

(A Unit of Birla Education Trust Pilani)

(*A step ahead.....*)

CBSE Affiliation No. 1730974

MATHEMATICS

(Note-Accordingly CBSE Examination Guidelines)

CLASS III

BLUEPRINT

Category of question	Marks	Percentage
Understanding: Questions designed to access the memory and understanding of the concept.	20	40%
Reasoning: Application of Knowledge and Concepts facts, techniques and rules in a different way to solve problems.	15	30%
Analytical : Questions that help students analyze, evaluate and create solutions.	15	30%

PAPER PATTERN

Total Marks- 50 Subjective- 100% (50 marks) Time duration- 3 Hrs.

- A. The question paper contains 4 pages.
- **B.** Total number of questions is 25.
- C. The question paper contains three parts Section A, B, and C.
- **D.** Section A consists of 8 questions of 1 mark each.
- **E.** Section B consists of 9 questions of 2 marks each.
- **F.** Attempt any 8 questions from Section C of 3 marks each.

Sr. No	CH NO.	CHAPTER NAME	1 Mark	2 Marks	3 Marks
1.	Ch. 1	Where to Look From?	Ch.1 & Ch.2	•	ssessed in
2.	Ch. 2	Fun with Number	Fun with Number PT-1.		
3.	Ch. 3	Give and Take	2	2	1
4.	Ch. 4	Long and Short	101	1	2
5.	Ch. 5	Shapes and Designs	2	2	1
6.	Ch. 6	Fun with give and take	1	2	2
7.	Ch. 7	Time goes on	2	2	2
Total no. of questions	ES	STD. 20	8	9	8
Total marks	-	-	8 X 1= 8	9 X 2=18	8 X 3=24



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CLASS IV BLUEPRINT

Category of question	Marks	Percentage
Understanding: Questions designed to access the memory and understanding of the concept.	20	40%
Reasoning: Application of Knowledge and		
Concepts facts, techniques and rules in a		
different way to solve problems.	15	30%
Analytical: Questions that help students		
analyze, evaluate and create solutions.	15	30%

PAPER PATTERN

Total Marks- 50 Subjective- 100% (50 marks) Time duration- 3 Hrs.

- A. The question paper contains 3 pages.
- **B.** Total number of questions is 25.
- C. The question paper contains three parts- Section A, B and C.
- **D.** Section A consists of 8 questions of 1 mark each.
- **E.** Section B consists of 9 questions of 2 marks each.
- **F.** Attempt any 8 questions from Section C of 3 marks each.

G N	CH NO.	CHAPTER NAME	1 Mark	2 Marks	3 Marks
Sr. No		CIMITERIVANIE	TWITE	2 Walks	5 Will Ks
1.	Ch. 1	Building With Bricks	Ch.1 & Ch.2	2 are already PT-1.	assessed in
2.	Ch. 2	Long and Short			
3.	Ch. 3	A trip to Bhopal	2	1	2
4.	Ch. 4	Tick-Tick-Tick	2	2	2
5.	Ch. 5	The way the world looks	2	2	1
6.	Ch. 6	The Junk Seller	1	2	1
7.	Ch. 7	Jugs and Mugs	1	2	2
Total no. of questions	-	STD 2	8	9	8
Total marks		OIL. Z	8 X 1 = 8	9 X 2 = 18	8 X 3 = 24



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CLASS V

BLUEPRINT

Category of question	Marks	Percentage
Understanding - Questions designed to		
access the memory and understanding of	20	40%
the concept.		
Reasoning - Application of knowledge		
and concepts facts, techniques, and rules	15	30%
in a different way to solve problems.		
Analytical- Questions that help students	15	30%
analyse, evaluate and create solutions.		30%

PAPER PATTERN

Total Marks- 50 Subjective- 100% (50 marks) Time duration- 3 Hrs.

- A. The question paper contains 3 pages.
- **B.** Total number of questions is 25.
- C. The question paper contains three parts- Section A, B, and C.
- **D.** Section A consists of 8 questions of 1 mark each.
- **E.** Section B consists of 9 questions of 2 marks each.
- **F.** Attempt any 8 questions from Section C of 3 marks each.

Sr. No	CH NO.	CHAPTER NAME	1 Mark	2 Marks	3 Marks	
1.	Ch. 1	The Fish Tail	Ch.1 & Ch.	2 are already	assessed in	
2.	Ch. 2	Shapes and Angles	PT-1.			
3.	Ch. 3	How many Squares	2	2	1	
4.	Ch. 4	Parts and Wholes	1	2	2	
5.	Ch. 5	Does It Look the Same	2	2	1	
6.	Ch. 6	Be my multiple, I'll be your factor	2	1	2	
7.	Ch. 7	Can you see the Pattern	1	2	2	
Total no. of questions	-	-	8	9	8	
Total marks	- E	STD. 2	8 X 1 = 8	9 X 2 = 18	8 X 3 = 24	



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CLASS VI BLUEPRINT

Category of question	Marks	Percentage
Remembering: Exhibit memory of previously learned material by recalling	43	54%
facts, terms, basic concepts.		
Understanding: Demonstrate understanding of facts and ideas by organizing,	100	
comparing.		
Applying: Solve problems to new situations by applying acquired knowledge,	19	24%
facts, techniques and rules in a different way.		1 - 40
Analysing: Examine and break information into parts by identifying motives	18	20%
or causes.		NVA
Evaluating: Present and defend opinions by making judgments about	7	
information, validity of ideas, or quality of work based on a set of criteria.		
Creating: Compile information together in a different way by combining	3	
elements in a new pattern or proposing alternative solutions		
	80	100%

PAPER PATTERN

Time duration- 3:00 Hrs.

Subjective- 100% (80 marks)

- **A.** Total number of questions is 31.
- **B.** The question paper contains four parts A, B, C and D.
- C. Section A consists of 8 questions of 1 mark each.
- **D.** Section B consists of 9 questions of 2 marks each.
- **E.** Attempt any 8 questions from Section C of 3 marks each.
- **F.** Attempt any 6 questions from Section D of 5 marks each.

Sr. No	CHAPTER NAME	1 Mark	2 Marks	3 Marks	5 Marks	Total
1.	Ch. 1- Knowing Our	02	01	01	01	12
	Numbers			1		
2.	Ch. 2- Whole	01	02	01		6
100	Numbers			10	1	
3.	Ch.3-Playing With	02	01	02	02	20
-	Numbers		40	7 4		
4.	Ch.4- Basic	01	01		01	8
	Geometrical ideas					
5.	Ch.5-Understanding	01	02	02	01	16
	Elementary Shapes					
6.	Ch.6-Integers	01	02	02	01	16
	ECT		20	10		
Total no. of questions	LOI	08	09	08	06	31
Total marks		8 X 1=	9 X 2=	8 X	6 x 5= 30	80
1 0 0001 11101 INS		8	18	3=24	0 N 0 = 50	- 50



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CLASS VII BLUEPRINT

Category of question	Marks	Percentage
Remembering: Exhibit memory of previously learned material by recalling	43	54%
facts, terms, basic concepts.		
Understanding: Demonstrate understanding of facts and ideas by organizing,		
comparing.		1 (1) (1)
Applying: Solve problems to new situations by applying acquired knowledge,	19	24%
facts, techniques and rules in a different way.		1 - 1
Analysing: Examine and break information into parts by identifying motives	18	20%
or causes.		NVA
Evaluating: Present and defend opinions by making judgments about	7	
information, validity of ideas, or quality of work based on a set of criteria.		
Creating: Compile information together in a different way by combining	1	
elements in a new pattern or proposing alternative solutions		
	80	100%

PAPER PATTERN Time duration- 3:00 Hrs.

Subjective- 100% (80 marks)

- **G.** Total number of questions is 31.
- **H.**The question paper contains four parts A, B, C and D.
- **I.** Section A consists of 8 questions of 1 mark each.
- **J.** Section B consists of 9 questions of 2 marks each.
- **K.** Attempt any 8 questions from Section C of 3 marks each.
- L. Attempt any 6 questions from Section D of 5 marks each.

			The second of the second			
Sr. No	CHAPTER NAME	1 Mark	2 Marks	3 Marks	5 Marks	Total
1.	Ch. 1- Integers	01		01	01	09
2.	Ch. 2- Fraction and	01	02	01	-	08
V	Decimals			40	V	
3.	Ch.3- Data Handling	-	02	01	02	17
4.	Ch.4-Simple Equations	02	02	02	01	17
5.	Ch.5-Lines and Angles	02	02	01	01	14
6.	Ch.6-Triangles and Its	02	01	02	01	15
	Properties					
Total no.		08	09	08	06	31
of questions	ECT		20	10		
Total		8 X 1=	9 X 2=	8 X	6 x 5= 30	80
marks		8	18	3=24		



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CLASS VIII BLUEPRINT

Category of question	Marks	Percentage
Remembering: Exhibit memory of previously learned material by recalling	43	54%
facts, terms, basic concepts.		
Understanding: Demonstrate understanding of facts and ideas by organizing,		
comparing.		A . A
Applying: Solve problems to new situations by applying acquired knowledge,	19	24%
facts, techniques and rules in a different way.		
Analysing: Examine and break information into parts by identifying motives	18	20%
or causes.	7	
Evaluating: Present and defend opinions by making judgments about		
information, validity of ideas, or quality of work based on a set of criteria.	3	
Creating: Compile information together in a different way by combining		
elements in a new pattern or proposing alternative solutions		
	80	100%

PAPER PATTERN

Total Marks- 80 Time duration- 3:00 Hrs.

Subjective- 100% (80 marks)

- **A.** Total number of questions is 31.
- **B.** The question paper contains four parts A, B, C and D.
- **C.** Section A consists of 8 questions of 1 mark each.
- **D.** Section B consists of 9 questions of 2 marks each.
- **E.** Attempt any 8 questions from Section C of 3 marks each.
- **F.** Attempt any 6 questions from Section D of 5 marks each.

Sr. No	CHAPTER NAME	1 Mark	2 Marks	3 Marks	5 Marks	Total
1.	Ch. 1- Rational	01	02	01		8
	Numbers		4			
2.	Ch. 2- Linear	01	01	01	01	11
	Equations in One					
	Variable	7				
3.	Ch.3- Quadrilaterals	02	02	01	01	14
4.	Ch.4- Data Handling	01	01	01	01	11
5.	Ch.5- Square and	01	01	02	02	19
	square roots					
6.	Ch.6- Cubes and cube	02	02	02	01	17
	root					
Total no.		08	09	08	06	31
of						
questions						
Total		8 X 1= 8	9 X 2= 18	8 X 3=24	6 x 5= 30	80
marks						



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CLASS IX BLUEPRINT

Category of question	Marks	Percentage
Remembering: Exhibit memory of previously learned material by recalling	43	54%
facts, terms, basic concepts.		
Understanding: Demonstrate understanding of facts and ideas by organizing,	100	
comparing.		
Applying: Solve problems to new situations by applying acquired knowledge,	19	24%
facts, techniques and rules in a different way.		
Analysing: Examine and break information into parts by identifying motives or	18	20%
causes.		
Evaluating: Present and defend opinions by making judgments about	7	
information, validity of ideas, or quality of work based on a set of criteria.		
Creating: Compile information together in a different way by combining		
elements in a new pattern or proposing alternative solutions		
	80	100%

PAPER PATTERN

Total Marks- 80 Time duration- 3 Hrs.

General Instructions:

- 1. This Question Paper has 5 Sections A, B, C, D, and E.
- 2. Section A has 18 MCQ's and 02 Assertion Reason based questions of 1 mark each.
- 3. Section B has 5 Short Answer-I (SA-I) type questions carrying 2 marks each.
- **4.** Section C has 6 Short Answer-II (SA-II) type questions carrying 3 marks each.
- **5.** Section D has 4 Long Answer (LA) type questions carrying 5 marks each.
- **6.** Section E has 3 sourced based/Case Based/passage based/integrated units of assessment (4 marks each) with sub-parts of the values of 1, 1 and 2 marks each respectively.
- 7. Draw neat figures wherever required. Take $\pi = 22/7$ wherever required if not stated.

Sr. No	CHAPTER NAME	1 MCQ	2 Marks	3 Marks	5 Marks	4 Marks	Total
1.	Ch - 1. Number System.	4	1	1	1	1	18
2.	Ch -2. Polynomial	4	2	1	1		16
3.	Ch -3. Coordinate Geometry.	4		1		1	11
4.	Ch - 4 Linear Equation in two variable.	4	1	1		1	18
5.	Ch -5. Euclid Geometry	C	1	1	119		5
6.	Ch -6. Lines and Angles.	4		1	1		12
Total no. of questions		20	5	6	4	3	38
Total marks		20	10	18	20	12	80



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CLASS X BLUEPRINT

Category of question	Marks	Percentage
Remembering: Exhibit memory of previously learned material by recalling facts,	43	54%
terms, basic concepts.		
Understanding: Demonstrate understanding of facts and ideas by organizing,		
comparing.		
Applying: Solve problems to new situations by applying acquired knowledge,	19	24%
facts, techniques and rules in a different way.		
Analysing: Examine and break information into parts by identifying motives or	18	20%
causes.		D.V.A
Evaluating: Present and defend opinions by making judgments about	1	
information, validity of ideas, or quality of work based on a set of criteria.		
Creating: Compile information together in a different way by combining		
elements in a new pattern or proposing alternative solutions		
9	80	100%

PAPER PATTERN

Total Marks- 80 Time duration- 3 Hrs.

General Instructions:

- 1. This Question Paper has 5 Sections A, B, C, D, and E.
- 2. Section A has 18 MCQ's and 02 Assertion Reason based questions of 1 mark each.
- 3. Section B has 5 Short Answer-I (SA-I) type questions carrying 2 marks each.
- 4. Section C has 6 Short Answer-II (SA-II) type questions carrying 3 marks each.
- 5. Section D has 4 Long Answer (LA) type questions carrying 5 marks each.
- 6. Section E has 3 sourced based/Case Based/passage based/integrated units of assessment (4 marks each) with sub-parts of the values of 1, 1 and 2 marks each respectively.
- 7. Draw neat figures wherever required. Take $\pi = 22/7$ wherever required if not stated.

Sr. No	CHAPTER NAME	1 MCQ	2 Marks	3 Marks	5 Marks	4 Marks	Total
_			2 Walks	3 Walks	3 Iviai KS	4 Iviai KS	
1.	Ch -1 Real Number	3		I	1	VAI	10
2.	Ch -2 Polynomial	3	1	1	1		13
3.	Ch -3 Linear Equation	2		1	1	1	14
	in two variable			. 400			
4.	Ch -4 Quadratic	3	1	1	1		13
	equation						
5.	Ch -5 Arithmetic	3	1	-1	1		13
	progression						
6.	Ch - 6 Triangle	3	1	1			8
7.	Ch - 7 Coordinate	3	1	00	4 0	1	9
	Geometry	9			10		
Total no.		20	5	6	4	3	38
of							
questions							
Total		20	10	12	20	12	80
marks							
	ı	l .	1		1	1	



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CLASS XI BLUEPRINT

Category of question	Marks	Percentage
Remembering: Exhibit memory of previously learned material by recalling	43	54%
facts, terms, basic concepts.		
Understanding: Demonstrate understanding of facts and ideas by organizing,		
comparing.		
Applying: Solve problems to new situations by applying acquired knowledge,	19	24%
facts, techniques and rules in a different way.		
Analysing: Examine and break information into parts by identifying motives or	18	20%
causes.		
Evaluating: Present and defend opinions by making judgments about		
information, validity of ideas, or quality of work based on a set of criteria.	3	ALV A
Creating: Compile information together in a different way by combining elements		
in a new pattern or proposing alternative solutions		
Total	80	100%

PAPER PATTERN

Time duration- 3 Hrs.

General Instructions:

- 1. This Question paper contains five sections A,B,C,D and E. Each section is compulsory. However, there is some internal choice in some questions.
- 2. Section A has 18 MCQ's and 02 Assertion Reason based questions of 1 mark each.
- 3. Section B has 5 Very Short Answer (VSA) questions of 2 marks each.
- 4. Section C has 6 Short Answer (SA) questions of 3 marks each.
- 5. Section D has 4 Long Answer (LA) questions of 5 marks each.
- 6. Section E has 3 source based/case based/passage based/integrated units of assessment.
- 7. Internal Choice is provided in 2 questions in Section-B, 2 questions in Section-C, 2 Questions in Section-D. You have to attempt only one alternative in all such questions.

Sr. No	CHAPTER NAME	1 MCQ	2 Marks	3 Marks	5 Marks	4 Marks	Total
1.	Ch-1 Set	3	1	1		/	8
2.	Ch-2 Relation and Function	3	1	1	11	1	12
3.	Ch - 4 Complex number and Quadratic Equation	3	1	1	1		13
4.	Ch- 6 Permutation and Combination	3	1		1	1	14
5.	Ch - 8 Sequence and Series	3	1	1	1		13
6.	Ch - 9 Straigh Line	3		1	1		11
7.	Ch - 10 Conic Section	2	<i>U</i> .	40		1	9
Total no. of questions		20	5	6	4	3	38
Total marks		20	10	18	20	12	80