

Mechanical Properties of Matter

Sr	Questions	Answers Choice
1	A mass of 2 kg is hung by spring which displaces it through 5 cm. the spring constnat.	A. 4000 N/m B. 400 N/m C. 40 N/m D. 4 N/m
2	Divers wear special suites in order to protect them from	A. Low pressure B. Low temperature C. High Temperature D. High Pressure
3	Teh pressure exrted by a aman one the surface of earth will be smaller when be	A. Stands on both feet B. Sits on the ground C. Sleeps on the ground D. Stands on one leg
4	A wire is stretched by a weight w. If the diameter of the wire is reduce dto half of its previous value, the extension will become	A. Four times B. Double C. One fourth D. One half
5	The pressue at any point in a liquid is proportional to.	A. Density of liquid B. Depth of the point below the surface of the liquid C. Acceleration due to gravity D. All of the above
6	SI unti of pressure is.	A. Newton B. Pascal C. Infinite D. Zero
7	In a statinary fluid, the local pressur eof the fluid vary.	A. Neither with depth nor along horizontal direction B. With depth only C. Both with depth and long horizontal direction D. Horizontally only
8	Which amount of water has greater density at room temperature.	A. 1 ton B. 100 g C. 1 kg D. All have same density
9	The most elastic material of the following is.	A. Rubber B. Steel C. Wood D. Glass
10	Materials which does not regain its original hape after remvoal of the load producing deformationare termed as.	A. Rigid materials B. Hook's materials C. Plastic materials D. Elastic materials
11	What is the force exerted by the atmosphere on a rectangular block surface of length 50 cm and breadth 40 cm? The atmospheric pressure is 100 k Pa.	A. 20 kN B. 200 kN C. 100 kN D. 500 kN
12	Which will exert greater pressure.	A. 3 g needle of tip are 1 mm ² B. 4000 kg elephath of total feed area 0.5 m ² C. A girl of mass 40 kg wearing high heel shoes of cross ctional area 0.5 cm ² D. A loaded ship fo mass 2.2×10^7 kg having area 600 mm ²
13	Atmospheric pressur eis commonly measured using a.	A. Hygrometer B. Monometer C. Barometer D. Thermometer
14	Which of the following phsical properties is used in a mercurv thermometer.	A. Colour B. Pressure C. Heat D. Volume

15 When a spring is compressed, what form of energy does it possess.
A. Heat
B. Internal
C. Potential
D. Kinetic

16 Pressure of 1 mm Hg is equal to
A. 1 atm
B. 133.29 atm
C. 1.316×10^{-3} atm
D. 1.31×10^5 atm

17 Pressure of 1000 bars is equivalent to
A. 0.1 kPa
B. 100 kPa
C. 10 kPa
D. 1 kPa

18 What is mass of a liquid of density 50 kg m^{-3} in a container of volume 5 m^3 ?
A. 200 kg
B. 250 kg
C. 225 kg
D. 275 kg

19 The principle of a hydraulic press is based on.
A. Pascal's law
B. Hooke's Law
C. Principle of conservation of energy
D. Principle of conservation of momentum

20 Pressure of liquid in a container increases with
A. Depth
B. Volume
C. Mass
D. Base
