# Standard 9 SCIENCE <br> Part - I 

Marks: 75
Tine: 3.00 Hours
5. Choose the correct answer:

1) 1 metric ton is equal to
a) 100 quintals
b) 10 quintals
c) $1 / 10$ quintals
d) $1 / 100$ quintals
2) The centrifugal force is
a) a real force
b) the force of reaction of centripetal force
c) a virtual force
d) directed towards the centre of the circular path.
3) The size of an air bubble rising up in water.
a) decreases
byincreases
c) remains same
d) may increase or decrease
4) When we mix a drop of ink in water we get a
a) Hetrogeneous mixture
b) compound
e) Homogenous mixture
d) Suspension
5) Among the following the odd pair is
a) ${ }_{x}^{18} \mathrm{O},{ }_{9}^{19} \mathrm{~F}$
b) ${ }_{18}^{+10} \mathrm{Ar},{ }^{14} \mathrm{~N}$
c) $\mathrm{Si}_{15} \mathrm{P}$
d) ${ }_{20}^{40} \mathrm{Cr},{ }_{19}^{19} \mathrm{~K}$
6) Elements in the modern periodic table are arranged in groups and ........ periods.
a) 7,18
b) 18,7
c) 17,8
d) 8,17
7) The animal without skill is
a) Acrania
b) Acephalia
c) Apteria
d) Acoelomate
8) Smooth muscles occur in
a) Uterus
b) artery
c) Vein
d) All of the above
9) The bending of root of a plant in response to water is called
a) Thigmonasty
b) phototropism
C) Hydrotropism
d) photonasty
10) The tropic movement that helps the climbing vines to find a suitable support is
a) phototropism
b) Geotropism
c) Thigmotropism
d) Chemotropism
11) Least count of screw gauge is $\qquad$
a) 0.01 mm
b) 0.01 cm
c) 0.1 mm
d) 0.1 cm
12) Among the following $\qquad$ is a mixture.
a) Common salt
b) Juice
c) Carbon dioxide
d) Pure silver

## Part - II

ii. inswer any seven of the following: Q.No: $\mathbf{1 6}$ is compulsory.
13) What is the full form of SI system.
14) Define least count of any device
15) Compare speed and velocity?
16) State pascals law?

Kindly send me your study materials to padasalai.net@gmail.com

Tsigs 17 ) Define Sublimation?
18) 1) Chromatography is based on the principle of
2) In petroleum refining the method of separation used is
19) Match
a) Dalton - Hydrogen atom model
b) Chadurick - Discovery of nucleus
c) Rutherfod - First atomic theory
d) Neils Bohr - Plum pudding Model

- Discovery of nutrons

20) List the respiratory organs of amphibians.
21) State whether true or false. If false, correct the statement.
a) Phloem is made up of trachids
b) Vessels are found in collenchyma
22) Fill in the blanks.
$6 \mathrm{CO}_{2}+.2 H_{2} \mathrm{D}_{2} \xrightarrow[\text { Chlorophyll }]{\text { Sunlight }} \mathrm{CH}_{2} \mathrm{H}_{2} \mathrm{O}+6 \mathrm{O}_{2}^{\dagger}$

Part - III
$7 \times 4=28$
III. Answer any seven questions:
23) Differentiate mass and weight.
24) Describe the construction and working of mercury barometer.
25) How are homogenous solutions different from hetrogenous solution? Explain with examples.
26) Draw structure of oxygen and Sulphur atoms.
27) What are the limitation of Mandeleev's periodic table?
28) How are the limbs of the birds adapted for avian life?
29). What is complex tissue? Name various kinds of complex tissues.
30) How will you differentiate the different types of transpiration?
31) Out line the flow chart of phylum chordata.
32) List five characteristic features of fishes.

> Part - IV
$3 \times 7=21$

## IV. Answer in detall.

33) 34) Explain different types of motion.
(OR)
1) With an appropriate illustration prove that the force acting on a smaller area exerts a greater pressure.
2) 3) Explain Tyndall effect and Brownian movement with suitable diagram.
1) What are nucleons? How many nucleons are present in phosphorous? Draw its structure.
2) 3) Give an account on phylum Arthropods
(OR)
1) List out the difference between mitosis and meiosis.
