exerted by air is .....
(A) 1 kilo Pascal
(B) 10 kilo Pascal
(C) 100 kilo Pascal
(D) none of these

Q.7 With the depth of a liquid, exerted pressure.....
(A) decreases (B) ceases
(C) increases (D) no change

Q.8 At high altitudes the air pressure is ..... than at sea level
(A) less (B) more
(C) same (D) can't say

Q.9 The substances that do not have a fixed shape and can flow are commonly called....
(A) Gases
(B) Liquids
(C) both (a) and (b)
(D) none of these

Q.10 The pressure applied on a body depends on
(A) Force
(B) Mass
(C) Both force and mass
(D) Both force and area

Q.11 You have two nails, one with sharp end and other with blunt end. If you apply equal force on each, the nail that will be hammered first will be
(A) The nail with pointed
(B) The nail with blunt end
(C) Both will be hammered in same time
(D) None of these can be hammered

Q.12 The formula for pressure is
(A) force × area (B) force / area
(C) Area / force (D) none of these

Q.13 The pressure increases with
(A) Decreasing depth
(B) Increasing depth
(C) Depth has no effect on pressure
(D) None of these

Q.14 The instrument used to measure the pressure is
(A) Hydrometer (B) Manometer
(C) Galvanometer (D) Anemometer

Q.15 Which of the following is not a unit of pressure?
(A) bar (B) Newton
(C) atm (D) Pascal

Q.16 Deep-sea diving vessels have to withstand pressure from the crushing effect of sea water acting
(A) upwards (B) downwards
(C) sideways (D) in all directions

Q.17 Which among the following will exert maxiumum pressure when pushed with the same amount of force ?
(A) An eraser of area 2 cm^2
(B) A shrapened pencil tip
(C) The blunt end of a pencil
(D) The rear portion of closed safely pin

Q.18 How does pressure vary as we move from sea level to the mountain top ?
(A) Decreases
(B) Increases
(C) Increases upto a few kilometre and then decreases
(D) Decreases upto a few kilometres and then increases

Q.19 At sea level, atmospheric pressure is about
(A) 10^3 Pa (B) 10^4 Pa
(C) 10^5 Pa (D) none of these

Q.20 Pascal is used as a unit for
(A) thrust (B) weight
(C) pressure (D) work

Q.21 SI unit of thrust is
(A) N (B) Kgm^{-3}
(C) Nm^{-2} (D) Joule

Q.22 The force divided by area on which it acts is called
(A) pressure (B) weight
(C) thrust (D) work

Q.23 1 Pa equals
(A) 10 Nm^{-2} (B) 1 Nm^{-2}
(C) 1/10 Nm^{-2} (D) 10^5 Nm^{-2}

Q.24 The unit of pressure used for meterological purpose is called
(A) a bar (B) pascal
(C) kg wt. (D) atm

Q.25 A high altitudes the air pressure (as compared to pressure o the surface of the Earth) is
(A) less (B) more
(C) same (D) none of these

Q.26 The pressure in a liquid at greater depth is
(A) smaller (B) greater
(C) same (D) none of these

Q.27 The pressure at any point in a liquid at rest depends only on the depth and on the ..... of the liquid.
(A) density (B) weight
(C) colour (D) none of these

ANSWER KEY

1.	B	2.	C	3.	B
4.	C	5.	C	6.	C
7.	C	8.	A	9.	C
10.	D	11.	A	12.	B
13.	B	14.	B	15.	B
16.	D	17.	B	18.	A
19.	C	20.	C	21.	A
22.	A	23.	B	24.	A
25.	A	26.	B	27.	A