SSO – SYNERGY SCIENCE OLYMPIAD

GRADE VI – SYLLABUS FRAMEWORK

Academic Year 2026–27

EXAMINATION PATTERN

CLASS	SUBJECT	QUESTIONS	TOTAL MARKS	TIME	SECTIONS
GRADE 6	SCIENCE	50	50	60 MINUTES	5

SECTION-WISE FRAMEWORK

Section	Area	Marks	Primary Focus
1	General Science	10	Core scientific knowledge
2	Observational & Applied Science	10	Observation and real-life application
3	Logical & Pictorial Reasoning	10	Scientific logic, diagrams and patterns
4	Basics of Science – Physics, Chemistry & Biology	12	Fundamental concepts and application
5	**SYNERGY CHALLENGE**	**8**	**Higher-order thinking and challenging problems**

- Scientific Patterns – sequences, missing stages and identification of patterns.
- Scientific Problem Solving – analyse, compare, infer, predict and select the best explanation.
- Experimental Situations – interpret simple experiments, observations and results.
- Data & Diagram Challenges – extract information from unfamiliar tables, graphs and diagrams.
- Integrated Science – questions may connect Physics, Chemistry, Biology and everyday science.

SYNERGY CHALLENGE – QUESTION DESIGN

Challenge Type	What Students Do	Examples of Skills
Think & Apply	Use known science in a new situation	Application, reasoning
Observe & Infer	Read a diagram, experiment or data	Observation, inference
Predict	Determine the likely outcome	Cause–effect, prediction
Find the Error	Identify an incorrect scientific idea	Critical thinking
Integrated Problem	Use more than one concept	Synthesis, problem solving

SSO – SYNERGY SCIENCE OLYMPIAD -GR VI

SAMPLE QUESTIONS

1. *Match column I with column II and select the correct option from the given codes.*

Column I	Column II
(a) Horse	(i) Decomposer
(b) Eagle	(ii) Omnivore
(c) Bear	(iii) Herbivore
(d) Fungi	(iv) Carnivore
(e) Vulture	(v) Scavenger

A) (a) - (iv), (b) - (ii), (c) - (iii), (d) - (i), (e) - (v)
B) (a) - (ii), (b) - (i), (c) - (iii), (d) - (v), (e) - (iv)
C) (a) - (iii), (b) - (iv), (c) - (ii), (d) - (i), (e) - (v)
D) (a) - (iii), (b) - (iv), (c) - (ii), (d) - (v), (e) - (i)

2. **Study the chart given below and identify X, Y, and Z.**

Vitamin / Mineral	Functions / Sources	Deficiency Disease
Vitamin A	*Carrot, Papaya, Milk*	**X**
Vitamin C	*Citrus fruits, Amla*	**Y**
Z	*Milk, Dairy products*	*Weak bones & Tooth decay*

A) X: Beriberi, Y: Scurvy, Z: Iron
B) X: Night Blindness, Y: Scurvy, Z: Calcium
C) X: Night Blindness, Y: Rickets, Z: Iodine
D) X: Scurvy, Y: Night Blindness, Z: Calcium

3. *Observe the changes shown below.*

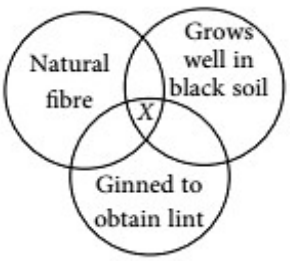
HEATING → WATER → WATER VAPOUR

Which process changes liquid water into water vapour?

A) Freezing *B) Melting* *C) Evaporation* *D) Condensation*

4. *The ..... is protected by the cranium.*

A) heart *B) lungs* *C) brain* *D) kidney*



5 .Identify X in the given Venn diagram.

A) Acrylic *B) Silk cotton* *C) Jute* *D) Cotton*

6. Which of the following statements is/are correct?

I. A mixture obtained by dissolving a solute in a solvent is called a solution.
II. A solution which can dissolve more solute is called saturated.
III. The components of a mixture retain their properties.
IV. A mixture having same composition throughout is called heterogeneous.

A) I and IV only *B) II and III only* *C) I, II and III only* *D) I and III only*

. **7.** *Manas's grandfather maintains an antique pendulum clock. If the clock is running slow by 20 minutes, what should be adjusted/replaced?*

A) The minute hand *B) The battery*
C) The string of the pendulum *D) The hour hand*



8. A village has many trees around a pond. The villagers begin cutting most of the trees for fuel. Which is the MOST likely long-term effect?

A) The soil will always become richer.
B) The local ecosystem may be disturbed and soil erosion may increase.
C) The amount of rainfall will immediately become zero.
D) All animals will become herbivores.

9. **Look at the simplified solar-system sequence***:* ☀ → **Earth → Moon**

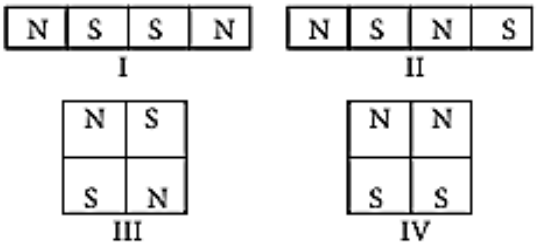
Which statement is correct?

A) The Moon is a star. *B) The Sun is a planet.*
C) Earth is a planet and the Sun is a star. *D) Earth produces its own sunlight.*

10. Properties of magnets

Which of the following pairs of magnets does not obey the properties of a magnet?

A) I and IV only *B) II and III only* *C) I and III only* *D) II and IV only*



1- C	**2- B**	**3- C**	**4- C**	**5 - D**	**6 -D**	**7 -C**	**8- B**	**9-C**	**10-A**