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FOR MEGHALAYA CLASS 8 PREPARATION

MBOSE Class 8 Sample Question Paper 2027 Mathematics

EXAM	YEAR	TYPE	SUBJECT
Meghalaya Class 8	2027	Sample Paper	Maths

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

MATHEMATICS
CLASS - VIII

Duration : 3 Hours
Full Marks : 80
Pass Marks : 24

General Instructions:
Answer all questions
Please check that there are 40 questions in the Question Paper.
The intended marks for questions or parts of questions are given in brackets.
The question paper is divided into 4 sections – A, B, C and D.
Section A – Question 1 contains 10 Multiple Choice Questions (MCQ) carrying 1 mark each.
Section B - contains 5 Fill in the blanks carrying 1 mark each.
Section C – contains 5 True or False carrying 1 mark each.
Section D – contains 10 Very Short Answer Type Questions carrying 2 marks each
Section E – contains 5 Short Answer Type Questions carrying 4 marks each
Section F – contains 4 Long Answer Type Questions carrying 5 marks each.
Use of calculators, smart watches, mobile phones or electronic gadgets is strictly prohibited.

SECTION – A

Multiple Choice Questions: **(10X1=10)**

1. The additive and multiplicative identities of rational numbers are:

   A. (-0, 0)
   B. (0, -1)
   C. (0, -1)
   D. (1, 0)

2. An integer can be

   A. Only positive
   B. only negative
   C. Both positive and negative
   D. None of the above

3. The sum of the measures of the external angles of any Polygon is:

   A. 60^o
   B. 90^o
   C. 180^o
   D. 360^o

4. When a die is thrown, probability of getting a prime number is

A. $\frac{1}{6}$ B. $\frac{1}{3}$

C. $\frac{1}{2}$ D. None of the above

5. Pie- Chart is a:

A. Bar graph B. double bar graph

C. Circle graph D. None of the above

6. The squares of which of the following would be odd numbers?

A. 431 B. 2826

C. 82004 D. 428

7. Which of the following is not a perfect square?

A. 169 B. 225

C. 423 D. 121

8. $a^2 - 2ab + b^2$ is equal to :

A. $(a + b)^2$ B. $(a – b)^2$

C. $(a + b)(a – b)$ D. None of the above

9. Marked price – Sales price is:

A. Sales Tax B. VAT

C. Discount D. GST

10. $– 20 x^4 \div 10 x^3$ is

A. -2 B. $-2x^2$

C. - 2x D. 2x

SECTION – B

Fill in the blank with appropriate answer: (5x1=5)

11. The product of two rational numbers is always a _____
12. A simple closed curve made up of only line segment is called _____
13. _____ is the pictorial representation of data using symbols.
14. The square root of 169 is _____
15. VAT stands for _____

SECTION -C

State whether the following statements are True or False. (5 x 1=5)

16. Subtraction is associative for rational numbers.
17. All squares are rhombuses and also rectangles.
18. Head and Tail are the possible outcomes you get, when a coin is tossed.
19. Square of 89 containing 1 in unit's place.
20. $(a + b)(a - b) = a^2 + b^2$

SECTION – D

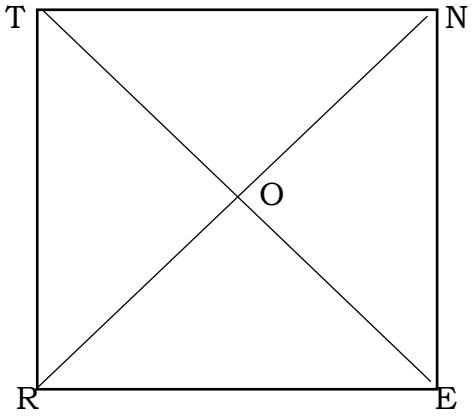
Very short answer: (10 x 2=20)

21. Find the product: $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times \frac{-14}{9}$
22. Find the number of sides of a regular polygon whose each exterior angle has a measure of 24^0
23. List the outcomes you can see in the experiment of Tossing two coins together.
24. A bag has 4 red balls and 2 yellow balls. A ball is drawn from the bag without looking into the bag. What is the probability of getting a red ball? Is it more or less than getting a yellow ball?
25. Without adding find the sum of
    3 + 5 + 7 + 9 + 11 + 13 + !5 + 17 + 19
26. Find the square root of 1369 by Division method.
27. 72 % of 25 students are interested in mathematics. How many students are not interested in Mathematics
28. Convert the following ratios to percentage
    3 : 4 ii) 2 : 3
29. Find the common factors of the given terms
    (i) 12 x, 36 ii) 10 p q, 20 q r , 30 r p
30. Factorise $p^2 - 10p + 25$ by using suitable identity.

SECTION-E

Short Answer Type:

31. RENT is a rectangle, its diagonals meet at O. Find, if R = 2x +4and OT= 3x +1



32. Find the smallest natural number by which 1458 should be multiplied so as to get a perfect square number. Also find the square root so obtained.

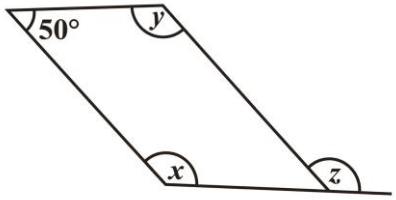
OR

33. Find the smallest square number which is divisible by each of the numbers 6, 9, and 15
34. Write a Pythagorean Triplet whose one number is 14.
35. The price of a TV is Rs. 13,000. The sales tax charged on it is at the rate of 12 %. Find the amount that Vinod will have to pay if he buys it.
36. Factorise the expression and divide as directed

$(y^2 + 7y + 10) \div (y + 5)$

SECTION F
Long Answer Type (Marks: 5x5=25)

37. Consider a parallelogram where one interior angle is 50°. Find the values of the unknowns x, y, and external angle z.



Draw a Pie chart showing the following information. The table shows the colours preferred by a group of people.

Colours	Number of People
Blue	18
Green	9
Red	6
Yellow	3
Total	**36**

38. Find the Greatest 4-digit number which is a perfect square.

OR

Find the smallest whole number by which 1008 should be multiplied so as to get a perfect square number. Also find the square root of the square number so obtained.

39. The population of a place increased to 54, 000 in 2003 at a rate of 5% per annum.
    i) Find the population in 2001.
    ii) What would be its population in 2005?

OR

Find Compound Interest on 12600 for 2 years at 10% per annum compounded annually. (Use Compound Interest formula)

40. Factorise the expressions and divide:

a. $(y^2 + 7y + 10) \div (y + 5)$

b. $5pq(p^2 - q^2) \div 2p(p + q)$

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