Classedge School

Question Paper

Class _____ Marks : _____

Subject _____ Time : _____

Name: _____

Roll No. : _____ Division : _____

Question 1

The acceleration produced in a body of given mass is directly proportional to the _____.

- A. Shape of the body
- B. Size of the body
- C. Force applied on the body.
- D. Material of the body.

Question 2

The S.I. unit of force is _____.

- A.
- B.
- C.
- D.

Question 3

What is the relationship between force (F), mass (m) and acceleration (a)?

- A. F = m ÷ a
- B. F = m + a
- C. F = m × a
- D. F = m − a

Question 4

What is the C.G.S. unit of force?

- A. newton
- B. dyne
- C. joule
- D. erg

Question 5

Why are wheels attached to heavy luggage?

- A. To ease the moving by increased friction
- B. To give a fashionable look
- C. To ease the moving by reduced friction
- D. To keep a balance between the applied forces on the luggage

Question 6

Can frictional force stop an object?

- A. No, friction only slows an object
- B. Yes, when it overcomes the applied force

Question 7

What principle is used to determine the density of liquids?

- A. Principle of relative density
- B. Principle of density
- C. Principle of relative mass
- D. Principle of relative volume

Question 8

- A.
- B.
- C.
- D.

Question 9

Which instrument is usually used to measure the mass of a solid?

- A. Physical balance
- B. Eureka can
- C. Beaker

Question 10

What is the formula for calculating the volume of a regular body?

- A. Area ÷ Height
- B. Height + Area
- C. Area × Height
- D. Area – Height

Question 11

The mass and volume of three substances*A* ,*B* and*C* are plotted below at standard temperature and pressure. Which substance has the least density?

- A. *A*
- B. *B*
- C. *C*

Question 12

Which instrument is used to measure the volume of an irregular solid?

- A. Measuring scale
- B. Measuring tape
- C. Measuring Cylinder

Question 13

Which liquid has the highest density?

- A. Water
- B. Alcohol
- C. Mercury

Question 14

- A.
- B.
- C.
- D.

Question 15

Steel sinks in water while a ship made up of steel floats in water. Which of the following is the correct reason for this?

- A. Density of ship is equal to that of steel
- B. Density of water is equal to that of steel
- C. Density of steel is less than that of ship
- D. Density of ship is less than that of water

Question 16

What is the SI unit of density?

- A. g/cm^2
- B. kg/m^3
- C. kg/m^2
- D. g/cm

Question 17

How much is the barometric height measured by a simple mercury barometer at sea level?

- A. 76 cm
- B. 54 cm
- C. 101 cm

Question 18

Which instrument is used to measure altitude?

- A. Altimeter
- B. Barometer
- C. Odometer

Question 19

What is the relation between the atmospheric pressure and the pressure inside the human body at sea level?

- A. Atmospheric pressure > Pressure inside human body
- B. Atmospheric pressure < Pressure inside human body
- C. Atmospheric pressure = Pressure inside human body

Question 20

People use narrow pipe straw to drink juice from a glass. This is possible due to presence of..... .

- A. liquid pressure
- B. atmospheric pressure
- C. gravitational pull
- D. frictional pressure

Question 21

The pressure exerted by the atmospheric air is known as..... .

- A. atmospheric pressure
- B. biosphere
- C. troposphere
- D. All of the above

Question 22

Which instrument is used to measure atmospheric pressure?

- A. Altimeter
- B. Barometer
- C. Odometer

Question 23

Which type of barometer does not contain any liquid?

- A. Mercury barometer
- B. Fortin's barometer
- C. Aneroid barometer

Question 24

What is buoyancy equal to?

- A. Weight of the liquid.
- B. Weight of the solid.
- C. Weight of the displaced Liquid.
- D. Weight of the displaced solid.

Question 25

What is buoyancy?

- A. The downward force exerted by a gas, liquid or any other fluid that opposes the weight of an immersed object.
- B. The upward force exerted by a gas, liquid or any other fluid that opposes the weight of an immersed object.
- C. The tangential force exerted by a gas, liquid or any other fluid that opposes the weight of an immersed object.
- D. The tangential force exerted by a gas, liquid or any other fluid that is in line with the weight of an immersed object.

Question 26

Generally wood floats on water. Why?

- A. Because wood is less dense than water.
- B. Because wood is denser than water.
- C. Because wood and water have the same density.
- D. Because wood has a property of never sinking.

Question 27

Which scientist first explained the concept of buoyancy?

- A. Newton
- B. Joule
- C. Thomson
- D. Archimedes

Question 28

Why does the egg not sink in salt water?

- A. Density of saltwater is higher than that of egg
- B. Density of saltwater is lower than that of egg
- C. Salt increases the surface tension of water

Question 29

Which force helps the swimmer to stay afloat in water?

- A. Frictional*force*
- B. Gravitational*force*
- C. Buoyant f*orce*
- D. Electrostatic*force*

Question 30

Which sea vehicle can float and submerge in water?

- A. Submarine
- B. Hovercraft
- C. Ships

Question 31

What upward force is exerted by water on an object immersed in it?

- A. Weight
- B. Upthrust
- C. Viscous force
- D. Surface tension

Question 32

What is the upthrust on a body immersed in a liquid equal to?

- A. Weight of the body
- B. Volume of the body
- C. Volume of the liquid displaced by the body
- D. Weight of the liquid displaced by the body

Question 33

What is the SI unit of upthrust?

- A. N
- B. kg m
- C. Pa
- D. Nm

Question 34

In which liquid will a wooden cork experience maximum upthrust?

- A. Water
- B. Mercury
- C. Acetone
- D. Milk