

SCHOOL-BASED ASSESSMENT (SBA) - 2025

END-OF-YEAR ASSESSMENT

SUBJECT: SCIENCE

GRADE-8

FINAL TERM

[Paper A: 48 Marks, Paper B: 52 Marks, Total: 100 Marks], Time = 3 hours

School Name: _____

Student Name : _____

Roll Number : _____

Section : _____

OBJECTIVE PART(MCQs)

Question No.1 : Which of the following elements are involved during photosynthesis?

- (a) Carbon and nitrogen (b) Nitrogen and oxygen
(c) Carbon and oxygen (d) Oxygen and nitrogen

Question No.3 : Which strategy is used to convert waste materials into new products?

- (a) Reduce (b) Reuse (c) Recycle (d) Recover

Question No.5 : Right hemisphere of the cerebrum controls which of the following activity?

- (a) Comprehension (b) Speech (c) Writing (d) Creativity

Question No.7 : Variations help organisms to adapt to their environment by increasing the:

- (a) chances of survival (b) water availability
(c) food availability (d) shelter availability

Question No.9 : Which of the following correctly represents the complementary base pairing in DNA?

- (a) A – T, C – G (b) A – C, T – G
(c) A – G, T – C (d) A – G, C – G

Question No.11 : Biotechnologists modify the genes of which crop to overcome the deficiency of iron in food?

- (a) Potato (b) Canola (c) Soyabean (d) Wheat

Question No.13 : Some metals can be changed into wires because metals are:

- (a) hard (b) lustrous (c) ductile (d) soft

Question No.15 : Which of the following is an example of combustion?

- (a) Rusting of iron (b) Burning of wood
(c) Melting of ice (d) Dissolving of sugar in water

Question No.17 : A cold pack treats wounds, and a chemical reaction causes it to feel cold. What type of reaction is this?

- (a) Exothermic (b) Endothermic (c) Combination (d) Displacement

Question No.19 : What is the pH range of strong acids?

- (a) 0 – 2 (b) 4 – 6 (c) 7 – 8 (d) 9 – 10

Question No.21 : The unit of force is:

- (a) newton (b) joule (c) gram (d) ampere

Question No.23 : In which medium, the speed of light is fastest?

- (a) Air (b) Water (c) Glass (d) Diamond

Question No.2 : Which human activity is a major cause of global warming?

- (a) Hunting of animals (b) Deforestation
(c) Planting trees (d) Overpopulation

Question No.4 : Identify the part of the forebrain.

- (a) Pons (b) Cerebellum (c) Hypothalamus (d) Medulla oblongata

Question No.6 : Muscles receive nerve impulses from _____ neurons.

- (a) inter (b) intra (c) sensory (d) motor

Question No.8 : What type of adaptation is found in plants to conserve water in dry environments?

- (a) Stomata (b) Thick cuticle
(c) Thin cuticle (d) Shallow roots

Question No.10 : Which type of bond is present between nitrogenous bases of DNA?

- (a) Hydrogen bond (b) Ionic bond (c) Metallic bond (d) Covalent bond

Question No.12 : Elements arranged in horizontal rows are called:

- (a) periods (b) groups (c) noble gases (d) metals

Question No.14 : Identify an unbalanced chemical equation.

- (a) $\text{CH}_4 + 2\text{O}_2 \rightarrow 2\text{H}_2 + \text{CO}_2$
(b) $\text{Na} + \text{Cl}_2 \rightarrow \text{NaCl}_2$
(c) $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
(d) $\text{C} + \text{O}_2 \rightarrow \text{CO}_2$

Question No.16 : The complete transfer of electrons results in the formation of _____ bond.

- (a) covalent (b) metallic (c) ionic (d) coordinate

Question No.18 : An acid that is found in vinegar is:

- (a) Hydrochloric acid (b) Acetic acid
(c) Sulphuric acid (d) Nitric acid

Question No.20 : SI unit of pressure is:

- (a) m (b) km (c) mm (d) Nm^{-2}

Question No.22 : When pressure exerted on a smaller piston produces an equal pressure on a larger piston because of oil(liquid), this phenomenon is called:

- (a) Air pressure (b) Water pressure (c) Hydraulic press (d) Hydrostatic pressure

Question No.24 : When a white light passes through a prism, which three colours are formed first?

- (a) Violet, green and blue (b) Violet, yellow and blue
(c) Red, orange and yellow (d) Red, blue and yellow

Question No.25 : Which phenomenon causes a pencil to appear bent in water?

- (a) Refraction (b) Diffraction (c) Reflection (d) Dispersion

Question No.27 : Which appliance uses the least amount of power for its work?

- (a) Hair dryer (b) Washing machine
(c) LED light bulb (d) Refrigerator

Question No.29 : Which part of UPS convert the AC input of the main power supply to DC input, which is stored in the battery?

- (a) AC/DC inverter (b) RFI filter
(c) Transfer switch (d) AC/DC rectifier

Question No.31 : The stars that are three or more times bigger than the Sun are called:

- (a) black stars (b) red stars (c) dwarf stars (d) massive stars

Question No.26 : Resistance is calculated mathematically as:

- (a) $I=R/V$ (b) $V=I/R$ (c) $R=V/I$ (d) $R=I/V$

Question No.28 : If a current of 10 Amperes flows through a bulb of 100 Volts. What will be the value of resistance?

- (a) 0.1 Ohm (b) 1 Ohm (c) 10 Ohm (d) 100 Ohm

Question No.30 : In a solar cooker, the sun rays are reflected by:

- (a) concave lens (b) convex lens (c) concave mirror (d) convex mirror

Question No.32 : The scientific study of the space using especially developed technology is called:

- (a) space navigation (b) space exploration
(c) space probes (d) space technology

SUBJECTIVE PART(CRQs)

Question No: 33

a) What are nerve impulses? (2 Marks)

b) What is medulla oblongata? Write any one function controlled by it. (2+1=3 Marks)

c) Explain the role of sensory neurons, inter neurons, and motor neurons in the transmission of messages in the body. (5 Marks)

Question No: 34

a) How meiotic-I division is different from the meiotic-II division? (2 Marks)

b) During cell division, what is the importance of interphase? (3 Marks)

c) Explain the key steps that occur during mitosis. (5 Marks)

Question No: 35

a) Write the types of covalent bonds present in the following molecules. (3 Marks)

O_2 , H_2 , N_2

b) Why the total mass of reactants is always equal to the total mass of the products? Explain with an example. (4 Marks)

c) Explain the formation of sodium chloride with the help of chemical equation. (5 Marks)

Question No: 36

a) What is meant by reflection? (2 Marks)

b) Write the characteristics of the image formed by a concave mirror, If: (2+2=4 Marks)

i. the object is placed beyond the principal focus.

ii. the object is very close to the concave mirror.

c) Write any four uses of spherical mirrors. (4 Marks)

Question No: 37

a) Write the names of any three tools used in space exploration. (3 Marks)

b) Write four new technologies developed on the Earth as a result of space exploration. (4 Marks)