#### 4.4 SCHEME OF EXAMINATION

**Mode of Examination**: Paper pencil on OMR answer sheets for admission to both Class VI and Class IX.

Type of Questions: Multiple Choice Questions

Scheme of Examination is as follows:

For VI Std (Based on topics listed in Appendix-II)

Section	Topic	No. of	Marks for each	Total marks
		Questions	Correct answer	
Α	Language	25	2	50
В	Mathematics	50	3	150
С	Intelligence	25	2	50
D	General Knowledge	25	2	50
	Total	125		300

#### For IX Std (Based on topics listed in Appendix-III)

Section	Topic	No. of Questions	Marks for each correct answer	Total marks
Α	Mathematics	50	4	200
В	Intelligence	25	2	50
С	English	25	2	50
D	General Science	25	2	50
E	Social Science	25	2	50
	Total	150		400

There is no negative mark for a wrong response.

#### 4.5 MEDIUM OF EXAMINATION

For admission to Class IX: English only

#### TOPICS COVERED IN CLASS VI: MATHEMATICS

## Total Question-50

Max Marks-150

S No	Topics	S No	Topics
1.	Natural Numbers	14.	Conversion of Units
2.	LCM and HCF	15.	Roman Numerals
3.	Unitary Method	16.	Types of Angles
4.	Fractions	17.	Circle
5.	Ratio and Proportion	18.	Volume of Cube and Cuboids
6.	Profit and Loss	19.	Prime and Composite Numbers
7.	Simplification	20.	Plane Figures
8.	Average	21.	Decimal Numbers
9.	Percentage	22.	Speed and Time
10.	Area and Perimeter	23.	Operation on Numbers
11.	Simple Interest	24.	Temperature
12.	Lines and Angles	25.	Arranging of Fractions
13.	Complementary and Supplementary Angles		

#### TOPICS COVERED IN CLASS VI: INTELLIGENCE

Total Question- 25 Max Marks- 50

Questions on Intelligence will be based on analogies (mathematical & verbal), pattern (spatial and mathematical), classification, visual, logical, reasoning etc.

# TOPICS COVERED IN CLASS VI: LANGUAGES (ENGLISH / HINDI / REGIONAL LANGUAGES)

# Total Question-25

Max Marks- 50

S No	Topics	S No	Topics
1.	Comprehension Passage	14.	Sentence Formation
2.	Preposition	15.	Antonyms
3.	Article	16.	Synonyms
4.	Vocabulary	17.	Adjectives
5.	Verbs and Type	18.	Interjection
6.	Confusing Words	19.	Idioms and Phrases
7.	Question Tags	20.	Collective Nouns
8.	Types of sentence	21.	Number
9.	Tense forms	22.	Gender
10.	Kinds of Nouns	23.	Adverbs
11.	Kinds of Pronouns	24.	Rhyming Words
12.	Correct Spelling	25.	Singular/Plural
13.	Ordering of words in sentence		

Questions in the language(s) section will be based on topics dealt till Class V.

## TOPICS COVERED IN CLASS VI: GENERAL KNOWLEDGE

Total Question– 25 Max Marks–50

S	Topics	S	Topics
No	-	No	-
1.	Different Types of Scientific Devices Used in Daily Life.	15.	Concepts on Mountain Terrain and Lifestyle
2.	Icons and Symbols of India: National Insignia, National Emblem, Sports, Animal etc. (Elementary awareness of Such symbols)	16.	Historical Monuments
3.	Major Religions of India (Elementary awareness about founder, place of origin, Religious books and important ideas)	17.	Shape of Earth and Gravitation (Basic concepts)
4.	Art and Culture (Music, Classical and Folk Dance); Renowned Personalities, Instrumental and Vocal Music, Major Dance Forms	18.	Non-Renewable Energy Sources (Fossil Fuels)
5.	Defence (Equivalent Ranks in three services, Weapons, Aircraft, Missiles & Warships (Elementary awareness)	19.	Food, Culture, Habitat, Languages etc of various regions (Basic concepts)
6.	Sports and Games (India & World). Renowned personalities, major competitions and trophies associated With various games	20.	Names of young ones of different animals
7.	Super Senses (How do plants and Animals sense their surroundings)	21.	Functions of Body Parts of Plants and Animals
8.	Relationship between Animals and Human Beings	22.	International Organizations: Basic knowledge about structure, Functioning and objectives of United Nations, World Bank etc.
9.	Taste and Digestion (Basic concepts)	23.	Indian Literary and Cultural Personalities: Names and fields of achievements
10.	Cooking and Preserving Techniques	24.	Indian Literary and Cultural Awards. (Names of the award sand recent recipients)
11.	Germination and Seed Dispersal	25.	Natural Calamities (Flood and Earthquake)
12.	Traditional Water Harvesting Techniques	26.	Evaporation, Condensation and Water Cycle (Basic concepts)
13.	Experiment with Water on Everyday Life	27.	Life of Farmers (Farming techniques)
14.	Water Pollution and Microbial Diseases	28.	Tribal Communities and Forest Produce

## TOPICS COVERED IN CLASS IX: MATHEMATICS

## **Total Questions-50**

#### Max Marks-200

S.No	Topics	S.No	Topics
1.	Rational Numbers	16.	Average, Median, Mode
2.	Linear Equations in One Variable	17.	Probability
3.	Understanding Quadrilaterals	18.	Pie Chart
4.	Data Handling (Bar Graph and Line Graph)	19.	Direct & Inverse Proportions
5.	Squares and Square Roots	20.	Factorizations
6.	Cubes and Cube Roots	21.	Introduction to Graph
7.	Comparing Quantities (Percentage, Profit and Loss)	22.	Unitary Method
8.	Algebraic Expressions and Identities	23.	Divisibility Exam
9.	Area and Perimeters	24.	Triangles (Angle Sum Property)
10.	Volumes and Surface Areas	25.	Parallel Lines
11.	Exponents and Powers	26.	Simple Interestand Compound Interest
12.	Playing with Numbers	27.	Time and Work
13.	Visualizing Solid Shapes	28.	Area and Perimeter of Circles
14.	Triangles (Pythagoras Theorem)	29.	Algebraic Expression (Addition, Subtraction, Multiplication, Division)
15.	Euler's Formula		

#### TOPICS COVERED IN CLASS IX: INTELLIGENCE

#### Total Question - 25

Max Marks-50

Questions on Intelligence will be based on analogies (mathematical & verbal), pattern (spatial and mathematical), classification, visual, logical, reasoning etc.

#### TOPICS COVERED IN CLASS IX: ENGLISH

Total Question-25

Max Marks -50

S No	Topics	S No	Topics
1.	Spotting Errors	17.	Sentence Improvement
2.	Comprehension Passage	18.	Change of sentence as directed
3.	Antonyms	19.	Sentence Formation
4.	Synonyms	20.	Types of Sentences
5.	Prepositions	21.	Phrase and Clauses
6.	Articles	22.	Kinds of Noun
7.	Types of Verbs	23.	Adjectives
8.	Tense Form	24.	Interjection
9.	Narration	25.	Question Tags
10.	Voices	26.	Adverbs
11.	Modals	27.	Conjunctions
12.	Confusing Words	28.	Conditions
13.	Subject-Verb Agreement	29.	Comparison of Adjectives
14.	Correct Spellings	30.	Personal Pronoun
15.	Order of words in a sentence	31.	Change of Gender
16.	Idioms and Phrases	32.	Change of Number

#### TOPICS COVERED IN CLASS IX: GENERAL SCIENCE

#### Total Question-25

#### Max Marks-50

S No	Topics	S No	Topics
1.	Fossil Fuel: Coal and Petroleum	14.	Micro-Organisms
2.	Combustion and Flame	15.	Some Natural Phenomenon
3.	Cell Structure and Function	16.	How to find calorific value of fuel?
4.	Reproduction in Plants And Animals	17.	Electroplating and Artificial Jewellery
5.	Force, Friction and Pressure	18.	Relation between types of friction.
6.	Sound and its basics	19.	Cropping Seasons
7.	Reflection and Dispersion of Light	20.	Agricultural Practices
8.	Metals and Non Metals	21.	Conservation of Plants and Animals
9.	Synthetic Fibers and Plastics	22.	Biosphere Reserves, National Parks and Sanctuaries
10.	Chemical Effects of Electric Current	23.	Reaching the age of Adolescence
11.	Stars and Solar Systems	24.	Changes during Puberty
12.	Pollution of Air and Water	25.	Endocrine Glands and Hormones
13.	Global Warming		

## TOPICS COVERED IN CLASS IX: SOCIAL SCIENCE

#### Total Question-25

#### Max Marks-50

S No	Topics	S No	Topics
1.	Revolt of 1857	20.	Interior of Earth
2.	Freedom Fighters	21.	Climate Change
3.	Important Freedom Movements	22.	Earthquakes and Major Land
			Forms
4.	Social and Caste Reforms	23.	Types of Rainfall
5.	Resources and sustainable	24.	Major Grasslands
	development		
6.	Rock cycle of water cycle	25.	Types of Forests
7.	Pressure and Wind System	26.	Means of Transport
8.	Land Soil and Water Resources	27.	Communication
9.	Minerals and Power Resources	28.	Life in deserts
10.	Indian Constitution and	29.	Panchayat System
- 11	Secularism	30.	Local Self Government
11.	Importance of Parliament	30.	Local Sell Government
12.	Types of Agriculture	31.	Law and Social Justice.
13.	Types of Government and Different tiers of Government	32.	Judiciary and Criminal Justice System
14.	Understanding Markets	33.	Marginalisation
15.	Elections	34.	Public Facilities
16.	Role of Government in Health	35.	Natural Vegetation and Wildlife
17.	Delhi Sultanate	36.	Industries
18.	Mughals	37.	Human Resources
19.	Bhakti and Sufi Movement	38.	Changes in the Arts

# **Syllabus of RIMC Entrance Examination**

# **1** MATHEMATICS PAPER

- (a) Arithmetic Natural numbers, Integers, Rational, Real numbers fundamental operation (Addition, subtraction, multiplication, division,) Decimal numbers. Unitary method. Simple problems of time and distance, time and work, simple problems of percentage. Profit and loss, simple interest. Prime and composite numbers. Test of divisibility by 2, 3, 4, 5, 6, 9 and 11. HCF and LCM. Ratio and Proportion, Average. Brackets and removal Brackets, Changing of units.
- (b) Algebra :- Basic operation: Addition, Subtraction, Multiplication, Division, Simple Factors- Simple problem based on A2- B2, split the Middle Term. Solution of simple linear equation of one variable and its 2 2 application. Exponents and indices (simple problem) and simple problems based on formula (a-b), (a+b+c), etc.
- (c) Geometry:- Lines and Angles, Plane and Plane figure, Properties of Angles at a point, parallel Lines, sides and Angles of a Triangle. Construction of Triangle Based on side and Angles, Bisecting the Angle and line by use of ruler and compass only. Special angles by use of ruler and compass, definition and simple problems based on quadrilaterals, triangles, and polygon, etc.
- (d) Mensuration: Area and Perimeter of Square, Rectangle, Parallelogram, Triangle, Arc Length circumference and Area of circle. Area of figures which can be split up in to the figures (field book), Volume and surface area of cube and cuboids, etc.
- (ii) English Paper: Unseen passage, Poem, Composition, Picture writing, Letter (Formal, Informal), Use of Nouns, Pronoun, Verb, Adverb, Adjective, Antonym, Synonyms, Direct, Indirect speech, Use of Phrases, Idioms, Use of Articles, Types of sentences, Spellings, Homophones, etc.
- (iii) General Knowledge: As applicable.