

**ASSESSMENT OBJECTIVES FOR ENGLISH FOR CLASS VIII**

- I. COMPREHENSION**
- II. WRITING SKILLS**
- III. VOCABULARY AND GRAMMAR**

**I. COMPREHENSION**

The candidate will be given a suitable passage and asked to answer the questions based on the passage. There will also be exercises based on the passage.

**II. WRITING SKILLS**

The candidate appearing for the exam should be able to write a story or composition based on hints given or a relevant topic.

**III. VOCABULARY AND GRAMMAR**

Grammar (reported speech; choose the correct form of the word given in brackets)  
Vocabulary exercises.

*The entrance examination will test the student in the above areas. These areas are broadly delineated cannot be specified in a detailed or precise manner in the curriculum content.*

**SCHEME OF ASSESSMENT FOR ENGLISH FOR CLASS VIII**

Assessment Objectives	Weightage (%)	Duration of Paper	Marks
Exercises based on Comprehension	40	1 Hour	50 Marks
Creative Writing	20		
Vocabulary and Grammar	40		

**ASSESSMENT OBJECTIVES FOR MATHEMATICS FOR CLASS VIII**

- I. Mathematical knowledge with understanding of concepts**  
**II. Applications of concepts – Problem solving skill**

**I. MATHEMATICAL KNOWLEDGE WITH UNDERSTANDING OF CONCEPTS**

The candidate taking the entrance exam should be able to present mathematical knowledge and understanding of concepts in relation to:

- Organise and present information accurately in written, tabular, graphical and diagrammatic forms.
- Perform calculations by suitable methods.
- Understand systems of measurement in everyday use and make use of them in the solution of problems.
- Estimate, approximate and work to degrees of accuracy appropriate to the context.

**II. APPLICATIONS OF CONCEPTS – PROBLEM SOLVING SKILL**

The candidate taking the entrance exam should be able to solve the numerical problems using appropriate formulae, symbols, units, graphs etc. The candidate will be tested on the following skills:

- Interpret, transform and make appropriate use of mathematical statements expressed in words or symbols.
- Recognise and use spatial relationships in two and three dimensions, particularly in solving problems.
- Recall, apply and interpret mathematical knowledge in the context of everyday situations.
- Make logical deductions from given mathematical data.
- Recognise patterns and structures in a variety of situations, and form generalizations.
- Respond to a problem relating to a relatively unstructured situation by translating it into an appropriately structured form.
- Analyse a problem, select a suitable strategy and apply an appropriate technique to obtain its solution.
- Apply combinations of mathematical skills and techniques in problem solving.
- Set out mathematical work, including the solution of problems, in a logical and clear form using appropriate symbols and terminology.

***The entrance examination will test the above objectives. These skills cannot be further specified in a detailed or precise manner in the curriculum content. However the questions are well within the syllabus of the entrance examination.***

## SCHEME OF ASSESSMENT FOR MATHEMATICS FOR CLASS VIII

Assessment Objectives	Weightage (%)	Duration of Paper	Marks
Mathematical Knowledge	30	1 Hour	50 Marks
Understanding of Concepts	30		
Application Skills	20		
Problem solving skills	20		

## SYLLABUS OUTLINE OF MATHEMATICS FOR CLASS VIII

### Numbers and Number sense

- The student will
  - a) compare and order rational numbers using mathematical symbols  $<$ ,  $>$  and  $=$ .
  - b) use arithmetic operators ( $+$ ,  $-$ ,  $\times$  and  $\div$ ) and the laws of exponents (indices) to simply numerical expressions involving rational numbers and decimals.
  - c) will solve multi step simplifications involving operations on rational numbers using BODMAS, i.e. hierarchy of operations. (Bracket of Division, Multiplication, Addition and Subtraction)
  - d) convert a given rational number into decimal and vice versa

### Algebra

- The student will
  - a) simplify algebraic expressions using basic operations
  - b) simplify/factorize the algebraic expressions using standard identities  $(a + b)^2$ ,  $(a - b)^2$  and  $a^2 - b^2$ .
  - c) frame and solve linear equations in one variable.

### Ratio and Proportion and commercial mathematics

- The student will
  - a) solve problems using direct and inverse variations.
  - b) calculate simple interest/principal/rate of interest/time
  - c) solve word problems using percentage, profit & loss and discount.

## Measurement and Geometry

- The student will
  - a. find the surface area and volume of cube and cuboids.
  - b. solve problems involving area and perimeter of square and rectangle.
  - c. solve simple problems using the properties of quadrilaterals, circles and congruence of triangles.

## Statistics

- The student, given a problem situation, will analyze, display, and interpret data in a variety of graphical methods, including line and bar graphs and draw inferences from graphs.

**ASSESSMENT OBJECTIVES FOR SCIENCE FOR CLASS VIII**

- I. Factual knowledge with understanding of concepts**
- II. Application of concepts – Problem solving**
- III. Drawing Skills**

**I. FACTUAL KNOWLEDGE WITH UNDERSTANDING OF CONCEPTS**

The candidate taking the entrance exam should be able to present factual knowledge and understanding of concepts in relation to:

- a. Facts, phenomena and laws.
- b. Define terms:  
Definition of physical, chemical and biological terms with SI units, symbols and equations.
- c. Explain a concept using examples from daily life or laboratory apparatuses
- d. Explain or suggest applications of science and technology in daily life with appropriate examples.

**II. APPLICATION OF CONCEPTS – PROBLEM SOLVING**

The candidate taking the entrance exam should be able to solve the numerical problems using appropriate formulas, symbols, units, graphs etc. The candidate will be tested on the following skills:

- a. Present the information given in the problem accurately.
- b. Convert units from one form to another.
- c. Manipulate data and equations (Physical and Chemical).
- d. Present the solution with appropriate steps.
- e. Present the result as desired by the problem with appropriate units.

**III. DRAWING SKILLS**

Drawing of diagrams and labeling them appropriately. Drawing of diagrams includes experiments in physics, chemical apparatuses / setups and biological structures.

**The entrance examination will test the above objectives. These skills cannot be further specified in a detailed or precise manner in the curriculum content. However the questions are well within the syllabus of the entrance examination.**

## SCHEME OF ASSESSMENT FOR SCIENCE FOR CLASS VIII

Paper	Assessment Objective	Weightage (%)	Duration of the paper	Marks
Entrance to class 8	Factual Knowledge	30	1 Hour	50 Marks
	Understanding of Concepts	30		
	Application Skills	20		
	Drawing Skills	20		

## SYLLABUS OUTLINE OF SCIENCE FOR CLASS VIII

**TOPICS:** FOOD; MATERIALS OF DAILY USE; WORLD OF THE LIVING; MOTION; ELECTRICITY; LIGHT; NATURAL RESOURCES;

### FOOD

- Nutrition in plants: How does plant obtain food?
- How does animals utilise plant food?
- Knowledge of terms like Heterotrophs, Autotrophs and Photosynthesis.
- Human digestive system: Role of Teeth, Stomach and Intestines.

### MATERIALS OF DAILY USE

- Natural and Man-made fiber: Wool, silk and cotton.
- Extraction of silk from silkworms – Process.
- Different clothes for different regions of the world.

### ACIDS, BASES AND SALTS

- Physical and chemical properties of acids and bases
- Acids and bases in daily life (lactic acid in milk, vinegar in pickles etc)

## PHYSICAL AND CHEMICAL CHANGES

- Distinguish between physical and chemical change

## WORLD OF THE LIVING

- Soil: Types of soil
- Absorption of water by soil.
- Crops grown in different soils.
- Climate: Adaptation of animals in different climates.

## MOTION

- Measurement of time: Different devices used to measure time.
- Measurement of speed.

## ELECTRICITY

- Working of an electric bulb.
- Working of an electric fuse.
- Construction of an electromagnet and its uses.

## LIGHT

- Basic property of light: Light travels in a straight line, formation of shadows etc.
- Reflection of light from different surfaces like metal, wall etc.
- Colors in sunlight.

## NATURAL RESOURCES

- Water as a natural resource.
- Various sources of water in nature: River, Pond, Lake etc.
- Scarcity of water.
- Forest: Resources that can be obtained from forests.
- Waste management.

**Questions will also be asked to test the general awareness in science pertaining to the age group.**