PROGRAM OF WORK FOR THE YEAR 2020-21

10TH STANDARD (E.M)

04-Apr-20

T.SHIVAKUMAR

10ᵀᴴ STANDARD ENGLISH MEDIUM

PROGRAM OF WORK FOR THE YEAR 2020-21

SUBJECT: MATHEMATICS

PREPARED BY :

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PART-1

LESSON NO.	UNIT NAME	ALLOTED PERIODS
1	ARITHMETIC PROGRESSION	08
2	TRIANGLES	12
3	PAIR OF LINEAR EQUATIONS IN TWO VARIABLES	12
4	CIRCLES	05
5	AREAS RELATED TO CIRCLES	09
6	CONSTRUCTIONS	08
7	COORDINATE GEOMETRY	10
8	REAL NUMBERS	08
	CCE EVALUATION	04
	TOTAL	76

PART-2

LESSON NO.	UNIT NAME	ALLOTED PERIODS
9	POLYNOMIALS	08
10	QUADRATIC EQUATIONS	10
11	INTRODUCTION TO TRIGONOMETRY	10
12	SOME APPLICATIONS OF TRIGONOMETRY	10
13	STATISTICS	08
14	PROBABILITY	06
15	SURFACE AREAS AND VOLUMES	12
	CCE EVALUATION	06
	TOTAL	70

NO.OF PERIODS: 25   MONTH: JUNE 2020

SL.NO	LESSON NAME	PERIODS	TEACHING ITEMS	PERIODS
1	**ARITHMETIC PROGRESSION**	6	1. **Introduction** 2. **Arithmetic progression** 3. **nth term of an A.P** 4. **Problems**	1 2 2
2	**TRIANGLES**	6	1. **Introduction** 2. **Similar figures and similarity of triangles** 3. **problems**	1 2 2
3	**PAIR OF LINEAR EQUATIONS IN TWO VARIABLES**	3	1. **Introduction** 2. **Pair of linear equations in two variables** 3. **Graphical method solution**	1 1 1
4	**Evaluation**	4	**CCE EVALUATION**	4

NO.OF PERIODS : 26   MONTH: JULY 2020

SL.NO	LESSON NAME	PERIODS	TEACHING ITEMS	PERIODS
1	**ARITHMETIC PROGRESSION**	6	1. **Sum of first n terms of an A.P** 2. **Exercise problems** 3. **Summary**	3 3
2	**TRIANGLES**	8	1. **Criteria of similarity of triangles** 2. **Areas of similar triangles** 3. **Problems**	2 2 4

3	**PAIR OF LINEAR EQUATIONS IN TWO VARIABLES**	8	4. **Algebraic methods of solving pair of linear equations in two variables**
			  a. **Substitution method**
			  b. **Elimination method**
			  c. **Cross multiplication method**
				8

4	**Evaluation**	4	**CCE EVALUATION**	4

NO.OF PERIODS: 24   MONTH:AUGUST 2020

SL.NO	LESSON NAME	PERIODS	TEACHING ITEMS	PERIODS
1	TRIANGLES	5	1. Pythagoras theorem 2. problems 3. Summary	1 2 2
2	PAIR OF LINEAR EQUATIONS IN TWO VARIABLES	5	1. Equations reducible to a pair of linear equations in two variables 2. Problems 3. Summary	1 2 2
3	POLYNOMIALS	7	1. Introduction 2. Euclid's definition, axioms and postulates 3. Equivalent versions of Euclid's fifth postulate 4. Summary	1 2 2 1
4	CIRCLES	4	1. Introduction and tangent to a circle 2. No.of tangents from a point on circle 3. problems	1 1 2
4	Evaluation	4	CCE EVALUATION	4

NO.OF PERIODS : 12   MONTH: September 2020

SL.NO	LESSON NAME	PERIODS	TEACHING ITEMS	PERIODS
1.	QUADRATIC EQUATIONS	12	1. Introduction and quadratic equation 2. Solution of a quadratic equation by factorization method 3. Solution of a quadratic equation by completing square method 4. Nature of roots 5. Problem solving 6. Summary	1 3 3 2 2 1
2.	**Mid-term examination**			

MONTH: OCTOBER
ANALYSIS OF FIRST TERM EXAM EVALUATION
AND CHECKING THE HOLIDAY HOME WORK

NO.OF PERIODS:22   MONTH: NOVEMBER 2020

SL.NO	LESSON NAME	PERIODS	TEACHING ITEMS	PERIODS
1	INTRODUCTION TO TRIGONOMETRY	10	1. Introduction and trigonometric ratios	1
			2. Trigonometric ratios of some specific angles	2
			3. Trigonometric ratios of complementary triangles	3
			4. Trigonometric identities	2
			5. problems	2
			6. Summary	
2	SOME APPLICATIONS OF TRIGONOMETRY	10	1. Introduction, height and distance	1
			2. Angle of elevation and angle of depression	2
			3. Applied problems	7
3	Evaluation	4	CCE EVALUATION	4

NO.OF PERIODS: 24   MONTH: DECEMBER 2020

SL.NO	LESSON NAME	PERIODS	TEACHING ITEMS	PERIODS
1	AREAS RELATED TO CIRCLES	12	1. Introduction, Perimeter, area of a circle	1
			2. Areas of sector and segment of a cirlce	2
			3. Areas of combinations of plane figure	2
			4. Problems	6
			5. Summary	1
2	CONSTRUCTIONS	08	1. Introduction and division of a line segment	4
			2. Construction of tangents to a cirlce	4
3	Evaluation	4	CCE EVALUATION	4

HAPPY NEW YEAR 2021

NO.OF PERIODS: 24   MONTH: JANUARY 2021

SL.NO	LESSON NAME	PERIODS	TEACHING ITEMS	PERIODS
1	COORDINATE GEOMETRY	13	1. Introduction	1
			2. Distance formula	2
			3. Section formula	2
			4. Area of a triangle	4
			5. Problems	3
			6. Summary	1
2	REAL NUMBERS	10	1. Introduction	1
			2. Euclid's division lemma	1
			3. The fundamental theorem of arithmetic	2
			4. Revisiting irrational numbers	2
			5. Revisiting irrational numbers their decimal expansion	2
			6. Problems	2
			7. Summary	
4	Evaluation	4	CCE EVALUATION	4

NO.OF PERIODS: 23   MONTH: FEBRUARY 2021

SL.NO	LESSON NAME	PERIODS	TEACHING ITEMS	PERIODS
1	PROBABILITY	06	1. Probability – a theoretical approach	1
				2
			2. Complementary event	2
			3. Problems	1
			4. Summary	
2	SURFACE AREAS AND VOLUMES	14	1. Introduction	1
			2. Surface area of a combination of solids	4
			3. Volume of a combinations of solids	3
			4. Conversion of solid from one shape to another	3
			5. Frustum of a cone	3
			6. Summary	

3	Evaluation	4	CCE EVALUATION	4

NO.OF PERIODS : 20   MONTH: March 2021

SL.NO	LESSON NAME	PERIODS	TEACHING ITEMS	PERIODS
1.	STATISTICS	12	1. Introduction	1
			2. Mean of grouped data	2
			3. Mode of grouped data	3
			4. Median of grouped data	3
			5. Graphical representation of cumulative frequency distribution	3
2.	Evaluation	4	CCE EVALUATION	4

1	*REVISION*	15	*REVISION*	15

ANNUAL EXAMINATION-MARCH/APRIL

Dear Sir/Madam : Actually we should finish the portion by December itself. Because in January, February and March there will be preparatory exam And PRACTICE PAPER so it is better to complete with in December. This Program of Work for department purpose. Any change u can make it.

THANK YOU