



**The Jammu & Kashmir  
State Board of  
School Education**

# **SYLLABI AND COURSES OF STUDY**

FOR

**Class IX**

**Kashmir Division/Jammu Division (Winter Zone) 2015-16  
Jammu Division (Summer Zone) 2016-17**

Published By

**THE JAMMU & KASHMIR STATE BOARD OF SCHOOL EDUCATION**



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Published by  
**The J&K State Board of School Education**  
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## **SCHEME OF STUDIES**

A candidate has to opt five subjects for pursuing Class IX course as listed below. They can also opt one subject covered under Additional languages/subject.

### **Compulsory Subjects:**

1. General English
2. Urdu or Hindi
3. Mathematics.
4. Social Science (History, Geography, Political Science, Economics & Disaster Management)
5. Science (Physics, Chemistry, Life Science)

### **Additional Languages / Subjects :**

1. Urdu
2. Kashmiri
3. Arabic
4. Persian
5. Hindi
6. Dogri
7. Sanskrit
8. Bhoti
9. Punjabi
10. Computer Education

Note : No repetition of compulsory language/subject is allowed while opting for an additional language / subject.

### **Activity Related Areas :**

- (i) Health and Physical Education
- (ii) Art Education

### **Subjects for Physically Challenged Children (Blind, Deaf and Dumb)**

They may opt for any two subjects in lieu of Mathematics and Science

- (i) Painting
- (ii) Music
- (iii) Home Science.



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## ENGLISH

### AIMS

To enable students to:-

- i. Develop the ability to use English effectively for the purpose of practical communication in a variety of second language situation;
- ii. Form a sound base for the skills required for further study or employment using English as the medium;
- iii. Develop an awareness of the nature of language and language learning skills along with a more general application (e.g. interfacing, analyzing, synthesizing material);
- iv. Encourage students to enjoy and appreciate the variety of language;
- v. Enable students to understand and respond appropriately to what they hear, read and experience.

### Domains:

1. Reading/writing
2. Usage
3. Speaking
4. Listening

### Reading/Writing

Only a few tasks shall be set to test the reading skills. The skills of reading and writing shall be tested in an integrated manner to reflect the way in which language is actually used. This is to allow writing tasks to be stimulated by authentic reading texts rather than seeing the two activities as diverse elements. However a few tasks may be set to test the reading skills exclusively.

#### 1. Reading:-

All the students should be able to:-

Demonstrate understanding of words/phrases within short texts; Scan to extract specific information from texts (at least from the texts of textbooks prescribed). Organize the relevant information and present it in a logical manner/given format.

#### 2. Writing :-

All the students should be able to:-

Carry out simple writing tasks, such as, writing an essay, short letters, short stories, paragraphs, dialogues and short messages .They should be able to write **coherently and cohesively** using suitable linkers. They should exhibit a sense of awareness of the audience and should be able to use vocabulary appropriately. They should also be able to use suitable format for writing different kinds of writings and make them as reader friendly as possible.



### 3. Usage:-

This domain will test the candidate's knowledge of the structure of English. It will emphasise accuracy and ability to use the grammatical rules of the language correctly. This domain will be tested, to a varying degree, throughout the paper.

#### Student should be able to:

Exercise care over punctuation and spelling, write in accurate simple sentences, attempt a variety of sentence structures, recognize the need for paragraphing and use an appropriate vocabulary.

### 4. Speaking/Listening

(Oral/aural communication)

All Students should be able to: Understand and convey simple and detailed information;

Present facts, ideas or opinions in an orderly sequence;

Make relevant comments on what is heard, seen or read;

Describe experience (s) in simple terms and express intelligibly what is thought or imagined.

Respond appropriately in a particular situation;

Speak audibly with appropriate tone, intonation and pace.

**Note:-** The oral/aural communication skills will be tested by the schools under the scheme of Continuous and Comprehensive Evaluation. Oral interviews will be used to test the skills.

### Book Prescribed

1. *Tulip Series Book - 9*  
**Textbook of English**

**Published by :-** *The Jammu and Kashmir State Board of School Education*

2. **A course in English Grammar and composition- for classes IX and X by Malathy Krishnan**

**Published by Foundation Books in collaboration with Jammu and Kashmir State Board of School Education.**

### Assessment of First Term Course

The First Term course shall carry a weightage of 100 marks. The performance of students during the First Term course shall be assessed through 02 unit tests each carrying 20 marks and a Term Test, at the end of the Term, of 60 marks. The Unit and the Term Tests (S) are to be given as per the scheme of Continuous and Comprehensive Evaluation introduced by the Board.

## SYLLABUS AND UNITIZATION OF TEXTBOOK OF ENGLISH ENTITLED (TULIP SERIES BOOK-9) FOR CLASS IX

### TERM I

Time : 3hrs/Term

Marks : 100/Term

#### Unit-I

Packing

Gulliver in Lilliput-I

Gulliver in Lilliput-II

15 Marks

#### Unit-II

No Men are Foreign

To Blossoms

Beauty

20 Marks



**Unit III**

The Tempest-I

The Tempest-II

15 Marks

**Unit-IV**

The Adventures of Toto

Moti Guj Mutineer

15 Marks

**Unit-V**

I Cannot Remember My Mother

The Road not Taken

15 Marks

**Unit-VI**

Old Man at the Bridge

A Basketful of Sea Trouts

20 Marks

**TERM-II**

**Unit-I**

Sheikh Noor-ud-din-Wali

Saint of Gutters

15 Marks

**Unit-II**

On Killing a Tree

Cart Driver

To the Cuckoo

20 Marks

**Unit-III**

The Last Leaf

The Happy Prince

20 Marks

**Unit-IV**

Palanquin Bearers

The Child's prayer

20 Marks

**Unit-V**

If I were you

The Fun They Had

How a Client was Saved

25 Marks

## SCHEMES OF ASSESSMENT

Time : 3 hours

Max Marks : 60

Section-A

### TERM I

Prose

Two out of four Passages followed by five multiple choice questions or fill in the blanks.

$5 \times \frac{1}{2} \times 2 = 5$  marks

One out of two long answer type question to be answered

$3 \times 1 = 3$  marks

Two out of four short answer type question to be answered

$2 \times 1\frac{1}{2} = 3$  marks

One word substitution of  $\frac{1}{2}$  mark each (Four)

$4 \times \frac{1}{2} = 2$  marks

Matching words with their meanings of  $\frac{1}{2}$  mark each

$4 \times \frac{1}{2} = 2$  marks

**Total = 15 marks**

Section - B

Short Stories

One long answer type question with internal choice to be answered

$4 \times 1 = 4$  marks

One short answer type question with internal choice to be answered

$2 \times 1 = 2$  marks

One long answer from writing work with internal choice to be answered

$2 \times 1 = 2$  marks

Make sentences of words/phrases (Two)

$\frac{1}{2} \times 2 = 1$  marks

Matching words (Two)

$\frac{1}{2} \times 2 = 1$  marks

**Total = 10 marks**

One out of two para phrases to be done of stanzas of given poems

$3 \times 1 = 3$  marks

Three questions about the literary devices used by poet, to be answered with internal choice

$3 \times 3 = 9$

One long question with internal choice to be answered

$3 \times 1 = 3$  marks

**Total = 15 marks**



### Section D (Play)

Question based on character/sketch/theme/scene or incident to be asked with internal choice	$3 \times 1 = 3$ marks
Choosing correct word in a sentence from the pair	$4 \times \frac{1}{2} = 2$ marks
<b>Total =</b>	<b>5 marks</b>

### Section E (Grammar)

Write message/e-mail to friends/Notice	02 marks
Paragraph writing on any topic esp. w.r. to writing work/discussion prescribed in the text-book	03 marks
Punctuation	02 marks
Nouns and their types	01 marks
Adjectives	01 marks
Verbs (simple, present, future)	03 marks
change of narration	03 marks
<b>Total =</b>	<b>15 marks</b>

### Scheme of Assessment

Time : 3 hrs

Section A

Term II

Max Marks : 80

#### Prose

Two out of four passages followed by either five multiple choice questions or fill in the blanks.  $\frac{1}{2} \times 5 \times 2 = 5$  marks

One out of two long answer type questions to be answered

$4 \times 1 = 4$  marks

Two out of four short answer type questions to be answered

$2 \times 1\frac{1}{2} = 3$  marks

One word substitution of  $\frac{1}{2}$  mark each (six)

$\frac{1}{2} \times 6 = 3$  marks

Matching words with their meanings of  $\frac{1}{2}$  mark each (six)

$\frac{1}{2} \times 6 = 3$  marks

**Total = 18 marks**

## Section B

### Short Stories

One long answer type question with internal choice to be answered

4 x 1 = 4 marks

One short answer type question with internal choice to be answered

2 x 1 = 2 marks

One short answer from writing work with an internal choice to be answered

4 x 1 = 4 marks

Make sentences of words / phrases (Four)

2 x ½ = 1 marks

Matching words (Four)

2 x ½ = 1 marks

**Total = 12 marks**

### Section - C (Poetry)

One out of two para phrases to be done of stanzas of given poems

3 x 1 = 3 marks

Three questions about the literary device used by poet, with internal choice

4 x 3 = 12 marks

One long answer question with internal choice to be answered

5 x 1 = 5 marks

**Total = 20 marks**

Question based on character/sketch/ theme/ scene or incident to be asked with internal choice.

3 x 1 = 3 marks

Choosing correct word in a sentence from the pair ( Two )

½x 2 = 1 marks

Using synonyms/ antonyms in a sentence ( Two )

2x½ = 1 marks

**Total = 5 Marks**

Writing an essay of about (150-200) words on any of the five given topics

4 marks

Writing a letter ( business/ personal / semi- official to ask for leave or information or to describe how a festival was celebrated or how you enjoyed picnic

2 marks

Write a short dialogue

2 marks

Adverbs and their types

½ x 2 = 1 mark



Use of too in sentences

$\frac{1}{2} \times 2 = 1$  mark

Use of unless

$\frac{1}{2} \times 2 = 1$  mark

Change of narration

$5 \times 1 = 5$  marks

Correcting sentences

$\frac{1}{2} \times 4 = 2$  marks

Preposition

$\frac{1}{2} \times 4 = 2$  marks

Tenses

4 marks

Articles

1 mark

**Total = 25 marks**

## **COURSE WORK**

### **I. Speaking / listening**

The teacher shall assess the students on their performance during the Academic session on two speaking and two listening activities, one activity during the first term course and the second during the second term course. These activities should be designed to test the candidate both as a listener and speaker.

Stimulus: Listening(recorded cassettes may be provided) followed by question testing, gist comprehension by box ticking, true/false or multiple choice questions, semi-formal conversation or monologue requiring comprehension of factual details demonstrated in minimal written response(e.g. one word answers or labeling of a diagram etc.)

### **II. Creative Writing**

#### **Assessment of Course Work:**

The students may be rated in Course work components I and II on a 05 points scale in grades A to E according to their performance.



## MATHEMATICS

The present revised syllabus in Mathematics has been assigned in accordance with NCF- 2005 and as per guidelines given in the focus group on teaching of Mathematics which is to meet the needs of all students of different categories. The subject of Mathematics has undergone changes from time to time in accordance with the growth of the subject and the need of the society which leads to motivate the topics from day to day problems so that a greater emphasis has been laid on the application of various concept. The Curriculum at secondary stage emphasizes on the capacity of the study to enjoy it and employ Mathematics in solving real life problems. It has been designed in such a manner that maintains the continuity of a concept and its applications in the further class. The proposed curriculum includes the study of number systems, Algebra, Geometry, Trigonometry, Mensuration, Statistics, Graphs and Coordinate geometry etc.

### AIMS and Objectives

The following are the aims that describe the educational purpose of a course in Mathematics at the Secondary State to enable students to :-

1. Develop their mathematical knowledge and skills in a way which encourages confidence and provides satisfaction and enjoyment ;
2. Read Mathematics and write and talk about the subject in a variety of ways ;
3. Develop a feel for numbers, carry out calculations and understand the significance of the results obtained ;
4. Apply Mathematics in everyday situations and develop an understanding of the part which Mathematics plays in the world around them;
5. Solve problems, present solutions clearly, check and interpret the results;
6. Develop an understanding of Mathematical principles ;
7. Recognize when and how a situation may be represented mathematically, identify and interpret relevant factors and where necessary, select an appropriate Mathematical method to solve the problem;
8. Use Mathematics as a means of communication with emphasis on the use of clear expression;
9. Develop an ability to apply Mathematics in other subjects, particularly science ;
10. Develop abilities to reason logically, to classify, to generalize and to prove;

11. Appreciate patterns and relationships in Mathematics ;
12. Produce and appreciate imaginative and creative work arising from mathematical ideas;
13. Develop their Mathematical abilities by considering problems and conducting individual and cooperative enquiry and experiment, including extended places of work of practical and investigative nature;
14. Appreciate the interdependence of different branches of Mathematics;
15. Acquire a foundation appropriate to their further study of Mathematics and of other discipline.

### Entitled Objective

The teaching and learning of mathematics at Secondary stage should enable the pupil to consolidate the mathematical knowledge and skills acquired at the upper Primary stage to :-

- Acquire knowledge and understanding of the terms, symbols concepts, principles, process, proofs etc. pertaining to secondary stage.
- Develop master of basic algebraic skills;
- Develop drawing skills ;
- Apply mathematical knowledge and skills to solve real life mathematical problems, by developing abilities to analyse, to see interrelationship involved, to think and reason;
- Develop the ability to articulate logically;
- Develop skill in the use of mathematical tables as aids for computational work.
- Develop ability to write/interpret logarithms for problem solving;
- Develop necessary skill to work with modern technological devices such as calculators, computers, etc. where available and develop understanding of the cause effects relationship and the interplay of variables;
- Develop interest in mathematics and participate in mathematical competitions and other mathematics club activities in the school;
- Develop appreciation for mathematics as a problem-solving tool in various fields for its beautiful structures and patterns etc., and
- Develop reverence and respect towards great mathematicians particularly towards the Indian mathematicians for their contributions to the fields of mathematics, astronomy etc.



## DOMAINS

The abilities to be assessed in Secondary School Examination shall cover a single domain.

### Techniques with application

The Examination will test the ability of the students to:

1. Organize, interpret and present information accurately in written, tabular, graphical and diagrammatic forms.
2. Perform calculation by suitable methods.
3. Understand system of measurement in everyday use and make use of them in the solution of problems.
4. Estimate, approximate and work to degree of accuracy appropriate to the content.
5. Use Mathematical and other instruments to measure and to draw an acceptable degree of accuracy;
6. Interpret, transform and make appropriate use of Mathematical statements expressed in words or symbols.
7. Recognize and use spatial relationships in two dimensions, particularly in solving problems.
8. Recall, apply and interpret Mathematical knowledge in the context of everyday situations.
9. Make logical deductions from a given Mathematical data.
10. Recognize patterns and structure in a variety of situations and form generalizations.
11. Analyze a problem, select a suitable strategy and apply an appropriate technique to obtain its solution.
12. Apply combination of mathematical skills and techniques in solving problems.
13. Set out a mathematical work, including the solution of problems in a logical and clear form using appropriate symbols and terminology.

## 1ST TERM COURSE

Marks : 100

Time : 3 hours

Unit	Chapters	Marks
1.	Number System	20
2.	Polynomials	20
3.	Co-ordinate Geometry	08
4.	Linear equations in two variables	10
5.	Lines and angles	12
6.	Triangles	20
7.	Constructions	10

### Unit I Number System

Marks 20

Real Numbers: Review of representation of natural numbers, integers, rational numbers on the number line. Representation of terminating / non terminating recurring decimals on the number line through successive magnification. Rational numbers as recurring numbers as recurring / terminating decimals. Examples of non recurring/non terminating  $\sqrt{2}, \sqrt{3}, \sqrt{5}$  etc.

Existence of non-rational numbers( irrational numbers) such as  $\sqrt{2}, \sqrt{3}$  and their representation on the number line.

Explaining that every real number is represented by a unique point on number line and conversely, every point on number line represents a unique real number Existence of  $\sqrt{x}$  for a given positive real number  $x$ ( visual proof to be emphasized). Definition of  $n^{\text{th}}$  root of a real number.

Recall of laws of exponents with integral powers, Rational exponents with positive real bases ( to be done by particular cases, allowing learners to arrive at the general laws).

Rationalization ( with precise meaning) of real numbers of the type ( and their combinations)

$\frac{1}{a+b\sqrt{x}}$  and  $\frac{1}{\sqrt{x}+\sqrt{y}}$  where 'x' and 'y' are natural numbers and a and b are integers.

### Unit II Polynomials

Marks 20

Definition of a polynomial in one variable, its coefficients, with examples and counter examples, its terms, Zero polynomial. Degree of a polynomial, constant, linear, quadratic, cubic polynomials, monomials, binomials, trinomials. Factors and multiples, Zeros/roots of a polynomial / equation. Division of a polynomial by polynomial. State and motivate the Remainder Theorem with examples and analogy to integers. Statement and proof of the Factor Theorem. Factorization of  $ax^2+bx+c$ ,  $a \neq 0$  where  $a, b, c$ , are real numbers and of cubic polynomials using the Factor Theorem.

Recall of algebraic expressions and identities.

Further identities of the type

$$(x+y+z)^2=x^2+y^2+z^2+2xy+2yz+2zx$$



$$(x \pm y)^3 = x^3 \pm y^3 \pm 3xy(x \pm y)$$

$$x^3 + y^3 + z^3 - 3xyz = (x+y+z)(x^2 + y^2 + z^2 - xy - yz - zx)$$

and their use in factorization of polynomials. Simple expressions reducible to these polynomials.

### Unit III

## Co-ordinate Geometry

Marks 08

The Cartesian plane, Coordinates of a point, names and terms associated with co-ordinate plane (x-axis, y-axis, origin, components of a point, Quadrants), plotting points in the plane, graph of a linear equations as examples; focus on linear equations of the type  $ax+by+c=0$  by writing it as  $y=mx+c$  and linking it with chapter on linear equations in two variables.

### Unit IV

## Linear equation in two variables

Marks 10

Recall of linear equations in one variable. Introduction to the equation in two variables. Prove that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they seem to lie on a line. Examples, problems from real life, including problems on ratio and proportion and with algebraic and graphical solution being done simultaneously.

### Unit V

## Lines and Angles

Marks 12

Introduction to Euclid's Geometry, the five postulates of Euclid, Equivalent version of the fifth postulate, Relationship between Axiom and theorem.

1. Given two distinct point, there exists one and only one line through them.
2. Two distinct line can not have more than one point in common.
3. If a ray stands on a line, then the sum of two adjacent angles so formed is 180 degree and the converse.
4. If two line intersect, the vertically opposite angles are equal.
5. Results on corresponding angles, alternate angles, interior angles when a transversal intersect two parallel lines.
6. Lines which are parallel to a given line are parallel.
7. The sum of the angles of a triangle is  $180^\circ$
8. If one side of a triangle is produced, the exterior angles so formed is equal to the sum of the two interior opposite angles.

### Unit VI

Marks 20

## Triangles :

1. Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and their included angle of the other triangles (S.A.S Congruency).
2. Two triangles are congruent if any two angles and the included side of one triangle is equal to two corresponding angles and the included side of the other triangle (ASA Congruency).

3. Two triangles are congruent if the three sides of one triangle are equal to three corresponding sides of the other triangles (SSS Congruency).
4. Two right triangles are congruent if the hypotenuse and one of the other two sides of one triangles is equal to the hypotenuse and the corresponding sides of the other triangle (RHS Congruency).
5. Angles opposite to equal sides of a triangle are equal.
6. Sides opposite to equal angles of a triangle are equal.
7. Triangle inequalities and relation between angle and facing side ; inequalities in a triangle.

### Unit VII

Marks 10

#### Constructions

1. Construction of bisectors of a line segment and  $60^\circ$ ,  $90^\circ$ ,  $45^\circ$  angles etc.
2. Construction of equilateral triangles.
3. Construction of a triangle given its base, sum/difference of the other two side and one base angle.
4. Construction of a triangle of given perimeter and base angles.

### ASSESSMENT OF FIRST TERM COURSE

The First Term course shall carry a weightage of 100 marks. The performance of students during the First Term shall be assessed through 02 Unit tests each of 20 marks and a Term Test of 60 marks. The Unit and Term tests (s) are to be given as per the scheme of Continuous and Comprehensive Evaluation introduced by the Board at the Secondary Stage.