

VNR9S

Virudhunagar District

Common Half Yearly Examination - December 2024



Standard 9

Time: 3.00 Hrs.

SCIENCE

Marks: 75

Part - 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) Electroplating is an example for
a) Heating effect b) Chemical effect
c) Flowing effect d) Magnetic effect
- 3) _____ is used as reflectors in torch light.
a) Concave mirror b) Plane mirror
c) Convex mirror d) Spherical mirror
- 4) The unit of magnetic flux density is
a) weber b) weber / metre c) weber / meter² d) weber. meter²
- 5) _____ has the same properties throughout the sample.
a) Pure substance b) Mixture c) Colloid d) Suspension
- 6) Change in the number of neutrons in an atom changes to
a) an ion b) an isotope c) an isobar d) another element
- 7) Bond formed between a metal and non metal atom is usually _____.
a) Ionic bond b) Covalent bond c) Coordinate bond
- 8) The hydrated salt of copper sulphate has _____ colour.
a) Red b) White c) Blue d) Green
- 9) The animal without skull is
a) Acrania b) Acephalia c) Apterina d) Acoelomate
- 10) Bile helps in the digestion of _____.
a) Protein b) Sugar c) Fats d) Carbohydrates
- 11) Food and Adulteration Act was enforced by Government of India in the year _____.
a) 1964 b) 1954 c) 1950 d) 1963
- 12) The organ affected by Jaundice is
a) liver b) lungs c) kidney d) brain

Part - II

Answer any 7 questions in very short:

7×2=14

[Question No. 22 is compulsory]

13) Define standard unit.

14) Match it:

- | | | |
|---------------------|---|--------------------|
| a) Electric charge | - | ampere |
| b) Electric field | - | ohm |
| c) Resistance | - | coulomb |
| d) Electric current | - | newton per coulomb |

15) State Pascal's law.

16) Define sublimation.

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- 17) Write a note on different types on bonds.
- 18) What are the various uses of Aquaregia?
- 19) Why are the frogs said to be amphibians?
- 20) Define Transpiration.
- 21) **Expand the following:**
 - (1) ORS
 - (2) BCG
- 22) Light enters from air into a glass plate having refractive index 1.5. What is the speed of light in glass?

Part - III**Answer any 7 questions in very short:****7×4=28****Question No. 32 is compulsory]**

- 23) Explain different types of motion.
- 24) a) State the laws of flotation.
b) List the safety features while handling electricity.
- 25) State the advantages of AC over DC.
- 26) State any five features of modern periodic table.
- 27) Explain the postulates of Bohr's atomic model.
- 28) Write any four uses of acids.
- 29) Differentiate between tropic and nastic movement.
- 30) Explain the role of food control agencies in India.
- 31) Explain the structure of Nephron.
- 32) Find the oxidation number of the elements in the following compounds.
 - a) Mn in $MnSO_4$
 - b) N in HNO_3

Part - IV**Answer all the questions:****3×7=21**

- 33) a) How will you find the thickness of a one rupee coin?
b) Write the spherical mirror formula and explain the meaning of each symbol used in it. **(OR)**
Explain two types of transformer.
- 34) Explain Tyndall effect and Brownian movement with suitable diagram. **(OR)**
List down the differences between Ionic and Covalent compounds.
- 35) List out the differences between Mitosis and Meiosis. **(OR)**
 - a) Differentiate Macronutrients from Micronutrients.
 - b) Give an account of classification of bacteria based on the shape.