



Standard 9

SCIENCE

Time: 3.00 Hrs.

Marks: 75

I. Choose the correct answer:

12×1=12

- 1) 1 metric ton is equal to _____.
a) 100 quintals b) 10 quintals c) 1/10 quintals d) 1/100 quintals
- 2) The area under velocity - time graph represents the
a) velocity of the moving object
b) displacement covered by the moving object
c) speed of the moving object
d) acceleration of the moving object
- 3) The size of an air bubble rising up in water _____.
a) decreases b) increases
c) remains same d) may increase or decrease
- 4) _____ is essential to perform separation by solvent extraction method.
a) Separating funnel b) Filter paper
c) Centrifuge machine d) Sieve
- 5) The term nucleons refer to _____.
a) protons and electrons b) only neutrons
c) electrons and neutrons d) protons and neutrons
- 6) Number of valence electrons in carbon is _____.
a) 2 b) 4 c) 3 d) 5
- 7) Apple contains malic acid. Orange contains _____.
a) citric acid b) ascorbic acid c) sulphuric acid d) tartaric acid
- 8) Mesoglea is present in _____.
a) Pori fera b) Coelenterata c) Annelida d) Arthropoda
- 9) Aerenchyma is found in _____.
a) epiphytes b) hydrophytes c) halophytes d) xerophytes
- 10) Bile helps in the digestion of _____.
a) Proteins b) Sugar c) Fats d) Carbo hydrates
- 11) An internal factor responsible for spoilage of food is _____.
a) Wax coating b) Contaminated utensils
c) Moisture content in food d) Synthetic preservatives
- 12) The primary organ infected during tuberculosis is _____.
a) bone marrow b) intestine c) spleen d) lungs

II. Write ANY SEVEN questions. Q.No. 22 is compulsory:

7×2=14

- 13) What are electric lines of force?
- 14) State Fleming's Left Hand Rule.
- 15) **Pick out the concave and convex mirrors from the following and tabulate them:**
(Rear view mirror, Dentists mirror, Torch-light mirror, Mirrors in shopping malls, Make-up mirror)
- 16) Define - Sublimation.
- 17) State modern periodic law.
- 18) **Fill in the blanks:**
i) The green pigment present in the plant is _____.
ii) The response of a plant part towards gravity is _____.
- 19) Mention any two vital functions of human kidney.
- 20) Differentiate - Kwashiorkar from Marasmus.
- 21) Expand the following: (1) WHO (2) HIV

- 22) Two acids 'A' and 'B' are given. Acid A gives one hydrogen ion per molecule of the acid in solution. Acid B gives the two hydrogen ions per molecule of the acid in solution.
- Find out acid A and B.
 - Which acid is called the king of chemicals?

Answer ANY SEVEN questions. Q.No. 32 is compulsory:

7×4=28

- 23) a) Define measurement.
b) Find the mass of an object weighing 98N.
- 24) Draw a neat diagram of an AC generator.
- 25) What are nucleons? How many nucleons are present in phosphorous? Draw its structure.
- 26) Why are Noble gases inert in nature?
- 27) a) What are the uses of "Plaster of Paris"?
b) What is neutralization reaction? Give an example.
- 28) **True or False (if false give the correct statement):**
- Parenchyma is a simple tissue.
 - Phloem is made of tracheids.
 - What is the consequence that occur if all blood platelets are removed from the blood?
- 29) **Match column A with column B:**
- | A | B |
|---|-------------------------|
| i) Roots are growing downwards into soil | - Positive phototropism |
| ii) Shoots growing towards the light | - Negative geotropism |
| iii) Shoots growing upwards | - Negative phototropism |
| iv) Roots growing downwards away from light | - Positive geotropism |
- 30) a) **Differentiate:** Incisors and Canines.
b) **Fill in the blanks:**
- The muscular and sensory organ which helps in mixing the food with saliva is _____.
 - The longest part of alimentary canal is _____.
- 31) Explain any two methods of food preservation.
- 32) Suggest the immunization schedule for a newborn baby till 12 months of age. Why it is necessary to follow the schedule?

IV. Give answer any one in each question:

3×7=21

- 33) a) i) State the law of floatation.
ii) Why does a helium balloon float in air?
(OR)
- b) a) Draw ray diagrams to show how the image is formed using a concave mirror, when the position of object is
(i) at C (ii) between C and F
(iii) between F and P of the mirror.
b) Mention the position and nature of image in each case.
- 34) a) i) What conclusions were made from the observations of Gold foil experiment?
ii) Write the electronic configuration of K and Cl.
(OR)
- b) Write any five uses of salts.
- 35) a) i) Comment on the aquatic and terrestrial habits of amphibians.
ii) How does locomotion take place in starfish?
(OR)
- b) i) Suggest precautionary measures you can take in your school to reduce the incidence of infectious disease.
ii) Define - Pathogen.