aglasem.com

FOR MEGHALAYA CLASS 8 PREPARATION

MBOSE Class 8 Sample Question Paper 2027 Science

EXAM	YEAR	TYPE	SUBJECT
Meghalaya Class 8	2027	Sample Paper	Science

SAMPLE QUESTION PAPERS

FOR

CLASSES VI TO VIII

MID- TERM EXAMINATION

FOR THE ACADEMIC YEAR- 2026

ENGLISH
MIL (KHASI, GARO & HINDI)
MATHEMATICS
SCIENCE
&
SOCIAL SCIENCE

DIRECTORATE OF EDUCATIONAL RESEARCH & TRAINING
NONGRIMMAW, LAITUMKHRAH
SHILLONG

2026

FOREWORD

The National Education Policy (NEP) 2020 has ushered in a transformative shift in the way we perceive teaching, learning, and assessment in our schools. At the heart of this change lies a focus on competency-based education — an approach that emphasizes the application of knowledge, critical thinking, and the development of real-life skills among students.

The National Curriculum Framework for School Education (NCFSE) 2023 emphasizes competency-based learning and assessment, shifting the focus from rote memorization to the practical application of knowledge and skills. Competency-based assessment (CBA) evaluates a student's ability to use their knowledge and skills in real-world contexts, rather than just their recall of facts. This approach aligns with the goals of the National Education Policy (NEP) 2020, which aims to foster critical thinking, problem solving, and other 21st century skills.

The Directorate of Educational Research and Training (DERT), Meghalaya, is committed to enhancing the quality of School education in the State through academic support, curriculum development, and capacity building. As part of this ongoing endeavour, the present set of sample question papers has been developed in aligning classroom instruction with assessment patterns.

In line with this progressive vision, the **Sample Question Papers for Classes 6 to 8 across subjects- Science, Mathematics, Social Science and Languages which include English, Khasi, Garo and Hindi which are oriented towards Competency-Based Assessment** and have been developed as a resource to support teachers, and students in navigating this important transition. These sample question papers are designed not merely to test rote memorization, but to assess the depth of understanding, analytical skills, and the ability of learners to apply concepts in novel situations.

The sample question papers included in this document aim to promote active engagement with the curriculum, nurture curiosity, and encourage problem-solving. Teachers can use these as models to create meaningful classroom assessments, while students can gain a clearer understanding of what is expected in a competency-driven learning environment.

We hope that this collection will serve as a valuable tool in enhancing the quality of assessment practices in schools, and in turn, contribute to building a more holistic and learner-cantered education system.

I would like to extend my sincere appreciation to all the contributors involved in this academic endeavour. Constructive feedback from users of this resource is welcomed and will be valuable in guiding future improvements.

Let us continue working together to foster a culture of thoughtful learning and fair assessment, paving the way for a generation that is confident, capable, and future-ready.

Director,
Directorate of Educational Research & Training,
Meghalaya, Shillong.

Background Note

NEP 2020 envisions a transformation in school assessment, away from rote memorization towards formative, regular, competency-based evaluation that tests higher-order thinking like analysis, critical thinking, and conceptual understanding

NCFSE 2023 builds on that vision and emphasizes “assessment as learning”, “for learning”, and “of learning” which are oriented towards competencies and capacities development in the learners.

Competency-Based Assessments under NEP 2020 and NCFSE 2023 are a reformative thrust toward holistic, skills-based, student-cantered learning. Through ongoing formative checks, diverse assessment modes, rubrics, self-reflection, and board-level flexibility, the new paradigm seeks to nurture critical thinkers rather than rote learners.

Competency-based questions (CBQs) and competency-based assessments (CBAs) play a crucial role in learning, and performance evaluation. They shift the focus from rote memorization or general qualifications to real-world skills, behaviours, and outcomes.

The Sample Question Papers prepared and developed by the Directorate of Educational Research and Training are based on the revised syllabus 2026 of Meghalaya School Education for classes 6 to 8 across core subjects such as Science, Mathematics, Social Science and Language including English, Khasi, Garo and Hindi.

These sample question papers across these grades and subjects shift focus from rote memorization to the application of knowledge, critical thinking, and real-world problem-solving skills and allow students to realise that what they learn in school is to help them relate with realities of life and to prepare them for the future as responsible and contributing citizens.

The key benefits of these sample questions across the subjects Science, Mathematics, Social Science and Language including English, Khasi, Garo and Hindi and across grades 6 to 9, is that they serve both as practice tools and as assessment frameworks, helping teachers design questions that test learners beyond their conceptual understanding and to help in assessing their higher-order reasoning and application capacities and skills.

Furthermore, these sample questions can serve as tools for teachers for test planning, question framing, and assessing higher-order skills. Besides this is will also help prepares teachers and students for practice aligned with demands of real competency-based items in future board exams offering exposure to varied question formats.

Furthermore, these sample questions will help to equip students with the capacities to apply knowledge in new situations, rather than recalling facts.

Another benefit of these sample question papers is to help identify and bridge learning gaps by spotlighting specific competencies.

This document stands as a strategic resource meant to mainstream competency-based assessment in middle and secondary stages of school education. It reflects a broader curricular transition, addresses the evolving demands for effective progression into higher grades.

CONTENT

FOREWORD ----------
BACKGROUND NOTE----------

SAMPLE QUESTION PAPER

Subjects	***Class***
English Class	VI
English Class	VII
English Class	VIII
MIL Khasi Class	VI
MIL Khasi Class	VII
MIL Khasi Class	VIII
MIL Garo Class	VI
MIL Garo Class	VII
MIL Garo Class	VIII
Mathematics Class	VI
Mathematics Class	VII
Mathematics Class	VIII
Science Class	VI
Science Class	VII
Science Class	VIII
Social Science Class	VI
Social Science Class	VII
Social Science Class	VIII
MIL Hindi Class	VI
MIL Hindi Class	VII
MIL Hindi Class	VIII

SCIENCE
Class – VIII

Duration: 3 hours
Full Marks: 80

General Instructions:

- Answer all questions
- Please check that there are 50 questions in the Question Paper
- Marks for each question are indicated against the question
- The question paper is divided into seven sections Section- A, B, C, D, E,F, G
  Section A – contains Multiple choice question of 1 mark each (5 marks)
  Section B – contains Fill in the Blanks of 1 mark each (5 marks)
  Section C- contains True or False of 1 mark each (5 marks)
  Section D – consists of Match the following column of 1 mark each (5 marks)
  Section E – consists of Very Short Answer type question of 1 mark each (10 marks)
  Section F – Short Answer Type of 2 marks each (30 Marks)
  Section G – Long Answer of 4 Marks each (20 Marks)

SECTION – A

Multiple Choice Questions: **(1 x 5 = 5)**

1. Which of the following is a Kharif crop?
   A. Wheat
   B. Gram
   C. Paddy
   D. Mustard

2. Food gets spoiled faster in summer because:
   A. Less Moisture
   B. High temperature promotes microbial growth
   C. Less sunlight
   D. Low humidity

3. Suggest the best way to conserve fuel
   A. Use private vehicles
   B. Use public transport
   C. Increase speed
   D. Idle engines

4. Why do tyres have grooves?
   A. Increase friction
   B. Reduce friction
   C. Reduce weight
   D. Increase speed

5. Which liquid conducts electricity best?
   A. Distilled water
   B. Salt solution
   C. Oil
   D. Alcohol

SECTION – B

Fill in the blank with appropriate answers: **(1 x 5 = 5)**

6. Coal, petroleum, and natural gas are called _____fuels.
7. Planting trees helps reduce_____warming
8. A push or pull is called _____.
9. Pressure is defined as force per unit _____.
10. The passage of an electric current through a conducting solution causes _____

SECTION – C

State whether the following are 'True' or 'False': **(1 x 5 = 5)**

11. Storage of grains in moist conditions prevents spoilage.
12. CNG is a cleaner fuel compared to petrol and diesel.
13. Red Data Book contains information about extinct species only.
14. Smooth surfaces produce more friction than rough surfaces.
15. Friction is necessary for walking.

SECTION – D

Match column A with column B **(1 x 5 = 5)**

Column A	Column B
16. Rhizobium	a. Organic matter
17. Bori	b. Vaseline and candles
18. Manure	c. Reduce friction
19. Paraffin wax	d. Nitrogen fixation
20. Lubricants	e. Wildlife sanctuary

SECTION – E

Very Short Answer: **(1 x 10 = 10)**

21. What is a crop?
22. While preparing the soil for growing a crop, levelling is done. Why?
23. Can microorganisms be seen with the naked eye? If not, how can they be seen?
24. Why should we conserve biodiversity?
25. What happens when force is applied on an object?
26. Calculate the pressure exerted by a force of 20 N on an area of 2 m^2.

27. Why do objects slow down due to friction?
28. Give one disadvantage of friction.
29. What happens when current passes through a solution?
30. Give one use of electroplating.

SECTION – F

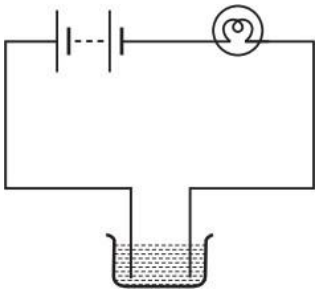
Short Answer: **(2 x 15 = 30)**

31. Explain the process of ploughing and its importance.
32. Which is better for long-term soil health – manure or fertilizers? Justify your answer.
33. Propose ways to improve crop yield using sustainable practices.
34. Differentiate between antibiotics and vaccines.
35. Describe the nitrogen cycle.
36. Suggest atleast two ways to prevent food poisoning.
37. Explain why fossil fuels are exhaustible natural resources.
38. A household switches from LPG to solar cooking.
    (a) What type of energy source is solar energy?
    (b) Mention one advantage of this change.
39. What are the products obtained and their uses when coal is processed in industry?
40. Differentiate between wildlife Sanctuary and National Park.
41. Design a poster idea to spread awareness about conservation.
42. Compare contact and non-contact forces.
43. What is electrostatic force? Why is it called non-contact force?
44. A sharp knife cuts vegetables easily compared to a blunt knife.
    Why does this happen?
45. Give reason why tap water is a good conductor of electricity.

SECTION – G

Long Answer **(4 x 5 = 20)**

46. "Microorganisms are both useful and harmful." Justify this statement with suitable arguments.
47. Why should paper be saved? Prepare a list of ways by which you can save paper.
48. Define force and explain its effects with examples.
49. Analyse the advantages and disadvantages of friction.
50. The bulb does not glow in the setup as shown in the figure below. List the possible reasons.



****