SET 1 **MODEL QUESTION PAPER** KEY BS-7/1

SECOND TERM SUMMATIVE ASSESSMENT 2026-27

BASIC SCIENCE – ANSWER KEY & SCORING INDICATORS

Class : 7 **Time : 2 Hrs 15 Minutes**

Instructions to the Teacher

- The scores given are suggestive. Accept all relevant answers in the learner's own words.
- Questions 3 and 4 have internal choice; evaluate the part attempted.
- Find the percentage of the total score secured and award the grade using the table below.

Score percentage	Grade
80 – 100	A – Outstanding
60 – 79	B – Very Good
40 – 59	C – Good
30 – 39	D – Satisfactory
Below 30	E – Needs Improvement

1 Digestion

a)	B. Stomach	**1**
b)	A. Biting and cutting food B. Canines C. Crushing and grinding food D. Molars	**2**
c)	Ingestion → Digestion → Absorption → Assimilation → Egestion	**1**
d)	Chewing breaks food into small pieces and mixes it with saliva; digestion of starch begins in the mouth; food is swallowed and digested easily.	**2**

2 Conductors and insulators

a)	Materials: cell / battery, torch bulb, connecting wires, the given objects. Procedure: make a circuit leaving a gap between two wire ends; place each object in the gap. If the bulb glows, the material is a conductor; if not, it is an insulator.	**2**
b)	Conductors: copper wire, iron nail, aluminium foil, pencil lead (graphite) Insulators: plastic scale, rubber eraser, dry wood, glass bangle	**2**
c)	Plastic and rubber are insulators. They do not allow electricity to pass and protect the electrician from electric shock.	**1**

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3 (A) Plane mirrors

a)	C. 5 (360 ÷ 60 − 1 = 5)	**1**
b)	Distance between object and image = 15 + 15 = 30 cm. Image is erect, same size, virtual, laterally inverted, as far behind the mirror as the object is in front (any two).	**2**
c)	Periscope. Two plane mirrors are used.	**2**

3 (B) Light pollution

a)	Excessive, misdirected or unwanted artificial light that disturbs the natural darkness of night.	**1**
b)	Confuses sea turtles and migratory birds; disturbs insects and nocturnal animals; affects human sleep; stars cannot be seen clearly (any two).	**2**
c)	Switch off unnecessary lights; use covered lamps that light only downward; use lights of low intensity; use timers / sensors (any two).	**2**

4 (A) Respiration

a)	Nose → Pharynx → Trachea → Bronchi → Bronchioles → Alveoli	**2**
b)	C. Alveoli	**1**
c)	When the diaphragm contracts and moves down, the chest cavity enlarges and air enters the lungs. When it relaxes and moves up, the chest cavity becomes smaller and air is pushed out.	**2**

4 (B) Digestion

a)	A. 1-b, 2-c, 3-d, 4-a	**1**
b)	Peristalsis is the wave-like contraction and relaxation of the muscles of the alimentary canal that pushes food forward. It takes place in the food pipe (oesophagus) and the intestines.	**2**
c)	Bile. It breaks fat into tiny droplets and helps in the digestion of fat.	**2**

5 Heat

a)	A. Thermal expansion	**1**
b)	A. Conduction B. Convection C. Radiation	**3**
c)	Light colours reflect most of the heat falling on them; cotton absorbs sweat and allows air to pass, keeping the body cool.	**2**

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6 Circulatory system

a)	B. Arteries	**1**
b)	A. Carry oxygen (contain haemoglobin) B. White blood cells C. Help in clotting of blood D. Carries digested food, waste, hormones and blood cells	**2**
c)	Four chambers: right atrium, left atrium, right ventricle, left ventricle	**2**

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