Course Content VM- 1200 (Upto 12 yrs)
Below 12 yrs.

Note : Above 12 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11

2. Multiplication by 12 to 19

3. Multiplication by 111

4. Multiplication by 222 to 999

5. Base Method Multiplication

    (a) Below Base 10

    (b) Below Base 20-90

    (c) Below Base 100

    (d) Below Base 200-900

    (e) Above Base 10

    (f) Above Base 20-90

    (g) Above Base 100

    (h) Above Base 200-900

    (I) Base method when one number is above & other is below the same base

    (j) When Bases are different but both numbers are below base

    (k) When Bases are different but both numbers are above base

6. If the sum of unit digits is 10 and rest place digits are same

7. If the sum of ten's place digit is 10 and one's place digits are same

8. Multiplication by 9

9. Multiplication of Number Ending with 9 i.e. 19- 99

10. General Method (2 digit x 2 digit)

Note : Above 12 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11
2. Multiplication by 12 to 19
3. Multiplication by 111
4. Multiplication by 222 to 999
5. Base Method Multiplication
   - (a) Below Base 10
   - (b) Below Base 20-90
   - (c) Below Base 100
   - (d) Below Base 200-900
   - (e) Above Base 10
   - (f) Above Base 20-90
   - (g) Above Base 100
   - (h) Above Base 200-900
   - (I) Base method when one number is above & other is below the same base
   - (j) When Bases are different but both numbers are below base
   - (k) When Bases are different but both numbers are above base
6. If the sum of unit digits is 10 and rest place digits are same
7. If the sum of ten's place digit is 10 and one's place digits are same
8. Multiplication by 9
9. Multiplication of Number Ending with 9 i.e. 19- 99
10. General Method (2 digit x 2 digit)
11. Subtraction (all from 9 last from 10)
12. Vinculum
13. Change unit digit into a vinculum
14. Change all digit to vinculum except first
15. Devinculate
16. Subtraction using vinculum
17. Addition Base Method
18. Subtraction Base Method
19. Addition Using Compliments
20. Division by 9
21. Division by 8
22. Division by 11
23. Division by 12
24. Division by 99
25. Division by number above base 100
26. Division Base Method (Above Base)
27. Division Base Method (Below Base)
28. Squares (Base Method)
29. Square of number ending with 5
30. Square of number starting with 5

Course Content VM- 1300 (Upto 13 yrs)
Below 13 yrs.

Note : Above 13 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11
2. Multiplication by 12 to 19
3. Multiplication by 111
4. Multiplication by 222 to 999
5. Base Method Multiplication
    - (a) Below Base 10
    - (b) Below Base 20-90
    - (c) Below Base 100
    - (d) Below Base 200-900
    - (e) Above Base 10
    - (f) Above Base 20-90
    - (g) Above Base 100
    - (h) Above Base 200-900
    - (I) Base method when one number is above & other is below the same base
    - (j) When Bases are different but both numbers are below base
    - (k) When Bases are different but both numbers are above base
6. If the sum of unit digits is 10 and rest place digits are same
7. If the sum of ten's place digit is 10 and one's place digits are same
8. Multiplication by 9
9. Multiplication of Number Ending with 9 i.e. 19- 99
10. General Method (2 digit x 2 digit)
11. Subtraction (all from 9 last from 10)
12. Vinculum
13. Change unit digit into a vinculum
14. Change all digit to vinculum except first
15. Devinculate
16. Subtraction using vinculum
17. Addition Base Method
18. Subtraction Base Method
19 Addition Using Compliments
20 Division by 9
21. Division by 8
22. Division by 11
23. Division by 12
24. Division by 99
25. Division by number above base 100
26. Division Base Method (Above Base)
27. Division Base Method (Below Base)
28. Squares (Base Method)
29. Square of number ending with 5
30. Square of number starting with 5

Note : Above 13 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11

2. Multiplication by 12 to 19

3. Multiplication by 111

4. Multiplication by 222 to 999

5. Base Method Multiplication

    (a) Below Base 10

    (b) Below Base 20-90

    (c) Below Base 100

    (d) Below Base 200-900

    (e) Above Base 10

    (f) Above Base 20-90

    (g) Above Base 100

    (h) Above Base 200-900

    (I) Base method when one number is above & other is below the same base

    (j) When Bases are different but both numbers are below base

    (k) When Bases are different but both numbers are above base

6. If the sum of unit digits is 10 and rest place digits are same

7. If the sum of ten's place digit is 10 and one's place digits are same

8. Multiplication by 9

9. Multiplication of Number Ending with 9 i.e. 19- 99

10. General Method (2 digit x 2 digit)

11. Subtraction (all from 9 last from 10)

12. Vinculum

13. Change unit digit into a vinculum

14. Change all digit to vinculum except first

15. Devinculate

16. Subtraction using vinculum

17. Addition Base Method

18. Subtraction Base Method

19 Addition Using Compliments

20 Division by 9

21. Division by 8

22. Division by 11

23. Division by 12

24. Division by 99

25. Division by number above base 100

26. Division Base Method (Above Base)

27. Division Base Method (Below Base)

28. Squares (Base Method)

29. Square of number ending with 5

30. Square of number starting with 5

31. Tables Using Vinculum

32. Multiplication by number of 9's

    a) Multiplier has equal of 9's as multiplicand digits

    b) Multiplier has less number of 9's as compared to digits of multiplicand

    c) Multiplier has more number of 9's as compared to digits of multiplicand.

33. Multiplication General Method

    a) 2 D x 2 D

    b) 3 D x 3 D

    c) 3 D x 2 D

    d) 4 D x 4 D

    e) 4 D x 3 D

    f) 4 D x 2 D

Course Content VM- 1302 (Upto 13 yrs)
Below 13 yrs.

Note : Above 13 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11

2. Multiplication by 12 to 19

3. Multiplication by 111

4. Multiplication by 222 to 999

5. Base Method Multiplication

    (a) Below Base 10

    (b) Below Base 20-90

    (c) Below Base 100

    (d) Below Base 200-900

    (e) Above Base 10

    (f) Above Base 20-90

    (g) Above Base 100

    (h) Above Base 200-900

    (I) Base method when one number is above & other is below the same base

    (j) When Bases are different but both numbers are below base

    (k) When Bases are different but both numbers are above base

6. If the sum of unit digits is 10 and rest place digits are same

7. If the sum of ten's place digit is 10 and one's place digits are same

8. Multiplication by 9

9. Multiplication of Number Ending with 9 i.e. 19- 99

10. General Method (2 digit x 2 digit)

11. Subtraction (all from 9 last from 10)

12. Vinculum

13. Change unit digit into a vinculum

14. Change all digit to vinculum except first

15. Devinculate

16. Subtraction using vinculum

17. Addition Base Method

18. Subtraction Base Method

19 Addition Using Compliments

20 Division by 9

21. Division by 8

22. Division by 11

23. Division by 12

24. Division by 99

25. Division by number above base 100

26. Division Base Method (Above Base)

27. Division Base Method (Below Base)

28. Squares (Base Method)

29. Square of number ending with 5

30. Square of number starting with 5

31. Tables Using Vinculum

32. Multiplication by number of 9's

    a) Multiplier has equal of 9's as multiplicand digits

    b) Multiplier has less number of 9's as compared to digits of multiplicand

    c) Multiplier has more number of 9's as compared to digits of multiplicand.

33. Multiplication General Method

    a) 2 D x 2 D

    b) 3 D x 3 D

    c) 3 D x 2 D

    d) 4 D x 4 D

    e) 4 D x 3 D

    f) 4 D x 2 D

34. Division General Method [Flag Method]

35. Squares by Duplex Method

36. Addition of Squares

37. Square Roots of Exact Squares

38. CUBES

39. Cube Roots of Exact Cubes

40. Fourth Power 2 Digit Number

Course Content VM- 1400 (Upto 14 yrs)
Below 14 yrs.

Note : Above 14 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11

2. Multiplication by 12 to 19

3. Multiplication by 111

4. Multiplication by 222 to 999

5. Base Method Multiplication

    (a) Below Base 10

    (b) Below Base 20-90

    (c) Below Base 100

    (d) Below Base 200-900

    (e) Above Base 10

    (f) Above Base 20-90

    (g) Above Base 100

    (h) Above Base 200-900

    (I) Base method when one number is above & other is below the same base

    (j) When Bases are different but both numbers are below base

    (k) When Bases are different but both numbers are above base

6. If the sum of unit digits is 10 and rest place digits are same

7. If the sum of ten's place digit is 10 and one's place digits are same

8. Multiplication by 9

9. Multiplication of Number Ending with 9 i.e. 19- 99

10. General Method (2 digit x 2 digit)

11. Subtraction (all from 9 last from 10)

12. Vinculum

13. Change unit digit into a vinculum

14. Change all digit to vinculum except first

15. Devinculate

16. Subtraction using vinculum

17. Addition Base Method

18. Subtraction Base Method

19 Addition Using Compliments

20 Division by 9

21. Division by 8

22. Division by 11

23. Division by 12

24. Division by 99

25. Division by number above base 100

26. Division Base Method (Above Base)

27. Division Base Method (Below Base)

28. Squares (Base Method)

29. Square of number ending with 5

30. Square of number starting with 5

31. Tables Using Vinculum

32. Multiplication by number of 9's

   a) Multiplier has equal of 9's as multiplicand digits

   b) Multiplier has less number of 9's as compared to digits of multiplicand

   c) Multiplier has more number of 9's as compared to digits of multiplicand.

33. Multiplication General Method

   a) 2 D x 2 D

   b) 3 D x 3 D

   c) 3 D x 2 D

   d) 4 D x 4 D

   e) 4 D x 3 D

   f) 4 D x 2 D

Course Content VM- 1401 (Upto 14 yrs)
Below 14 yrs.

Note : Above 14 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11

2. Multiplication by 12 to 19

3. Multiplication by 111

4. Multiplication by 222 to 999

5. Base Method Multiplication

     (a) Below Base 10

     (b) Below Base 20-90

     (c) Below Base 100

     (d) Below Base 200-900

     (e) Above Base 10

     (f) Above Base 20-90

     (g) Above Base 100

     (h) Above Base 200-900

     (I) Base method when one number is above & other is below the same base

     (j) When Bases are different but both numbers are below base

     (k) When Bases are different but both numbers are above base

6. If the sum of unit digits is 10 and rest place digits are same

7. If the sum of ten's place digit is 10 and one's place digits are same

8. Multiplication by 9

9. Multiplication of Number Ending with 9 i.e. 19- 99

10. General Method (2 digit x 2 digit)

11. Subtraction (all from 9 last from 10)

12. Vinculum

13. Change unit digit into a vinculum

14. Change all digit to vinculum except first

15. Devinculate

16. Subtraction using vinculum

17. Addition Base Method

18. Subtraction Base Method

19 Addition Using Compliments

20 Division by 9

21. Division by 8

22. Division by 11

23. Division by 12

24. Division by 99

25. Division by number above base 100

26. Division Base Method (Above Base)

27. Division Base Method (Below Base)

28. Squares (Base Method)

29. Square of number ending with 5

30. Square of number starting with 5

31. Tables Using Vinculum

32. Multiplication by number of 9's

   a) Multiplier has equal of 9's as multiplicand digits

   b) Multiplier has less number of 9's as compared to digits of multiplicand

   c) Multiplier has more number of 9's as compared to digits of multiplicand.

33. Multiplication General Method

   a) 2 D x 2 D

   b) 3 D x 3 D

   c) 3 D x 2 D

   d) 4 D x 4 D

   e) 4 D x 3 D

   f) 4 D x 2 D

34. Division General Method [Flag Method]

35. Squares by Duplex Method

36. Addition of Squares

37. Square Roots of Exact Squares

38. CUBES

39. Cube Roots of Exact Cubes

40. Fourth Power 2 Digit Number

Note : Above 14 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11
2. Multiplication by 12 to 19
3. Multiplication by 111
4. Multiplication by 222 to 999
5. Base Method Multiplication

    (a) Below Base 10

    (b) Below Base 20-90

    (c) Below Base 100

    (d) Below Base 200-900

    (e) Above Base 10

    (f) Above Base 20-90

    (g) Above Base 100

    (h) Above Base 200-900

    (I) Base method when one number is above & other is below the same base

    (j) When Bases are different but both numbers are below base

    (k) When Bases are different but both numbers are above base
6. If the sum of unit digits is 10 and rest place digits are same
7. If the sum of ten's place digit is 10 and one's place digits are same
8. Multiplication by 9
9. Multiplication of Number Ending with 9 i.e. 19- 99
10. General Method (2 digit x 2 digit)
11. Subtraction (all from 9 last from 10)
12. Vinculum
13. Change unit digit into a vinculum
14. Change all digit to vinculum except first
15. Devinculate
16. Subtraction using vinculum
17. Addition Base Method
18. Subtraction Base Method
19 Addition Using Compliments
20 Division by 9
21. Division by 8
22. Division by 11
23. Division by 12

24. Division by 99

25. Division by number above base 100

26. Division Base Method (Above Base)

27. Division Base Method (Below Base)

28. Squares (Base Method)

29. Square of number ending with 5

30. Square of number starting with 5

31. Tables Using Vinculum

32. Multiplication by number of 9's
    a) Multiplier has equal of 9's as multiplicand digits
    b) Multiplier has less number of 9's as compared to digits of multiplicand
    c) Multiplier has more number of 9's as compared to digits of multiplicand.

33. Multiplication General Method
    a) 2 D x 2 D
    b) 3 D x 3 D
    c) 3 D x 2 D
    d) 4 D x 4 D
    e) 4 D x 3 D
    f) 4 D x 2 D

34. Division General Method [Flag Method]

35. Squares by Duplex Method

36. Addition of Squares

37. Square Roots of Exact Squares

38. CUBES

39. Cube Roots of Exact Cubes

40. Fourth Power 2 Digit Number

41. Addition and Subtraction (Fractions)

42. Auxiliary fractions
    a. Denominator Ending with 9
    b. Denominator Ending with 8
    c. Denominator Ending with 7
    d. Denominator Ending with 6
    e. Denominator Ending with 1

43. Multiplication (3 Rows General Method)

44. Multiplication (3 Rows Base Method)

Course Content VM- 1403 (Upto 14 yrs)
Below 14 yrs.

Note : Above 14 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11
2. Multiplication by 12 to 19
3. Multiplication by 111
4. Multiplication by 222 to 999
5. Base Method Multiplication

    (a) Below Base 10

    (b) Below Base 20-90

    (c) Below Base 100

    (d) Below Base 200-900

    (e) Above Base 10

    (f) Above Base 20-90

    (g) Above Base 100

    (h) Above Base 200-900

    (I) Base method when one number is above & other is below the same base

    (j) When Bases are different but both numbers are below base

    (k) When Bases are different but both numbers are above base

6. If the sum of unit digits is 10 and rest place digits are same
7. If the sum of ten's place digit is 10 and one's place digits are same
8. Multiplication by 9
9. Multiplication of Number Ending with 9 i.e. 19- 99
10. General Method (2 digit x 2 digit)
11. Subtraction (all from 9 last from 10)
12. Vinculum
13. Change unit digit into a vinculum
14. Change all digit to vinculum except first
15. Devinculate
16. Subtraction using vinculum
17. Addition Base Method
18. Subtraction Base Method
19 Addition Using Compliments
20 Division by 9
21. Division by 8
22. Division by 11
23. Division by 12
24. Division by 99
25. Division by number above base 100
26. Division Base Method (Above Base)
27. Division Base Method (Below Base)

28. Squares (Base Method)
29. Square of number ending with 5
30. Square of number starting with 5
31. Tables Using Vinculum
32. Multiplication by number of 9's
   a) Multiplier has equal of 9's as multiplicand digits
   b) Multiplier has less number of 9's as compared to digits of multiplicand
   c) Multiplier has more number of 9's as compared to digits of multiplicand.
33. Multiplication General Method
   a) 2 D x 2 D
   b) 3 D x 3 D
   c) 3 D x 2 D
   d) 4 D x 4 D
   e) 4 D x 3 D
   f) 4 D x 2 D
34. Division General Method [Flag Method]
35. Squares by Duplex Method
36. Addition of Squares
37. Square Roots of Exact Squares
38. CUBES
39. Cube Roots of Exact Cubes
40. Fourth Power 2 Digit Number
41. Addition and Subtraction (Fractions)
42. Auxiliary fractions
   a. Denominator Ending with 9
   b. Denominator Ending with 8
   c. Denominator Ending with 7
   d. Denominator Ending with 6
   e. Denominator Ending with 1
43. Multiplication (3 Rows General Method)
44. Multiplication (3 Rows Base Method)
45. Magic Squares
46. Multiplication (Algebraic Expressions)
47. Division (Algebraic Expressions)
48. Divisibility Rules
49. Approximations
50. Calender Technique (Days & Dates)

Course Content VM- 1500 (Upto 15 yrs)
Below 15 yrs.

Note : Above 15 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11

2. Multiplication by 12 to 19

3. Multiplication by 111

4. Multiplication by 222 to 999

5. Base Method Multiplication

    (a) Below Base 10

    (b) Below Base 20-90

    (c) Below Base 100

    (d) Below Base 200-900

    (e) Above Base 10

    (f) Above Base 20-90

    (g) Above Base 100

    (h) Above Base 200-900

    (I) Base method when one number is above & other is below the same base

    (j) When Bases are different but both numbers are below base

    (k) When Bases are different but both numbers are above base

6. If the sum of unit digits is 10 and rest place digits are same

7. If the sum of ten's place digit is 10 and one's place digits are same

8. Multiplication by 9

9. Multiplication of Number Ending with 9 i.e. 19- 99

10. General Method (2 digit x 2 digit)

11. Subtraction (all from 9 last from 10)

12. Vinculum

13. Change unit digit into a vinculum

14. Change all digit to vinculum except first

15. Devinculate

16. Subtraction using vinculum

17. Addition Base Method

18. Subtraction Base Method

19 Addition Using Compliments

20 Division by 9

21. Division by 8

22. Division by 11

23. Division by 12

24. Division by 99

25. Division by number above base 100

26. Division Base Method (Above Base)

27. Division Base Method (Below Base)

28. Squares (Base Method)

29. Square of number ending with 5

30. Square of number starting with 5

31. Tables Using Vinculum

32. Multiplication by number of 9's
   a) Multiplier has equal of 9's as multiplicand digits
   b) Multiplier has less number of 9's as compared to digits of multiplicand
   c) Multiplier has more number of 9's as compared to digits of multiplicand.

33. Multiplication General Method
   a) 2 D x 2 D
   b) 3 D x 3 D
   c) 3 D x 2 D
   d) 4 D x 4 D
   e) 4 D x 3 D
   f) 4 D x 2 D

34. Division General Method [Flag Method]

35. Squares by Duplex Method

36. Addition of Squares

37. Square Roots of Exact Squares

38. CUBES

39. Cube Roots of Exact Cubes

40. Fourth Power 2 Digit Number

Note : Above 15 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11

2. Multiplication by 12 to 19

3. Multiplication by 111

4. Multiplication by 222 to 999

5. Base Method Multiplication

    (a) Below Base 10

    (b) Below Base 20-90

    (c) Below Base 100

    (d) Below Base 200-900

    (e) Above Base 10

    (f) Above Base 20-90

    (g) Above Base 100

    (h) Above Base 200-900

    (I) Base method when one number is above & other is below the same base

    (j) When Bases are different but both numbers are below base

    (k) When Bases are different but both numbers are above base

6. If the sum of unit digits is 10 and rest place digits are same

7. If the sum of ten's place digit is 10 and one's place digits are same

8. Multiplication by 9

9. Multiplication of Number Ending with 9 i.e. 19- 99

10. General Method (2 digit x 2 digit)

11. Subtraction (all from 9 last from 10)

12. Vinculum

13. Change unit digit into a vinculum

14. Change all digit to vinculum except first

15. Devinculate

16. Subtraction using vinculum

17. Addition Base Method

18. Subtraction Base Method

19 Addition Using Compliments

20 Division by 9

21. Division by 8

22. Division by 11

23. Division by 12

24. Division by 99

25. Division by number above base 100

26. Division Base Method (Above Base)

27. Division Base Method (Below Base)

28. Squares (Base Method)

29. Square of number ending with 5

30. Square of number starting with 5

31. Tables Using Vinculum

32. Multiplication by number of 9's

    a) Multiplier has equal of 9's as multiplicand digits

    b) Multiplier has less number of 9's as compared to digits of multiplicand

    c) Multiplier has more number of 9's as compared to digits of multiplicand.

33. Multiplication General Method

    a) 2 D x 2 D

    b) 3 D x 3 D

    c) 3 D x 2 D

    d) 4 D x 4 D

    e) 4 D x 3 D

    f) 4 D x 2 D

34. Division General Method [Flag Method]

35. Squares by Duplex Method

36. Addition of Squares

37. Square Roots of Exact Squares

38. CUBES

39. Cube Roots of Exact Cubes

40. Fourth Power 2 Digit Number

41. Addition and Subtraction (Fractions)

42. Auxiliary fractions

    a. Denominator Ending with 9

    b. Denominator Ending with 8

    c. Denominator Ending with 7

    d. Denominator Ending with 6

    e. Denominator Ending with 1

43. Multiplication (3 Rows General Method)

44. Multiplication (3 Rows Base Method)

Course Content VM- 1502 (Upto 15 yrs)
Below 15 yrs.

Note : Above 15 yrs. - Falls in Next Category

1. Multiplication by 11 and multiples of 11
2. Multiplication by 12 to 19
3. Multiplication by 111
4. Multiplication by 222 to 999
5. Base Method Multiplication

   (a) Below Base 10

   (b) Below Base 20-90

   (c) Below Base 100

   (d) Below Base 200-900

   (e) Above Base 10

   (f) Above Base 20-90

   (g) Above Base 100

   (h) Above Base 200-900

   (I) Base method when one number is above & other is below the same base

   (j) When Bases are different but both numbers are below base

   (k) When Bases are different but both numbers are above base
6. If the sum of unit digits is 10 and rest place digits are same
7. If the sum of ten's place digit is 10 and one's place digits are same
8. Multiplication by 9
9. Multiplication of Number Ending with 9 i.e. 19- 99
10. General Method (2 digit x 2 digit)
11. Subtraction (all from 9 last from 10)
12. Vinculum
13. Change unit digit into a vinculum
14. Change all digit to vinculum except first
15. Devinculate
16. Subtraction using vinculum
17. Addition Base Method
18. Subtraction Base Method
19. Addition Using Compliments
20. Division by 9
21. Division by 8
22. Division by 11
23. Division by 12
24. Division by 99
25. Division by number above base 100

26. Division Base Method (Above Base)

27. Division Base Method (Below Base)

28. Squares (Base Method)

29. Square of number ending with 5

30. Square of number starting with 5

31. Tables Using Vinculum

32. Multiplication by number of 9's
    a) Multiplier has equal of 9's as multiplicand digits
    b) Multiplier has less number of 9's as compared to digits of multiplicand
    c) Multiplier has more number of 9's as compared to digits of multiplicand.

33. Multiplication General Method
    a) 2 D x 2 D
    b) 3 D x 3 D
    c) 3 D x 2 D
    d) 4 D x 4 D
    e) 4 D x 3 D
    f) 4 D x 2 D

34. Division General Method [Flag Method]

35. Squares by Duplex Method

36. Addition of Squares

37. Square Roots of Exact Squares

38. CUBES

39. Cube Roots of Exact Cubes

40. Fourth Power 2 Digit Number

41. Addition and Subtraction (Fractions)

42. Auxiliary fractions
    a. Denominator Ending with 9
    b. Denominator Ending with 8
    c. Denominator Ending with 7
    d. Denominator Ending with 6
    e. Denominator Ending with 1

43. Multiplication (3 Rows General Method)

44. Multiplication (3 Rows Base Method)

45. Magic Squares

46. Multiplication (Algebraic Expressions)

47. Division (Algebraic Expressions)

48. Divisibility Rules

49. Approximations

50. Calender Technique (Days & Dates)

Note : Above 15 yrs. - Not Eligible

1. Multiplication by 11 and multiples of 11
2. Multiplication by 12 to 19
3. Multiplication by 111
4. Multiplication by 222 to 999
5. Base Method Multiplication

   (a) Below Base 10

   (b) Below Base 20-90

   (c) Below Base 100

   (d) Below Base 200-900

   (e) Above Base 10

   (f) Above Base 20-90

   (g) Above Base 100

   (h) Above Base 200-900

   (I) Base method when one number is above & other is below the same base

   (j) When Bases are different but both numbers are below base

   (k) When Bases are different but both numbers are above base

6. If the sum of unit digits is 10 and rest place digits are same
7. If the sum of ten's place digit is 10 and one's place digits are same
8. Multiplication by 9
9. Multiplication of Number Ending with 9 i.e. 19- 99
10. General Method (2 digit x 2 digit)
11. Subtraction (all from 9 last from 10)
12. Vinculum
13. Change unit digit into a vinculum
14. Change all digit to vinculum except first
15. Devinculate
16. Subtraction using vinculum
17. Addition Base Method
18. Subtraction Base Method
19. Addition Using Compliments
20. Division by 9
21. Division by 8
22. Division by 11
23. Division by 12
24. Division by 99
25. Division by number above base 100
26. Division Base Method (Above Base)

27. Division Base Method (Below Base)
28. Squares (Base Method)
29. Square of number ending with 5
30. Square of number starting with 5
31. Tables Using Vinculum
32. Multiplication by number of 9's
    a) Multiplier has equal of 9's as multiplicand digits
    b) Multiplier has less number of 9's as compared to digits of multiplicand
    c) Multiplier has more number of 9's as compared to digits of multiplicand.
33. Multiplication General Method
    a) 2 D x 2 D
    b) 3 D x 3 D
    c) 3 D x 2 D
    d) 4 D x 4 D
    e) 4 D x 3 D
    f) 4 D x 2 D
34. Division General Method [Flag Method]
35. Squares by Duplex Method
36. Addition of Squares
37. Square Roots of Exact Squares
38. CUBES
39. Cube Roots of Exact Cubes
40. Fourth Power 2 Digit Number
41. Addition and Subtraction (Fractions)
42. Auxiliary fractions
    a. Denominator Ending with 9
    b. Denominator Ending with 8
    c. Denominator Ending with 7
    d. Denominator Ending with 6
    e. Denominator Ending with 1
43. Multiplication (3 Rows General Method)
44. Multiplication (3 Rows Base Method)
45. Magic Squares
46. Multiplication (Algebraic Expressions)
47. Division (Algebraic Expressions)
48. Divisibility Rules
49. Approximations
50. Calender Technique (Days & Dates)
51. Pythagoras Theoram