Practice Question

Q.1) Describe the arrangement of particles in solid,liquid and gases?
Q.2) Mention the various methods of inter – crop hybridisation.
Q.3) If Z=3 , What could be the valency of element? Write the name of element ?
Q.4) What is mixed farming?
Q.5) What is meant by saturated solution?
Q.6) Are plastids present in animal cells?
Q.7) What are the ions?
Q.8) Identify the pure substances and mixtures.
i) Tin ii) Ice
Q.9) Mention the elements and the ratio by mass of elements present in .
a) Ammonia Nitrogen and Hydrogen with a ratio by mass 14:3
b) Carbon dioxide ,Carbon and Oxygen with a ratio by mass of 3:8
Q.10) Name the three different models of an atom and ones who formulated them.
Q.11) What is solution? What are the components of a solution?
Q.12) Calculate the molar mass of CH_3COOH.
(Atomic maass of C = 12, H = 1, O = 16)
Q.13) How did Rutherford come to the conclusion that most of the space in an atom is empty?
Q.14) Why do isotopes of an elements show similar properties?
Q.15) State the law of constant proportion.
Q.16) What was the drawback of Rutherford model of an atom?
Q.17) a) Calculate the number of molecules present in 44 g of CO_2.
(Atomic Mass C = 12, O = 16, $N_A = 6.022 \times 10^{23}$) mol^{-1}
b) What are polyatomic ion? Give one example.
Q.18)a) Calculate the mass of 0.125 mol NaOH.
b) Write the chemical formula of the substances formed.
a) Ammonium dichromate b) Aluminium Sulphate c) Calcium Phosphate
d) Iron (III) Oxide
Q.19) Draw a neat labelled diagram of animal cell.
Q.20) Write difference between prokaryotic cell and eukaryotic cell.
Q.21) Write the difference between simple tissue and complex tissue.
Q.22) a) What is a tissue? Justify that blood is a tissue.
b) Identify the meristematic tissues which are located at.
1) Growing tips of roots and stem 2) The base of leaves or internodes on.

Q.23) a) Name the Process by which green plants make their own food.
b) Mention any two food materials which provide us carbohydrates.
c) Name two cattles breeds which show excellent resistance of disease.
d) What is the main benefit of mixed cropping?
e) What is animal husbandary?
Describe in short five methods by which you can increase the yield of crops and livestock.
Q.24) a)Define.
i) Valency
ii) Atomic Number
iii) Mass Number
iv) Condensation

b) What is the effect of pressure on boiling point?

c) List any four factors on which evaporation depends. Explain in short any three factors.

Q.25) a) What is the difference between uniform velocity and non uniform velocity?

b) Differentiate between distance and displacement.

c) Describe any three properties of colloid.

d) Why is it not possible to distinguish particles of a solute from the solvent in solution? 2 m

Q.26) a) What is meristematic tissue?

b) What are stomata?

c) What do you mean by guard cells?

d) Name the tissues which is responsible for increase in length of stem and root. 1 m

e) What is the life span of human RBCs?

f) Identify the following tissues.

i) The epithelial tissue which has pillar like tall cells.

ii) The cells of this tissues are filled with fat globules.

iii) The movement of this tissue pushes the mucus forward to clear respiratory tract

iv) It gives buoyancy to lotus to help it a float.

v) Tissue present in lung alveoli

Q.27) a) Write the electronic configuration and valency of the following.

i) Chlorine ii) Sodium iii) Silicon

b) How many electrons, protons and neutrons will be there in an elements 9^{19} ?

What will be the valency of the elements?

Q.28) An atom of an element has three electrons in its 3^{rd} orbit , which is the outermost shell.

Write1) The electronic configuration

2) Atomic Number 3) Number of protons 4) valency

Q.29) a) Give two examples where we experience inertia in our day today lives.

b) List two situations where in the third law of motion can be observed .

Q.30) when a true solution of sugar was formed what would be its transparency and stability. 2 m

Q.31) While separating two immiscible liquid with oil and water , would be observations.

Q.32) Water can exist in all the three state solid,liquid and gases condct an experiment and describe what happens to the particles during the change of state.

Q.33) In our day to day life , we experience or come across different types of motions.

Can you give an example of the motion.

a)The acceleration is positive and in the direction of motion

b)The acceleration is uniform or the rate of acceleration

Q.34) Take a bowl of water Containing some amount of oil in it. How will you separate the two.