

Science Revision Test 2

Time : 45 mins

Max Marks: 50

General Instructions:

1. Question numbers 1 to 15 are one-mark questions. These are to be answered in one word or in one sentence.
2. Question numbers 16 to 22 are two-mark questions. These are to be answered in about 30 words each.
3. Question numbers 23 to 29 are three-mark questions. These are to be answered in about 50 words each.

Q1. Which of the following is the SI Unit of Electric Current?

- (a) ohm
- (b) ampere
- (c) volt
- (d) faraday

Q2. The purpose of a rheostat is:

- (a) Increase the magnitude of current only
- (b) Decrease the magnitude of current only
- (c) Increase or decrease the magnitude of current
- (d) None of these

Q3. Who has stated the Right hand Thumb Rule?

- a. Orsted
- b. Fleming
- c. Einstein
- d. Maxwell

Q4. No force acts on a current carrying conductor when it is placed-

- a. perpendicular to the magnetic field
- b. parallel to the magnetic field
- c. far away from the magnetic field
- d. inside a magnetic field

Q5 Which method is used to produce electricity in hydroelectric power plant.

- a. By boiling the water to produce steam
- b. By ionizing water
- c. By running dynamo by kinetic energy
- d. Any of the above

Q6 The chemical formula of lead sulphate is

- (a) Pb_2SO_4
- (b) $Pb(SO_4)_2$

- (c) PbSO_4
- (d) $\text{Pb}_2(\text{SO}_4)_3$

Q7. Chemically rust is

- (a) hydrated ferrous oxide
- (b) only ferric oxide
- (c) hydrated ferric oxide
- (d) none of these

Q8. Which one of the following is acidic?

- (a) Lemon juice
- (b) Tomatoes
- (c) Milk
- (d) All

Q9. Lime water is

- (a) CaO
- (b) $\text{Ca}(\text{OH})_2$
- (c) CaCO_3
- (d) CaCl_2

Q10. Which of the following metals is present in the anode mud during the electrolytic refining of copper?

- (a) Sodium
- (b) Aluminium
- (c) Gold
- (d) Iron

Q11. The chlorophyll in photosynthesis is used for

- I. Absorbing light
- II. Breaking down water molecule
- III. No function
- IV. Reduction of CO_2

Q12. Proteins after digestion are converted into

- I. Carbohydrates
- II. Small globules
- III. Amino acids
- IV. starch

Q13. Which of the following is a biodegradable substance?

- I. Glass
- II. Plants
- III. Plastics
- IV. Polythene

Q14. The functional unit of environment is

- I. Ecosystem
- II. Nitrogen
- III. Carbon
- IV. Oxygen

Q15. Which of the following is the plant hormone?

- (a) Insulin
- (b) Thyroxine
- (c) Oestrogen
- (d) Cytokinin

Q16. Define 1 volt. Express it in terms of SI unit of work and charge calculate the amount of energy consumed in carrying a charge of 1 coulomb through a battery of 3V.

Q17. What is meant by solenoid? How does current carrying solenoid behave? Give its main use.

Q18. Define process of nuclear fission. Write the steps involved in generating electricity in a nuclear reactor.

Q19. "We need to balance a skeletal chemical equation". Give reason to justify the statement.

Q20. Define olfactory indicators. Name two substances which can be used

Name any two strong acids.

Q21. Mention the names of the metals for the following:

Two metals which are alloyed with iron to make stainless steel.

Two metals which are used to make jewelry.

Q22. In single celled organisms diffusion is sufficient to meet all their requirements of food exchange of gases or removal of wastes but it is not in case of multicellular organisms. Explain the reason.

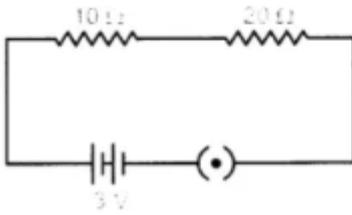
Q23. State how concentration of auxin stimulates the cells to grow longer on the side of the shoot which is away from light?

Q24. What is environmental pollution?

Distinguish between biodegradable and non-biodegradable pollutant

Name the biodegradable pollutant

Q25. Find the current flowing in the circuit and the potential difference across 10 ohm resistor



Q26. What are magnetic field lines? Give reasons

- a. Two magnetic field lines never intersect each other.
- b. Magnetic field lines are closed curves.

Q27. Define tidal energy. Explain how the tidal energy is harnessed and write one limitation of the use of tidal energy.

Q28. State the type of chemical reactions and chemical equations that take place in the following.

- a. Magnesium wire is burnt in air.
- b. Electric current is passed through water.
- c. Ammonia and hydrogen chloride gases are mixed.

Q29. A white coloured powder is used by doctors for supporting fractured bones.

- a. Write chemical name and formula of the powder.
- b. When this white powder is mixed with water a hard solid mass is obtained. Write balanced chemical equation for the same.