12TH STD MATHS PUBLIC EXAM IMPORTANT QUESTIONS (2022-23)

12th std Maths very very Important Questions....

இதை மட்டும் படித்தால் போதும்...

அனைவருக்கும் பகிரவும்....

QUESTION PATTERN

PART – I	(1 MARK) =	20 MARKS
PART – II	(2 MARK) =	14 MARKS
PART – III	(3 MARK) =	21 MARKS
PART – IV	(5 MARK) =	35 MARKS

TOTAL = 90 MARKS

PART – 1 (1 MARKS QUESTIONS):[20]

- MUST READ ALL LESSONS BOOK BACK QUESTIONS CHAPTERS (1-12).
- MUST PRACTICE QUATERLY ,HALF YEARLY ,REVISION TESTS QUESTION PAPER OF VARIOUS DISTRICTS INTERIOR ONE MARKS.

PART – 2 (2 MARKS QUESTIONS):[14]

- WE CAN STUDY CHAPTERS 1,2,3,4,8,11,12 ON FULLY IS ENOUGH TO ATTEND 6 QUESTIONS FROM 9 QUESTIONS.
- IMPORTANT QUESTIONS FOR THIS CHAPTERS GIVEN BELOW..

PART – 3 (3 MARKS QUESTIONS):[21]

- WE CAN STUDY CHAPTERS 1,2,3,4,8,11,12 ON FULLY IS ENOUGH TO ATTEND 6 QUESTIONS FROM 9 QUESTIONS.
- IMPORTANT QUESTIONS FOR THIS CHAPTERS GIVEN BELOW..

PART – 4 (5 MARKS QUESTIONS):[35]

- WE CAN STUDY CHAPTERS 1,2,3,4,8,11,12 ON FULLY , AND ALSO STUDY CHAPTERS 5,6,7,9,10 5MARKS ONLY.

❖ IMPORTANT QUESTIONS FOR THIS CHAPTERS GIVEN BELOW..

CHAPTER 1-12 STUDY QUESTIONS SESSIONS.... FOR GOLDEN BLOMMERS & TOPPER'S STUDENTS...

CHAPTERS	QUESTIONS SESSIONS	EXERCISES WITH RESPECT.TO.EXAMPLES
1	2M,3M,5M FULLY	EXERCISES 1.1 TO 1.7 FULLY WITH EGS
2	2M,3M,5M FULLY	EXERCISES 2.1 TO 2.8 FULLY WITH EGS
3	2M,3M,5M FULLY	EXERCISES 3.1 TO 3.6 FULLY WITH EGS
4	2M,3M,5M FULLY	EXERCISES 4.1 TO 4.5 FULLY WITH EGS
5	5M ONLY	5M – EX.5.1(6),EG.5.10,EX.5.2 (4,8),EG.5.23,5.26,EX.5.4(3),EX.5.5 FULLY WITH EGS
6	5M ONLY	5M – EX.6.1(9,10TO14),EG.6.3,6.5,6.6,6.7,EX.6.3 (1,4),EG.6.23,EX.6.5(2,4,5),EX.6.7 FULLY WITH EGS
7	5M ONLY	EX. 7.1, EX.7.2,EX.7.8 WITH EGS
8	2M,3M,5M FULLY	EXERCISES 8.1 TO 8.7 FULLY WITH EGS
9	5M ONLY	EXERCISE 9.3, 9.8, 9.9 FULLY WITH EGS
10	5M ONLY	EXERCISE 10.8 FULLY WITH

		EGS
11	2M,3M,5M FULLY	EXERCISES 11.1 TO 11.5 FULLY WITH EGS
12	2M,3M,5M FULLY	EXERCISES 12.1 TO 12.2 FULLY WITH EGS

NOTE:

[..] IS TO MUST GIVE FIRST PRIORITY…

ALL CHAPTERS IMPORTANT QUESTIONS IN NEXT PAGE….

2 & 3 Mark Questions

CHAPTER-1

Solve-by Cramers rule,Inversion methods.

Find-inverse-Gauss Jordon Method.

Find rank of matrix- echolan form-row reduction methods

EXERCISE

EX1.1- 6,7,3,5,15,10,11,8,9,

EX1.2-1,2,3

EX1.3-1(i),(ii),EX1.4-1(i),(ii),EX1.6-1(iii)

EXERCISE

1.11,1.8,1.9,1.6,1.17,1.22,1.13,1.5,1.3,1.20,1.18

CHAPTER-2

Square root,problems based on –cube roots of unity-properties of Modulus, triangle inequality.

EXAMPLES

2.12,2.3,2.4,2,6,2.7,2.13,2.16,2.17,2.19,2.23,2.24,2.28,2.32,2.33

EXERCISE

EX2.8-6,7,8,5,7,1

EX2.4-4,7

EX2.5-3,8,10

EX2.6-1,EX2.7-1,2,4

CHAPTER-3

EXERCISE

Descartes rule

EX3.5-6,1

EX3.3-1,2,3,7

EX3.2-1,2

EX3.1-9,4

EXAMPLES

3.31,3.3,3.12,3.13,

3.19,3.10,3.16,3.7,3.20

CHAPRER-4

EXERCISE

EX4.5-1,2,3,4,8,6,7

EX4.4-2

EX4.3-4

EX4.2-5,8

EXAMPLES

4.3,4.4,4.10,4.13,4.15,

4.17,4.18,4.19,4.21,4.24,4.25

CHAPTER-5

EXAMPLES-5.16,5.31,5.23,5.24,5.14,5.15,

5.12,5.9,5.32,5.33,5.25,5.34

EXERCISE

EX5.4-7,8,1

EX5.1-1,8,9,2,3,5,11,10

EX5.2-1,2,3

CHAPTER-6

Problems based on-work done,moment, Collinear,coplanar(lie on same plane),inresecting,image of point,Volume of parallopiped,angle between lines/planes, shortest distance, points of intersection

EXERCISE

EX6.1-3,4,6 EX6.2-8,10,3,9

EX6.3-2,3,6,8 EX6.4-5.6.7.8,9

EX6.8-2,3,4

EXAMPLES

6.12,6.13,6.15,6.3,6.2,6.1,6.4,

6.18,6.19,6.20,6.49,6.52,6.51,6.55

CHAPTER-7

Problem based on –Rate of change-Equations of tangent and normal, Limits, Mean value theorem , Monotonicity , Extrema , asymptotes

EXAMPLES

7.3,7.16,7.20,7.25,7.42,7.34,7.36,7.29,7.4,7.11,7.27,7.28,

7.30,7.40,7.68,7.32,7.21,7.59,7.57,7.51,7.53,7.55,

EXERCISE

EX7.1-1,3,4,6,7,EX7.4-1,2,3,EX-7.1-4,5,1,EX7.2-2,4,10

EX7.3-10,8,7,4,1,3,EX7.6-2(iii),(iv),

EX7.7-1,EX7.9=1,2,3,EX7.9-1

CHAPTER-8

EXERCISE

EX8.1-6,7,1,2,3

EX8.2-2,3,4,9,6,10

EX8.7-1,4,5,2

Ex8.5-1,2,3,4,5

EX8.4-4,5,1,3

EXAMPLES

8.21,8.20,8.16,8.7,8.6,8.2,8.4,8.21,8.15

CHAPTERS-9

EXAMPLES

9.44,9.7,9.42,9.69,9.29,9.25,
9.10,9.2,9.38,9.37,9.50,9.53,9.62,9.66

EXERCISES

EX9.7-1,2,

EX9.6-1(V) to (vii)

Ex9.3-1(iii),2-(ii),(x),(i),(vi)

CHAPTER-10

Problems based on-degree and order,
Variable separable,Linear DE , Homogeneous DE

Examples

10.8,10.7,10.3,10.2,10.24,10.22,10.10,10.28

Exercise

EX10.4-5,6,4,8

EX10.5-4,2

EX10.7-12,1,2,3,4,13

CHAPTER-11

EXERCISE

EX11.5-8,9,3,5,1,7

EX11.4-1,3,6,5,7

EX11.1-1,2,5

EX11.2- 2,4,6

EX11.3- 1,3,4,6

EXAMPLES

11.1,11.2,11.15,11.14,11.13,11.11,11.18,11.7,

CHAPTER-12

(should practise full chapters)
Problem based on-determine * is binary,Truth tables,
some laws of equivalences

EXERCISE

EX12.1-4,2,3,1

EX12.2-4,6,8,7,9,14,10,11,12

EXAMPLES

12.13,12.8,12.17,12.18,12.16,12.6,12.14,12.15,12.1

12th Mathematics | 5 mark Questions

Chapter-1 | APPLICATION OF MATRICES AND DETERMINANTS

	EXERCISE	EXAMPLE
EX.1.1	-3,11,14,4	1,10, 1.12 1.25, 1.23, 1.31
EX.1.3	-2,5,	1.24, 1.26, 1.28, 1.34, 1.39, 1.40
EX.1.4	-1(iv),5	(*Students should know how to solve-by using Matrix inversion method-Cramer's rule,
EX.1.5	-2,3,4	
EX.1.6	-2,3,1(iii),1(iv)	Rank method-Gaussian elimination method)
EX.1.7	-2,3	

Chapter-2 | COMPLEX NUMBERS

	EXERCISE	EXAMPLE
EX.2.5	-2,7,6,	2.15,2.14,2.8(ii),
EX.2.6	-2	2.31(i),(ii)
EX.2.7	-3,6,5,4	2.27,2.32,2.33,
EX.2.8	-10,3,2	2.34,2.35,2.36
EX2.4	-7(ii)	(*should know how to find -locus equation-polar form-rectangular form-applying de Moivre's theorem-properties of cube roots of unity)

Chapter-3 | THEORY OF EQUATIONS

	EXERCISE	EXAMPLE
EX.3.1	- 10,5,6,4	3.6, 3.15
EX.3.2	- 4	3.23, 3.24,3.28,
EX.3.3	- 2,3,5,4	(*should know how to solve-Partially factored polynomials-reciprocal equations-Vieta's formula)
EX.3.4	-1(i),1(ii),2	
EX.3.5	-5(i),3,4,7	

Chapter-4 | INVERSE TRIGONOMETRIC FUNCTIONS

	EXERCISE	EXAMPLE
EX.4.5	- 10,9(i),9(iv),9(iii)	4.28, 4.23, 4.22, 4.7, 4.4,4.29
EX 4.2	- 6(i),5(iii)	4.27,4.20
EX.4.1	-7,6(i),8(ii)	

Chapter-5 | TWO DIMENSIONAL ANALYTICAL GEOMETRY-II

	EXERCISE	EXAMPLE
EX.5.5	-7,9,8,2,3,5,6,1,4,10	5.40,5.10,5.19,5.23,5.26,5.21
EX.5.4	-3,	(*should know how to find-the centre , vertice, foci, etc from different conics, real life application of conics)
EX.5.2	- 4(iv),4(v),8(v),8(vi)	
EX.5.1	-6	

Chapter-6 | APPLICATION OF VECTOR ALGEBRA

	EXERCISE	EXAMPLE
EX.6.1	-9,10,8,7	6.7, 6.6, 6.3, 6.5,6.23(i),6.23(ii),6.16,6.33,
EX.6.3	-4(i),4(ii)	
EX 6.4	-3	6.34,6.35,6.46,6.27,6.44,
EX.6.5	-6,5,4,7	(*should practice the questions: $\cos(\alpha \pm \beta)$,$\sin(\alpha \pm \beta)$,Examples-6.7,6.6, Apollonius' theorem, vector triple product expansion , to know the equations of line , plane in parametric, non-parametric vector and cartesian forms, shortest distance,concept of coplanar ,intersecting, image of a point, foot of perpendicular)
EX 6.7	-1,2,3,4,5,6,7	
EX 6.8	-1,2,4	
EX 6.9	-8	

Chapter-7 | APPLICATIONS OF DIFFERENCIAL CALCULUS

	Exercise	Example
EX.7.1	- 6,7,8,9,10	7.7,7.9,7.13,7.14,7.15,7.17,
EX 7.2	- 9,6,7,8	7.18,7.31,7.44,7.45
EX.7.5	-8,10,11,12	7.60,7.61,7.62,7.63,7.64,7.65, 7.69,7.70,7.71,7.72
EX 7.7	-3	(should know- to trace the curves for the polynomials, rate change problems, equations of tangents and normal, angle between curves, (Indeterminate form) limit, concavity, convexity and points of inflection, local extrema, Application in optimization)
EX 7.8	-4,5,6,7,8,9,10,11,12	
EX 7.9	-2(i),2(ii),2(iii),2(iv)	

Chapter-8 | DIFFERENCIALS AND PARTIAL DERIVATIVES

	EXERCISE	EXAMPLE
EX.8.3	- 5	8.8,8.9,8.10,8.14,8.13,8.22
EX 8.4	- 2(i),2(ii),2(iii),6,7,8	(should know to apply Eulers theorem, find partial derivatives, calculate linear approximation, Calculate the differential of a function)
EX.8.6	-6,7,8,9	
EX 8.7	-6,3	

Chapter-9| APPLICATIONS OF INTEGRATION

EXERCISE	EXAMPLE
EX.9.2 - 1(i),1(ii)	9.1,9.4,9.9,9.11,9.12,9.13,
EX 9.3 -1(iii), 1(iv),1(v),1(vi)	9.14,9.15,9.16,9.17,9.19,
-2(iv),2(v),2(vi),2(vii),	9.21,9.27,9.28,9.30,
-2(ix),2(xi)	9.36,9.54,9.55,9.56,9.59,
EX .9.4 -3,2	9.60,9.61,9.63,9.64,9.68
EX 9.8 -4,5,6,7,8,9,10	(knowing to find-Area, Volume, evaluate definite integral as the limits of sum, Second fundamental theorem -using properties)
EX 9.9 -4,5,6	

Chapter-10|ORDINARY DIFFERENCIAL EQUATIONS

EXERCISE	EXAMPLE
EX.10.5 - 4(x)	10.15,10.19,10.21
EX 10.6 - 1,2,3,4,5,6,7,8	10.23,10.25,10.26
EX.10.7 - 7,8,9,10,12,13,14	10.27,10.28,10.29,10.30
EX 10.8 -1,2,3,4,5,6,7,8,9,10	(knowing to apply DE in real life problems, Variable separable method,homogeneous DE, Linear DE)

Chapter-11|PROBILITY DISTRIBUTIONS

EXERCISE	EXAMPLE
EX.11.1 - 3,4	11.2,11.6,11.7,11.8,11.9,
EX 11.2 - 2,4,5,6,7	11.10,11.11,11.12,11.14,
EX 11.3 -3,4,5,6	11.15,11.16,11.17,11.18,
EX 11.4 -1(iii),1(iv),7,4	11.19,11.20,11.21,11.22
-6,7,2,3	(knowing to calculate mean and variance, apply Binomial Distribution and Bernoulli distribution, determine probability mass function from cumulative distribution function, obtain cumulative distribution function from mass function,cdf,pdf)
EX 11.5 -2,5,6,7,8,9	

Chapter-12|DISCRETE MATHEMATICS

EXERCISE	EXAMPLE
EX.12.1 - 5,9,10	12.4,12.7,12.9,12.10,
EX 12.2 - 13,15,7(iii),6(iv)	12.2,12.3,12.19
	(some laws of equivalence, modular arithmetic, properties of a binary operations, Boolean matrices)

Tips for Borderline students

Chapters-12

Ch-6(EX6.7- 1 to 7,
$cos(\alpha \pm \beta)$,$sin(\alpha \pm \beta)$,
eg-6.7,eg-6.6)

Ch-5(EX5.5),eg5.40

Ch-1(EX1.6&1.7,eg-1.39),

Ch-7(EX7.9-2,eg7.69,7.70,7.71,7.72)

Ch-2(EX2.6-2,EX2.7-6,eg2.27,eg2.36)

Ch-3(EX3.4),
EX3.5-5(i),5,3,eg3.27,EX3.1-10

Ch-4(EX4.5-10,9)
eg-4.28,4.29,4.22,4.23

Ch-8(eg-8.22),EX8.4-2,7,8,6,EX8.7-6

Ch9(EX9.2-1,2,EX9.8-5,6,8,10,EX9.9-4,5,6,eg-9.54,9.55,9.56,9.60)

Ch-10(EX10.8)

Ch-11(EX11.5,EX11.4,EX11.2-4,6)

ALL THE BEST

-PREPARED BY..

RISHI VLOGS & EDUCATION..