

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 : During which process, do plants absorb oxygen and release carbon dioxide?

- (a) Respiration (b) Transpiration (c) Photosynthesis (d) Reproduction

Question No.3 : On which basis ecological pyramids are formed?

- (a) Number and weight (b) Number and size
(c) Shape and weight (d) Shape and size

Question No.5 : Which part of the brain is involved in making a painting?

- (a) Pons (b) Thalamus
(c) Right hemisphere (d) Left hemisphere

Question No.7 : Which of the following changes is caused by environmental variation?

- (a) Height (b) Language (c) Blood type (d) Eye colour

Question No.9 : In DNA structure, Thymine always pairs with:

- (a) Adenine (b) Guanine (c) Thymine (d) Cytosine

Question No.11 : Biotechnological techniques can be used to develop vaccines against:

- (a) common cold (b) measles (c) influenza (d) tuberculosis

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 reactions indicates displacement reaction?

- (a) $3\text{H}_2 + \text{N}_2 \rightarrow 2\text{NH}_3$
(b) $2\text{KClO}_3 \rightarrow 2\text{KCl} + 3\text{O}_2$
(c) $2\text{CO} + \text{O}_2 \rightarrow 2\text{CO}_2$
(d) $\text{Zn} + \text{CuSO}_4 \rightarrow \text{ZnSO}_4 + \text{Cu}$

Question No.17 : Identify endothermic reactions from the given examples.

- (a) Digestion of food (b) Ignition of matchstick
(c) Burning of candle (d) Cooking of an egg

Question No.19 : What will be the pH value of a solution containing a higher concentration of hydrogen ions?

- (a) 0 – 3 (b) 5 – 7 (c) 7 – 9 (d) 12 – 14

Question No.21 : When an object experiences a balanced force then it:

- (a) accelerates (b) decelerates
(c) remains stationary (d) changes direction

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

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

Question No.2 : The human activity which is mostly affected by climate is:

- (a) fishing (b) mining (c) manufacturing (d) farming

Question No.4 : Which parts of the body act as effectors?

- (a) Brain and spinal cord (b) Muscles and glands
(c) Cell body and axon (d) Spinal cord and glands

Question No.6 : Which type of neurons is responsible for carrying messages from the brain to the muscles?

- (a) Motor (b) Mixed (c) Sensory (d) Inter

Question No.8 : The function of the stem of the cactus plant is to:

- (a) produce flower (b) absorb sunlight
(c) store water (d) support roots

Question No.10 : Identify the bond that holds the two strands of DNA together.

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

Question No.12 : How many elements are there in a short period of the periodic table?

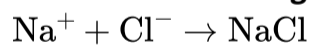
- (a) 1 (b) 2 (c) 3 (d) 4

Question No.14 : Which gas is produced during the following chemical reaction?



- (a) H_2 (b) Cl_2 (c) HCl (d) ZnCl_2

Question No.16 : How many electrons are transferred from the sodium atom in the given reaction?



- (a) 1 (b) 2 (c) 3 (d) 4

Question No.18 : Tartaric acid is obtained from:

- (a) fats (b) tamarind (c) apples (d) citrus fruits

Question No.20 : The SI unit of pressure is:

- (a) watt (b) joule (c) pascal (d) newton

Question No.22 : When a paratrooper jumps, air provides an opposing force equal to gravitational force then he falls with _____ speed.

- (a) increasing (b) decreasing (c) non-uniform (d) constant

Question No.24 : After scattering from a prism, light forms a band of seven colors called:

- (a) refraction (b) reflection (c) spectrum (d) dispersion

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

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

Question No.26 : Which formula is used to find resistance in an electrical circuit?

- (a) Current/Voltage (b) Voltage/Current (c) Resistance/Voltage (d) Current/Resistance

Question No.27 : The greater power is consumed in:

- (a) fan (b) bulb (c) heater (d) television

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.28 : The resistance of copper wire in a circuit is 5 Ohm and the current passing through the circuit is 7 Ampere. The voltage of the circuit will be:

- (a) 12 Volt (b) 35 Volt (c) 30 Volt (d) 21 Volt

Question No.30 : Concave mirror_____ sunlight in a solar cooker.

- (a) disperses (b) converges (c) absorbs (d) reflects

Question No.32 : Which type of facility is used to send space craft?

- (a) Airports (b) Seaport (c) Launching Pads (d) Helipads

SUBJECTIVE PART(CRQs)

Question No: 33

a) Write the names of parts of the hindbrain. (3 Marks)

b) Write any three functions of the hypothalamus. (3 Marks)

c) Explain the peripheral nervous system. (4 Marks)

Question No: 34

a) What are nucleotides and how many types of nucleotides are there? (2+1=3 Marks)

b) What is a gene and where is it found? (3 Marks)

c) Write any two differences between genetic and environmental variations. (2=2=4 Marks)

Question No: 35

a) How does a covalent bond formed? (2 Marks)

b) Write any two differences between a double covalent bond and a triple covalent bond. (2+2=4 Marks)

c) Draw the dot and cross structure of the following compounds. (2+2+2=6 Marks)

1. H₂O, 2. CH₄, 3. HCl

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) What is a pulsar? (2 Marks)

b) Write any four precautionary measures for the survival of astronauts in space. (4 Marks)