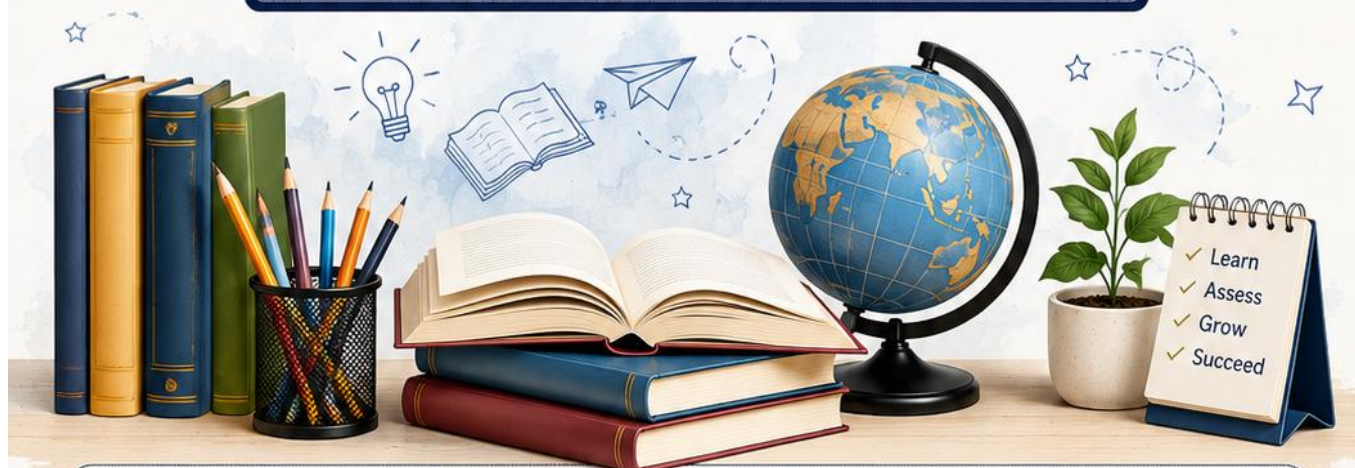


Goa State Council of Educational Research and Training (GSCERT)

Porvorim, Goa

SUMMATIVE EVALUATION 2026-27

SAMPLE QUESTION PAPER



MARKS



TIME



TOTAL SECTIONS



TOTAL QUESTIONS



INSTRUCTIONS

CONTENTS

Sr. No.	Particulars	Page No.
1	 Blue Print	_____
2	 Question Paper	_____
3	 Answer Key	_____



Prepared by

ASSESSMENT CELL

Goa State Council of Educational
Research and Training (GSCERT),
Porvorim, Goa



A competency-based assessment aligned
with NEP 2020 and the State Curriculum Framework.

SUMMATIVE EVALUATION -1
2026 – 2027
SAMPLE QUESTION PAPER

GRADE: 7

Subject Code: 7SCIENG

SUBJECT: Science

MARKS: 50

1. Weightage to the content

Chapter. No.	Chapter	Marks
2.	Exploring Substances: Acidic, Basic and Neutral	10
3	Electricity: Circuits and their components	11
5.	Changes Around us: Physical and Chemical	9
6.	Adolescence: A Stage of Growth and Change	11
7.	Heat Transfer in Nature	9
	Total	50

2. Weightage to the cognitive level as per Revised Bloom's Taxonomy

Bloom's level	Marks	Percentage
Remember	6	12 %
Understand	10	20 %
Apply	10	20 %
Analyze	10	20 %
Evaluate	8	16 %
Create	6	12 %
Total	50	100 %

3. Weightage to the difficulty level

Difficulty level	Marks	Percentage
Easy	16	32 %
Average	20	40 %
Difficult	14	28 %
Total	50	100 %

4. Weightage to the question form

Question Form	Marks	Percentage	Suggested item
MCQ/VSA	20 (20×1)	40 %	Multiple-choice questions.
SA	12 (6×2)	24 %	Brief explanation, steps, inference or reason.
LA	18 (6×3)	36 %	Case, passage, problem, data, judgment or creation.
Total	50	100 %	

5. Weightage to the assessment style

Assessment style	Marks	Percentage	Requirement
Competitive-style competency-based	23	46 %	All items should be mapped to CG/Competency and unfamiliar, integrative or high discrimination formats should be used.
Regular competency-based	27	54 %	All items should be application-oriented, age-appropriate and mapped to the assessed competency.
Total	50	100 %	

SUMMATIVE EVALUATION -1

2026 – 2027

SAMPLE QUESTION PAPER

GRADE: 7

Subject Code: 7SCIENG

SUBJECT NAME: Science

DURATION: 120 minutes

NO. OF QUESTIONS :32

MARKS: 50

General Instructions:

1. All questions are compulsory.
 2. The question paper contains 32 questions.
 3. Question 1 to 20 are MCQ questions of 1 mark each and are to be marked on the OMR sheet provided.
 4. Question 21 to 26 are short answer questions of 2 marks each.
 5. Question 27 to 32 are long answer questions of 3 marks each.
-

Choose the correct alternatives from the options provided below and mark your responses in the OMR sheet provided to you.

(20 × 1 = 20 Marks)

1. Rohan switches on a torch, but the lamp does not glow when the electric cell is removed. This observation helps him understand that the electric cell _____.
 - A. controls the flow of current
 - B. provides electrical energy to the circuit
 - C. produces light directly
 - D. connects the components of the circuit
2. During the water cycle, water vapour in the atmosphere cools and changes into tiny water droplets that gather together to form clouds. This process is called _____.
 - A. Infiltration
 - B. Condensation
 - C. Conduction
 - D. Purification

3. The primary form of energy supplied directly by the batteries to activate the circuit is _____.
- A. Light energy.
 - B. Mechanical Energy.
 - C. Electrical energy.
 - D. Sound Energy.
4. Litmus, a natural indicator extracted from lichens, is commonly available in which of the following forms?
- A. Only as a solution.
 - B. Only as paper strips.
 - C. Both as a solution and paper strips.
 - D. Only as a powder.
5. Chintu told his friend that new substance formed when iron get rusted is _____.
- A. Iron oxide
 - B. Iron dioxide
 - C. Iron trioxide
 - D. Iron tetroxide
6. Simran was told by doctor that generally during 10 to 12 years of age, most changes in our body are observed in _____.
- A. Weight only
 - B. Height only
 - C. Height and hair
 - D. Height and weight
7. Chandan is planning to build a house in a coastal village. To make the house naturally cooler during hot summer afternoons, they decided that the direction of main windows should face _____.
- A. Towards the hills
 - B. Towards the sea
 - C. Away from the sea
 - D. None of the above

8. The start of menstruation considered the most definitive indicator of the onset of reproductive maturity _____.
- A. It signifies the completion of maximum skeletal growth.
 - B. The body begins to produce mature eggs and support potential reproduction.
 - C. It causes sudden growth during the teenage years.
 - D. The pituitary gland releases growth hormones.
9. Chinmay tests different household substances using pH paper. Toothpaste shows properties of a substance that is _____.
- A. Acidic in nature.
 - B. Basic in nature.
 - C. Neutral in nature.
 - D. Corrosive in nature.
10. . Reema tests an electric bulb in a circuit and observes the following:
- Statement I: The bulb glows when electric current passes through its filament.
- Statement II: The bulb does not glow when its filament is broken.
- Statement III: The filament produces light and heat when current passes through it.
- Which of the following statements is correct?
- A. Only Statements I and II are correct.
 - B. Only Statements I and III are correct.
 - C. Only Statements II and III are correct.
 - D. All three statements are correct.
11. During a science activity, Rohan observes that an iron nail left exposed to moist air develops a new brown substance on its surface. Based on his observation, he identifies the type of change that has occurred.
- The change observed by Rohan is a _____.
- A. Physical change
 - B. Chemical change
 - C. Both physical and chemical change
 - D. No change

- 12 A student concludes from a circuit experiment that metals are generally good conductors of electricity because the lamp glows when the circuit is completed using a metal. This conclusion is _____.
- A. Incorrect, because metals do not allow electric current to pass through them.
 - B. Incorrect, because a lamp can glow only when an insulator is used.
 - C. Correct, because metals generally allow electric current to flow easily.
 - D. Correct, because metals produce electricity when connected to a circuit.
13. A family is designing a house for a region with very hot summers and very cold winters. To reduce heat transfer through the walls, the most suitable choice would be _____.
- A. Use solid metal sheets for the walls
 - B. Use hollow bricks with air spaces inside them
 - C. Use thick glass walls without any air gap
 - D. Use concrete walls painted black
14. Knowing that tobacco, alcohol, and illegal drugs are addictive, a responsible adolescent should ____.
- A. Avoid these substances and encourage friends to make healthy choices.
 - B. Experiment with them once
 - C. Use them only during celebrations.
 - D. Keep them a secret from parents.
15. A river flows rapidly over rocky terrain and gradually makes the rock pebbles smoother. This observation can be explained by _____.
- A. erosion caused by flowing water.
 - B. combustion of rocks.
 - C. melting of rocks.
 - D. formation of new substances.
- 16 A student observes a pan of water being heated on a gas stove and makes the following statements:
- I. Heat travels from the flame to the metal pan mainly by radiation.
 - II. Water inside the pan gets heated mainly due to convection.
 - III. The warmth felt by a person standing near the stove is mainly due to radiation.
- Which of the following statements is correct?
- A. Only I and II are correct.
 - B. Only II and III are correct.
 - C. Only I and III are correct.
 - D. I, II and III are all correct.

17. During a trek, Maya's friend gets stung by an ant, causing a burning sensation. To relieve the affected area, Rohan should apply _____.

- A. Vinegar.
- B. Lemon juice.
- C. Baking soda.
- D. Curd.

Directions: Question 18 consists of an Assertion (A) and a Reason (R).

Use the following key to choose the appropriate answer.

- A. Both Assertion (A) and Reason (R) are true, and R is the correct explanation of A.
- B. Both Assertion (A) and Reason (R) are true, but R is not the correct explanation of A.
- C. Assertion (A) is true, but Reason (R) is false.
- D. Assertion (A) is false, but Reason (R) is true.

18. Assertion (A): Neutralisation reaction is accompanied by the absorption of heat.

Reason (R): Neutralisation reaction is a reaction between an acid and a base to form salt and water.

19. A school wants to improve menstrual hygiene while also reducing environmental impact. The most appropriate approach based on the given information would be to _____.

- A) Provide sanitary products, ensure proper disposal facilities, and promote the use of biodegradable options.
- B) Provide sanitary pads but allow used pads to be disposed of in open areas.
- C) Focus only on providing sanitary products without creating disposal facilities.
- D) Avoid discussing menstrual hygiene to prevent discomfort among students.

20. During a hot afternoon in a coastal village, the windows of a house are kept facing the sea because _____.

- A. Water gets heated faster than land and pushes warm air towards the sea.
- B. Land gets heated faster than water, causing cooler air to move from the sea towards the land.
- C. Land and water get heated and cooled at the same rate, producing sea breeze.
- D. Water cools faster than land, causing warm air to move from the sea towards the land.

Answer the following questions:

(6×2=12)

21. Rohan receives an offensive message about one of his classmates in a social media group. Instead of forwarding it, he deletes the message and informs his teacher.

Why was Rohan's action responsible? Give any two reasons based on the passage.

22. A student removes the bulb from a torch and notices that the filament is connected to two terminals which are separated from each other. Explain why the filament is connected to two separate terminals and state what happens to the filament when the torch is switched on.

23. Two plots of land of the same size receive the same amount of rainfall. One plot has gravel soil and the other has clay soil. Predict which area will allow more groundwater recharge. Give a scientific reason for your answer.

24. Imagine you are designing a simple torch using an incandescent lamp. Complete the design by suggesting how the filament should be connected and what should happen when the torch is switched on. Give two points.

25. A hilly village experiences frequent soil and rock erosion during heavy rainfall. Explain how planting trees on the slopes can help reduce erosion.

26. A 14-year-old boy develops a deeper voice and a small bulge in his throat. His younger brother believes that these changes indicate an illness. Evaluate the brother's conclusion and give two reasons to support your judgement.

Answer the following:

(6 X 3 Marks = 18)

27. Turmeric paper is used as an indicator for testing substances.

(a) What colour change does turmeric paper show when it comes in contact with a basic substance?

(b) What happens to turmeric paper when it comes in contact with an acidic or neutral substance? Justify your answer.

28. Prithvi wants to start a "Waste-to-Garden" project at home. He plans to use vegetable peels and fruit waste to prepare compost and then grow flowering plants.

a) Which activity in the project would involve a physical change?

b) Which activity would involve a chemical change? Give one reason.

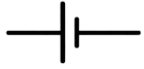
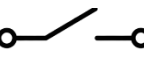
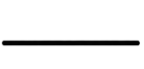
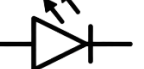
c) How can Prithvi use the prepared compost to help the flowering plants grow?

29. Rina recently attained puberty and started menstruating. She feels tired and is unsure about proper hygiene. Her friend says that taking a daily bath alone is sufficient during menstruation.

Analyse Rina's situation and answer the following:

1. What is missing from her friend's advice about menstrual hygiene.

2. Why maintaining personal and menstrual hygiene is important during adolescence.
 3. How a balanced diet can help Rina during this stage of growth.
30. A village receives very little rainfall for several months.
- (a) Which stage of the water cycle is directly affected due to the lack of rainfall?
 - (b) Explain how the Sun contributes to the continuous movement of water in nature.
 - (c) State one importance of the water cycle for life on Earth.
31. Suresh found that plants are not growing well lately in his farmland.
- a) What may be the reason that plants are not growing well lately in Suresh farmland?
 - b) What remedy you will provide to him?
 - c) Sometimes, the soil may be neutral, but the plants growing in it may still show poor health. Why?
32. Study the electrical symbols given above. Imagine that you are designing a simple electrical circuit for a science exhibition. You have a cell, battery, lamp, LED, connecting wire and switch available. Use the appropriate symbols to design the circuits and answer the following:

ELECTRICAL SYMBOL					
					

- a) Design and draw a circuit diagram in which a lamp glows using a cell.
- b) Design and draw a circuit diagram in which an LED glows using a battery and a switch.
- c) State the condition you would ensure while designing the LED circuit so that the LED glows when the switch is closed.

SUMMATIVE EXAM -I
2026- 2027

ANSWER KEY

Grade: VII – English Medium

Marks: 50

Subject Code: 7SCIENG

Subject Name: Science

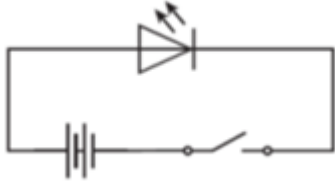
No. of Questions: 32

Duration: 120 min

(ACCEPT ANY OTHER VALID ANSWER WHEREVER APPLICABLE)

Q. NO	ANSWERS	MARKS
1.	B) provides electrical energy to the circuit	1
2.	B) Condensation	1
3.	C) Electrical energy.	1
4.	C) Both as a solution and paper strips.	1
5.	A) Iron oxide	1
6.	C) Height and weight.	1
7.	B) Towards the sea	1
8.	B) The body begins to produce mature eggs and support potential reproduction.	1
9.	B) Basic in nature.	1
10.	D) All three statements are correct.	1
11.	B) Chemical change	1
12.	C) Correct, because metals generally allow electric current to flow easily.	1
13.	B) Hollow bricks with air spaces inside them	1
14.	A) Avoid these substances and encourage friends to make healthy choices.	1
15.	A) Erosion caused by flowing water.	1
16.	B) Only II and III are correct.	1
17.	C) Baking soda.	1
18.	D) Assertion (A) is false, but Reason (R) is true.	1
19.	A) Provide sanitary products, ensure proper disposal facilities, and promote the use of biodegradable options.	1
20.	B) Land gets heated faster than water, causing cooler air to move from the sea towards the land.	1
21.	• He used social media responsibly and did not spread harmful information. (1 Mark) • He sought guidance from a responsible adult (teacher), helping to ensure the well-being of others. (1 Mark)	2
22.	• The filament is connected to two separate terminals to complete the electric circuit without the terminals touching each other. • When the torch is switched on, electric current passes through the filament, causing it to become very hot and glow, producing light.	2

Q. NO	ANSWERS	MARKS
23.	- The gravelly soil will allow more groundwater recharge. - Gravel has larger, interconnected pore spaces, allowing water to infiltrate more easily than clay.	2
24.	- The filament should be connected between two separate terminals so that electric current can pass through it. - When the torch is switched on, the filament becomes hot and glows to produce light.	2
25.	The roots of trees hold the soil together and reduce the washing away of soil by rainwater. The vegetation also slows down the flow of water over the slopes, thereby reducing erosion.	2
26.	The conclusion is incorrect. These are normal changes during adolescence. The voice becomes deeper as the larynx grows, and the throat bulge is the Adam's apple, which becomes more prominent during this stage.	2
27.	- Turmeric paper turns reddish-brown when it comes in contact with a basic substance. - Turmeric paper generally does not show a characteristic colour change with either acidic or neutral substances. Since both acidic and neutral substances produce no characteristic colour change, turmeric paper cannot distinguish between them. It is mainly useful for identifying basic substances.	3
28.	- Cutting or Peeling the vegetable and fruit— it is a physical change because no new substance is formed. - Decomposition of the waste to form compost — it is a chemical change because new substances are formed. - The compost provides nutrients and improves plant growth.	3
29.	- Taking a bath alone is not sufficient; proper menstrual hygiene also includes using suitable menstrual products and disposing of them properly. - Good hygiene helps maintain cleanliness and reduces the risk of infections. - A balanced diet provides nutrients needed for growth, development, and maintaining good health during adolescence.	3
30.	- Precipitation is affected - The Sun provides heat for evaporation of water from water bodies and plants, initiating the water cycle. - It replenishes freshwater sources and helps conserve the total amount of water on Earth	3

Q. NO	ANSWERS	MARKS
31	i) The farmland has become acidic due to excessive use of chemical fertilisers. ii) When the soil is too acidic, the plants do not grow well. It can be treated by adding lime in soil, which is a base and neutralise the acidic nature of soil. iii) It may be due to the deficiency of nutrients in the soil.	3
32.	a)  b)  c) The LED must be connected in the correct polarity: its positive terminal (anode) should be connected to the positive terminal of the battery and its negative terminal (cathode) to the negative terminal. When the switch is closed, current flows through the LED and it glows.	3