

MULTIPLE CHOICE QUESTIONS
CLASS VIII
TOPIC: GEOMETRY

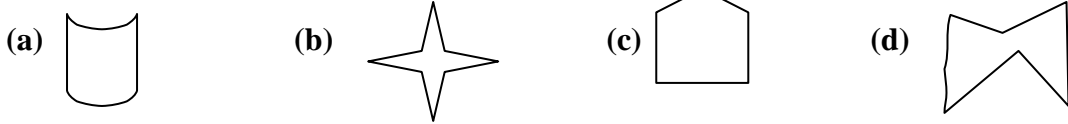
TIME: 30 MINUTES

TOTAL QUESTIONS = 40

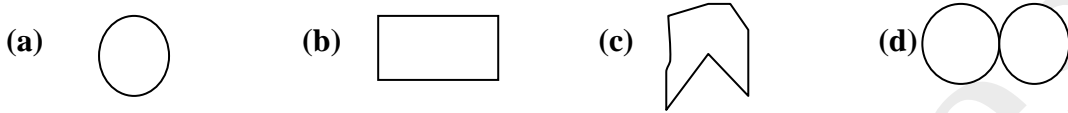
1. A simple closed curve made up of only _____ is called a polygon .
(a) curves (b) line segments (c) lines (d) closed curves
2. A polygon with minimum number of sides is
(a) Pentagon (b) Square (c) triangle (d) angle
3. Polygons that have no portions of their diagonals in their exteriors are called
(a) Squares (b) triangles (c) convex (d) concave
4. Polygons that have any portions of their diagonals in their exteriors are called
(a) Squares (b) triangles (c) convex (d) concave
5. All the sides of a regular polygon are _____.
(a) Parallel (b) equal in length (c) not parallel (d) not equal
6. . All the angles of a regular polygon are of _____.
(a) 90° (b) 60° (c) equal measure (d) equal length
7. Sum of all interior angles of a polygon with (n) sides is given by
(a) $(n - 2) \times 180^\circ$ (b) $n - 2 \times 180^\circ$ (c) $(n + 2) \times 180^\circ$ (d) $n + 2 \times 180^\circ$
8. Maximum number of right angles in a right angled triangle are
(a) 2 (b) 1 (c) 3 (d) 0
9. Sum of all interior angles of a parallelogram is
(a) 180° (b) 360° (c) 540° (d) 240°
10. The angle sum of all interior angles of a convex polygon of sides 7 is
(a) 180° (b) 540° (c) 630° (d) 900°
11. Each exterior angle of a regular hexagon is of measure
(a) 120° (b) 80° (c) 100° (d) 60°
12. The number of sides in a regular polygon is 15 , then measure of each exterior angle is
(a) 24° (b) 36° (c) 20° (d) 18°

13. The measure of each interior angle of a regular polygon is 140° , then number of sides that regular polygon has _____
 (a) 15 (b) 12 (c) 9 (d) 10

14. Which of the following polygons is convex polygon ?

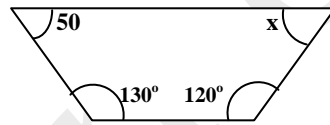


15. Which of the following is concave polygon?



16. The value of x in the following figure is

- (a) 120° (b) 80°
 (c) 100° (d) 60°

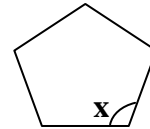


17. A quadrilateral which has 2 pairs of equal adjacent sides but unequal opposite sides is called _____.

- (a) parallelogram (b) rhombus (c) kite (d) square

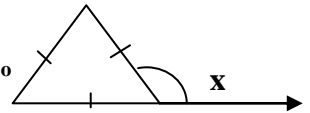
18. The value of x in the following figure is

- (a) 100° (b) 90°
 (c) 108° (d) 120°



19. The value of x in the following figure is

- (a) 120° (b) 180° (c) 60° (d) 100°



20. A parallelogram each of whose angles measures 90° is _____.

- (a) rectangle (b) rhombus (c) kite (d) trapezium

21. A parallelogram whose all sides are equal is called

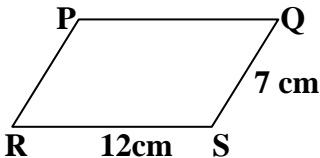
- (a) square (b) rhombus (c) rectangle (d) trapezium

22. the diagonals of a rhombus bisect each other at _____ angles.

- (a) acute (b) right (c) obtuse (d) reflex

23. Diagonals of a rectangle:

- (a) equal to each other (b) not equal
 (c) one is double of the other (d) none of these

24. The diagonals of a square bisect each other at _____ angle.
(a) acute (b) right (c) obtuse (d) reflex
25. the value of x in the following figure is:
(a) 60° (b) 70° (c) 180° (d) 90°
26. Minimum possible interior angle in a regular polygon is _____.
(a) 70° (b) 60° (c) 90° (d) 120°
27. Maximum possible exterior angle in a regular polygon is _____.
(a) 70° (b) 60° (c) 90° (d) 120°
28. How many sides does a heptagon have ?
(a) 2 (b) 4 (c) 7 (d) 5
29. Name the closed figure with 4 sides ?
(a) Hexagon (b) Triangle (c) Pentagon (d) Quadrilateral
30. How many diagonals does a regular Hexagon has ?
(a) 2 (b) 9 (c) 3 (d) 5
31. What is the number of sides in Hexagon ?
(a) 4 (b) 7 (c) 6 (d) 5
32. What is the sum of the measures of angles of a convex quadrilaterals?
(a) 180° (b) 90° (c) 360° (d) 45°
33. If the three angles of a quadrilateral are 120° , 130° , 10° then what is the fourth angle ?
(a) 30° (b) 100° (c) 40° (d) 90°
34. The opposite angles of a parallelogram are _____.
(a) Unequal (b) equal (c) complementary (d) supplementary
35. The perimeter of parallelogram PQRS is:
(a) 12 cm (b) 7 cm
(c) 38 cm (d) 19 cm
- 
36. The diagonals of a square are _____ each other .
(a) equal to (b) unequal to
(c) perpendicular bisectors of (d) none of these
37. A parallelogram with sides of equal length is called _____.

- (a) trapezium (b) square (c) rectangle (d) rhombus

38. How many measurements can determine a quadrilateral uniquely?

- (a) 2 (b) 3 (c) 4 (d) 5

39. Diagonals of a parallelogram _____ each other.

- (a) bisect (b) equal to (c) perpendicular to (d) none of these

40. How many sides does decagon has?

- (a) 8 (b) 10 (c) 6 (d)
-

Answer Key

1	(b)	21	(b)
2	(c)	22	(b)
3	(c)	23	(a)
4	(d)	24	(b)
5	(b)	25	(b)
6	(c)	26	(b)
7	(a)	27	(d)
8	(b)	28	(c)
9	(b)	29	(d)
10	(d)	30	(b)
11	(d)	31	(c)
12	(a)	32	(c)
13	(c)	33	(b)
14	(c)	34	(b)
15	(d)	35	(c)
16	(d)	36	(c)
17	(c)	37	(d)
18	(c)	38	(d)
19	(a)	39	(a)
20	(a)	40	(b)

Analyze Your Performance

Questions	Tally Marks	Revise These concepts
1,2,3,4,5,6,14,15,40		Classification of polygons
17,20,21,22,23,24,25,28,29,30 ,31,34,35,36,37,38,39		Kinds of quadrilaterals
7,8,9,1,13,16,18,19,32,33		Angle sum property of polygons
11,12,26,27		Sum of measures of exterior angles of polygons

**MULTIPLE CHOICE QUESTIONS
CLASS VIII
TOPIC: DATA HANDLING**

TIME: 15 MINUTES

TOTAL QUESTIONS = 20

Frequency distribution of daily income of 550 workers of a factory is given below

	Class intervals (daily income in Rs)	Frequency (number of workers)
I	100-125	45
II	125-150	25
III	150-175	55
IV	175-200	125
V	200-225	140
VI	225-250	55
VII	250-275	35
VIII	275-300	50
IX	300-325	20
	TOTAL	550

Read the table given above and answer the following questions (Q1 – Q5)

Q1 What is the size of class intervals ?

- (a) 24 (b) 25 (c) 26 (d) 15

Q2 Which class has the highest frequency ?

- (a) 200-225 (b) 300-325 (c) 175-200 (d) 150-175

Q3 Which class has the lowest frequency ?

- (a) 100-125 (b) 300-325 (c) 175-200 (d) 150-175

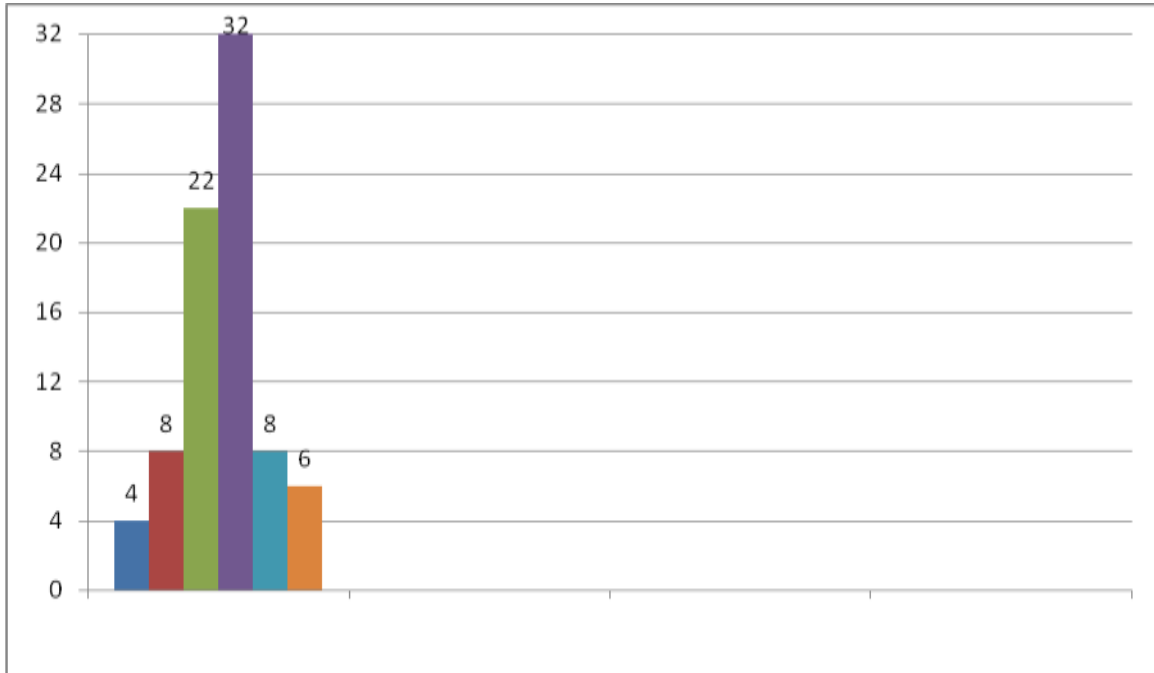
Q4 What is the upper limit of the class interval 250-275?

- (a) 250 (b) 275 (c) 25 (d) 525

Q5 Which two classes have the same frequency?

- (a) III & IV (b) I & II (c) II & V (d) V & VI

The number of hours for which students of particular class watched television during holidays is shown through the graph given below:



See the graph given above and answer the following questions (Q6-Q10)

Q6 For how many hours did the maximum number of students watch TV ?

- (a) 4-5 hrs (b) 6-7 hrs (c) 3-4 hrs (d) 2-3hrs

Q7 How many students watched TV for less than 4 hrs ?

- (a) 12 (b) 34 (c) 4 (d) 8

Q8 How many students spent more than 5 hrs in TV watching ?

- (a) 14 (b) 0 (c) 6 (d) 8

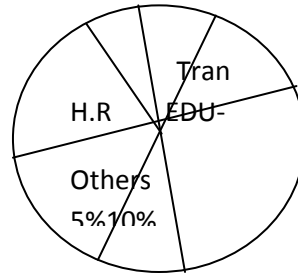
Q9 For how many hours did the minimum number of students watch TV ?

- (a) 2-3 hrs (b) 6-7 hrs (c) 1-2 hrs (d) 3-4hrs

Q10 How many students spent less than 5 hrs in TV watching ?

- (a) 34 (b) 32 (c) 8 (d) 66

Adjoining pie-chart gives the expenditure (in %age) on various items and savings of a family during a month .



Study the given pie chart and answer the following questions (Q11-Q15)

Q11 On which item the expenditure was maximum ?

- (a) food (b) education (c) others (d) transport

Q12 On which item the expenditure was minimum ?

- (a) food (b) education (c) others (d) transport

Q13 Expenditure on which item is equal to total savings of the family ?

- (a) food (b) education (c) others (d) transport

Q14 If the monthly savings of the family is Rs 3000, What is the monthly expenditure on cloths ?

- (a) 3000 (b) 2000 (c) 2500 (d) 1000

Q15 What is the monthly expenditure on education for children ?

- (a) 3000 (b) 2000 (c) 2500 (d) 1000

Numbers 1 to 10 are written on ten separates slips (one number on one slip), kept in a box and mixed well. One slip is chosen from the box without looking in to it .Answer the following questions (Q16-Q20)

Q16 What is the probability of getting a number 6?

- (a) 1 (b) 0 (c) $\frac{1}{10}$ (d) $\frac{1}{2}$

Q17 What is the probability of getting a number less than 6?

- (a) 1 (b) 0 (c) $\frac{1}{10}$ (d) $\frac{1}{2}$

Q18 What is the probability of getting a number greater than 6?

- (a) 1 (b) 0 (c) $\frac{1}{10}$ (d) $\frac{2}{5}$

Q19 What is the probability of getting a 1-digit number ?

- (a) 1 (b) 0 (c) $\frac{1}{10}$ (d) $\frac{9}{10}$

Q20 What is the probability of getting an even number ?

- (a) 1 (b) 0 (c) $\frac{1}{10}$ (d) $\frac{1}{2}$

ANSWER KEY

Q. No	Answer	Q. No	Answer
1	b	11	a
2	a	12	d
3	b	13	b
4	b	14	b
5	a	15	a
6	a	16	c
7	b	17	d
8	a	18	d
9	c	19	d
10	d	20	d

ANALYSIS

Question	Tally mark	Revise these concepts
1,2,3,4,5		How to read frequency distribution table
6,7,8,9,10		How to read Histogram
11,12,13,14,15,		Pie-chart
16,17,18,19,20		Probability

MULTIPLE CHOICE QUESTIONS
CLASS VIII
TOPIC: SQUARES AND SQUARE ROOTS

TIME: 30 MINUTES

TOTAL QUESTIONS = 40

Q1. Which of the following is not a square number?

- (a) 4 (b) 9 (c) 16 (d) 24

Q2. The square of 23 is :

- (a) 529 (b) 526 (c) 46 (d) 429

Q3. The square of which of the following would be even number?

- (a) 2826 (b) 7779 (c) 1057 (d) 131

Q4. The square of which of the following would be odd number?

- (a) 431 (b) 272 (c) 1234 (d) 7928

Q5. Which of the following is a perfect square ?

- (a) 45 (b) 81 (c) 18 (d) 54

Q6. What will be the “ one’s digit” in the square of 1234 ?

- (a) 6 (b) 2 (c) 8 (d) 9

Q7. What will be the number of zeros in the square of 400 ?

- (a) 5 (b) 1 (c) 3 (d) 4

Q8. The perfect square number between 30 and 40 is :

- (a) 35 (b) 39 (c) 36 (d) 32

Q9. Which of the following number would have digit 6 at units place ?

- (a) 19^2 (b) 24^2 (c) 25^2 (d) 13^2

Q10. Which of the following number would have digit 5 at units place :

- (a) 95^2 (b) 59^2 (c) 24^2 (d) 42^2

Q11. Which of the following number would have digit 1 at units place ?

- (a) 81^2 (b) 18^2 (c) 54^2 (d) 95^2

Q12. How many natural numbers lie between 9^2 and 10^2 ?

- (a) 15 (b) 19 (c) 18 (d) 17

- Q13. How many non square numbers lie between 11^2 and 12^2 ?**
(a) 21 (b) 23 (c) 22 (d) 20
- Q14. 25 can be express as the sum of first _____ consecutive odd numbers .**
(a) (b) 4 (c) 6 (d) 3
- Q 15. How many numbers lie between square of 12 and 13?**
(a) 21 (b) 23 (c)22 (d)24
- Q16. What will be the value of ' x' in Pythagorean triplet (6,8, x)?**
(a) 5 (b) 7 (c)10 (d) 11
- Q 17. The square of -9 is**
(a) -81 (b) 81 (c) 18 (d) -18
- Q 18. The square root of 6400 is**
(a) 80 (b) 81 (c) 32 (d) 23
- Q19. By which smallest number 90 must be multiplied so as to make it a perfect square ?**
(a) 10 (b) 2 (c) 5 (d) 3
- Q20 By which smallest number 48 must be divided so as to make it a perfect square ?**
(a) 2 (b) 3 (c) 6 (d) 4
- Q21 which smallest number should be added to 80 so as to make it a perfect square ?**
(a) 2 (b) 3 (c) 1 (d) 4
- Q22 What could be the possible "one's digit" of the square root of 625?**
(a) 5 (b) 0 (c) 4 (d) 8
- Q23 Which is the smallest three-digit perfect square?**
(a) 100 (b) 101 (c) 121 (d) 144
- Q24 Which is the greatest three-digit perfect square?**
(a) 999 (b) 961 (c) 962 (d) 970
- Q25 Which is the greatest 4-digit perfect square?**
(a) 9999 (b) 9990 (c) 9800 (d) 9801
- Q26 Which is the smallest 4-digit perfect square?**
(a) 1024 (b) 1025 (c) 1000 (d) 1016

Q27 What will be the number of digits in the square root of 25600?

- (a) 3 (b) 2 (c) 5 (d) 4

Q28 What will be the number of digits in the square root of 1296?

- (a) 2 (b) 3 (c) 1 (d) 4

Q29 The square root of 12.25 is _____ .

- (a) 3.5 (b) 2.5 (c) 35 (d) 25

Q30 What is the length of the side of a square whose area is 441 cm^2 ?

- (a) 21 (b) 22 (c) 20 (d) 12

Q31 In a right angle triangle ABC , right angled at B, AB=6cm, BC=8cm ,then AC= _____ .

- (a) 10 (b) 12 (c) 21 (d) 14

Q32 Which least number should be subtracted from 629 so as to get a perfect square ?

- (a) 4 (b) 5 (c) 6 (d) 3

Q33 The square root of 1.21 is

- (a) 1.1 (b) 11 (c) 21 (d) 2.1

Q34 What is the smallest square number which is divisible by each of the numbers 6,9 and 15 ?

- (a) 900 (b) 810 (c) 630 (d) 720

Q35 The square of 1.2 is

- (a) 144 (b) 1.44 (c) 14.4 (d) 2.4

Q36 The square root of 169 is

- (a) -13 (b) 1.3 (c) -1.3 (d) $\frac{13}{10}$

Q37 What is the length of the diagonal of a rectangle having dimensions 3cm and 4cm?

- (a) 5 (b) 7 (c) 1 (d) 4

Q38 What will be the length of third side of a right angled triangle whose hypotenuse is 5cm and one of the side is 3 cm ?

- (a) 2 (b) 3 (c) 4 (d) 5

Q39 Which of the following is not a perfect square ?

- (a) 81 (b) 18 (c) 100 (d) 121

Q40 Which is the smallest square number that is divisible by each of the number 4,9 and10?

(a) 900

(b) 810

(c) 800

(d) 920

ANSWER KEY

Q. No.	Answer	Q. No.	Answer	Q. No.	Answer	Q. No.	Answer	Q. No.	Answer
1	d	9	b	17	b	25	a	33	a
2	a	10	a	18	a	26	d	34	a
3	a	11	a	19	a	27	a	35	b
4	a	12	c	20	b	28	a	36	a
5	b	13	c	21	c	29	a	37	a
6	a	14	a	22	a	30	a	38	c
7	d	15	d	23	a	31	a	39	b
8	c	16	c	24	b	32	a	40	a

ANALYSIS

QUESTION	TALLY MARK	REVISE THESE CONCEPT
1,2,5,17,35		How to find square of a number
18,29,30,31,33,36,37,38		How to find square root of a number
3,4,11,10,9,6,7,8,12,13,15,14,16,		Properties of square number
19,20,21,23,24,25,26,32,34,39,40		Application of square and square root
22,27,28		Properties of square root

**MULTIPLE CHOICE QUESTIONS
CLASS VIII
TOPIC: CUBES AND CUBE ROOTS**

TIME: 30 MINUTES

TOTAL QUESTIONS = 40

Q1 Which of the following is not a perfect cube ?

- (a) 1 (b) 9 (c) 8 (d) 27

Q2 The cube of 4 is _____ .

- (a) 12 (b) 8 (c) 4 (d) 64

Q3 The value of 5^3 is _____ .

- (a) 125 (b) 15 (c) 10 (d) 75

Q4 The cube of an even number is always _____ .

- (a) odd number (b) even number (c) prime number (d) none of these

Q5 The cube of an odd number is always _____ .

- (a) odd number (b) even number (c) prime number (d) none of these

Q6 Each prime factor appears _____ times in its cube?

- (a) 2 (b) 3 (c) 1 (d) 4

Q7 Which of the following is Hardy-Ramanujan Number ?

- (a) 1724 (b) 1725 (c) 1727 (d) 1729

Q8 By which smallest natural number 392 must be multiplied so as to make the product a perfect cube ?

- (a) 2 (b) 14 (c) 7 (d) 49

Q9 The smallest natural number by which 243 must be multiplied to make the product a perfect cube is _____ .

- (a) 3 (b) 9 (c) 8 (d) 7

Q10 The smallest natural number by which 704 must be divided to obtain a perfect cube is

- (a) 22 (b) 12 (c) 11 (d) 13

Q11 The smallest natural number by which 135 must be divided to obtain a perfect cube is

- (a) 5 (b) 3 (c) 15 (d) 9

Q12 Which of the following is not a perfect cube ?

- (a) 216 (b) 343 (c) 125 (d) 108

Q13 The expansion of a^3 is _____ .

- (a) $3 \times a$ (b) $a+a+a$ (c) $3 \times 3 \times 3$ (d) $a \times a \times a$

Q14 What will be the unit digit of the cube of a number ending with 2 ?

- (a) 8 (b) 4 (c) 2 (d) 6

Q15 What will be the unit digit of the cube of a number ending with 4 ?

- (a) 4 (b) 6 (c) 2 (d) 8

Q16 What will be the unit digit of the cube of a number ending with 6 ?

- (a) 4 (b) 6 (c) 2 (d) 8

Q17 A cuboid has dimensions 5cm , 2cm, 5cm .How many such cuboid will be needed to form a cube ?

- (a) 20 (b) 10 (c) 5 (d) 2

Q18 How many cuboids of dimensions 15cm, 30cm ,15cm will be needed to form a cube ?

- (a) 15 (b) 4 (c) 30 (d) 5

Q19 729 is the value of _____ .

- (a) 8^3 (b) 9^3 (c) 6^3 (d) 4^3

Q20 Which of the following is a perfect cube ?

- (a) 125 (b) 135 (c) 145 (d) 115

Q21 What is the volume of a cube whose edge is 2cm ?

- (a) 8 (b) 6 (c) 10 (d) 4

Q22 The symbol for cube root is _____ .

- (a) $\sqrt{3}$ (b) $\sqrt[3]{\square}$ (c) $\sqrt{3}$ (d) $\sqrt[2]{3}$

Q23 The cube root of 512 is _____ .

- (a) 8 (b) 32 (c) 16 (d) 2

Q24 The value of $\sqrt[3]{343}$ is ____ .

- (a) 8 (b) 7 (c) 6 (d) 3

Q25 Which of the following is true for any natural number n?

- (a) $n^2 > n^3$ (b) $n^3 > n^2$ (c) $n^2 = n^3$ (d) none of these

Q26 If the volume of a cube is 125 cm³ then what would be the length of its side?

- (a) 25 (b) 5 (c) 4 (d) 15

Q27 What will be the unit digit of the cube root of a number ends with 8?

- (a) 2 (b) 8 (c) 4 (d) 6

Q28 What will be the unit digit of the cube root of a number ends with 2?

- (a) 2 (b) 8 (c) 4 (d) 6

Q29 What will be the unit digit of the cube root of a number ends with 3?

- (a) 3 (b) 7 (c) 5 (d) 2

Q30 What will be the unit digit of the cube root of a number ends with 7?

- (a) 3 (b) 7 (c) 6 (d) 5

Q31 9 is the cube root of _____ .

- (a) 343 (b) 729 (c) 629 (d) 81

Q32 The number of digits in the cube root of a 6-digit number is _____ .

- (a) 3 (b) 2 (c) 4 (d) 6

Q33 How many digits will be there in the cube root of 46656 ?

- (a) 2 (b) 1 (c) 3 (d) 4

Q34 How many digits will be there in the cube root of 512 ?

- (a) 1 (b) 2 (c) 3 (d) 4

Q35 What will be the unit digit of $\sqrt[3]{15625}$?

- (a) 5 (b) 0 (c) 3 (d) 4

Q36 How many zeros will be there in the cube root of 27000?

- (a) 3 (b) 0 (c) 1 (d) 2

Q37 How many zeros will be there in the cube root of 800?

- (a) 3 (b) 0 (c) 1 (d) cube root does not exist

Q38 If $7^3=343$, then $\sqrt[3]{343} =$ _____ .

- (a) 3 (b) 7 (c) 13 (d) 9

Q39 If $8^3=512$, then $\sqrt[3]{512} =$ _____ .

- (a) 3 (b) 7 (c) 13 (d) 9

Q40 What will be the unit digit of $\sqrt[3]{216}$?

- (a) 3 (b) 6 (c) 4 (d) 2

ANSWER KEY

Q. No.	Answer	Q. No.	Answer	Q. No.	Answer	Q. No.	Answer	Q. No.	Answer
1	b	9	a	17	a	25	b	33	a
2	d	10	c	18	b	26	b	34	a
3	a	11	a	19	b	27	a	35	a
4	b	12	d	20	a	28	b	36	c
5	a	13	d	21	a	29	b	37	d
6	b	14	a	22	b	30	a	38	b
7	d	15	a	23	a	31	b	39	a
8	c	16	b	24	b	32	b	40	b

ANALYSIS

Question	Tally mark	Revise these concepts
1,2,3,12,13,19,20,21		How to find cube of a number
23,24,26,31,38,39		How to find cube root of a number
4,5,6,14,15,16,25,		Properties of cube
27,28,29,30,32,33,34,35,36,37,40		Properties of cube root
7		Ramanujan number
8,9,10,11,17,18		Application of cube
22		Symbol for cube root

**MULTIPLE CHOICE QUESTIONS
CLASS VIII
TOPIC: ALGEBRAIC EXPRESSIONS**

TIME: 30 MINUTES

TOTAL QUESTIONS = 40

Q1: The number of terms in the expression $2x^2+3x+5$ is

- (a) 1 (b) 2 (c) 3 (d) 5

Q2: The coefficient of x in the expression $-7x + 5$ is

- (a) 5 (b) -7 (c) 7 (d) x

Q3: The numerical coefficient of y in the expression $2x+3y+7z$ is

- (a) 2 (b) 3 (c) 7 (d) $3y$

Q4: The expression $y+z+100$ is a

- (a) monomial (b) literal number
(c) binomial (d) trinomial

Q5: The expression $7xy$ has the factors

- (a) $7, x, y$ (b) x, y (c) $7, x$ (d) $7, y$

Q6: The common factors of the terms $2y, 22xy$ is

- (a) 2 (b) $2y$ (c) y (d) xy

Q7: '2' is common factor of the expressions

- (a) $12a^2b, 15ab^2$ (b) $5xy, 10x$
(c) $10x^2, -18x^3, 14x^4$ (d) $33y, -22z$

Q8: The factorization of $7a^2+14a$ is

- (a) $7(a+z)$ (b) $21a$ (c) $7(a+1)$ (d) $7a(a+2)$

Q9: The addition of $ab-bc, bc-ca, ca-ab$ is

- (a) $3ab+3bc+3ca$ (b) 0
(c) $ab+bc+ca$ (d) $ab-bc+ca$

Q10: One of the example of binomial is

- (a) $3xyz$ (b) $3xy+z$ (c) $3x+y+z$ (d) $3+x+y+z$

Q11: The area of triangle is 'xy' where 'x' is length and 'y' is breadth. If the length of rectangle is increased by 5 units and breadth is decreased by 3 units, the new area of rectangle will be

- (a) $(x-y)(x+3)$ (b) $xy+15$ (c) $(x+5)(y-3)$ (d) $xy + 5-3$

Q12 : The value of $2x(-3x)$ is

- (a) $5x^2$ (b) $-6x$ (c) $-5x^2$ (d) $-6x^2$

Q13: Like terms in the expression $7x, 5x^2, 7y, -5yx, -9x^2$, are

- (a) $7x, -5yx$ (b) $5x^2, -5yx$ (c) $5x^2, -9x^2$, (d) $7x, 7y$

Q14: Area of rectangle of length '3x' and breadth '5y' is

- (a) $3x+5y$ (b) $15xy$ (c) $15x$ (d) $15y$

Q15: Number of terms in the expression $xyz+1$ is

- (a) 4 (b) 3 (c) 2 (d) 1

Q16: The product of $-4p$ and $7p$ is

- (a) $28p$ (b) $-28p^2$ (c) $-28p$ (d) $28p^2$

Q17: The product of $a^2, 2a^2, 5a^{10}$ is

- (a) $10a^{34}$ (b) $7a^{34}$ (c) $10a^{22}$ (d) $10a^{440}$

Q18: Multiplication of $pq+qr+rp$ and 'zero' is

- (a) $pq+qr$ (b) $pq+rp$ (c) $pq+qr+rp$ (d) 0

Q19: The value of $3x(4x-5)+3$ for $x=3$

- (a) -6 (b) 66 (c) 106 (d) 0

Q20: The volume of rectangular box whose length, breadth and height is $2p, 4q, 8r$ respectively is

- (a) $14pqr$ (b) $2p+4q+8r$ (c) $64pqr$ (d) 64

Q21: Numerical coefficient of x^{2y} in the expression $1+x+2x^{2y}$ is

- (a) $2y$ (b) 2 (c) $2x^{2y}$ (d) $2x^2$

Q22: Coefficient of xy in the expression $\frac{x}{2} + \frac{y}{2} - xy$ is

- (a) -1 (b) $1/2$ (c) 1 (d) $1/4$

Q23: Which of the following expression is trinomial

- (a) xyz (b) $xy+z$ (c) $x+y+z$ (d) $x+yz$

Q24: Which of the following expression is monomial

- (a) $x+1$ (b) pqr (c) $pq+r$ (d) $p+qr$

Q25: Multiplication of 'ab' and 'a-b' is

- (a) a^2b-b (b) a^2b+b (c) ba^2b+ab^2 (d) $a^2b - ab^2$

Q26: The suitable identity to find $(x+3)(x+3)$ is

- (a) $(a+b)^2$ (b) $(a - b)^2$ (c) $a^2 - b^2$ (d) $(x+a)(x+b)$

Q27: Value of $(4p - 3q)^2$ is

- (a) $16p^2 - 9q^2$ (b) $16p^2 - 9q^2 + 24pq$ (c) $16p^2 - 9q^2 - 24pq$ (d) $16p^2 + 9q^2 - 24pq$

Q28: $(9x+a)(x+b)$ is equal to

- (a) $x^2 ax + ab$ (b) $x^2 +(a+b)x + ab$ (c) $x^2 +bx + ab$ (d) $x^2 +ab$

Q29: Value of expression ‘ $a(a^2+a +1)+5$ ’ for ‘ $a = 0$ ’ is

- (a) $a+5$ (b) 1 (c) 6 (d) 5

Q30: Which of the following is not binomial

- (a) $m+n$ (b) mn (c) $m-n$ (d) $m^2 - n^2$

Q31: Subtracting $7x + y$ from $-x + y$ gives

- (a) $6x+2y$ (b) $8x+2y$ (c) $-8x$ (d) $8x$

Q32: Which identity is used to evaluate $(m+3)(m+2)$.

- (a) $(x+a)(x+b)=x^2+(a+b)x+ab$ (b) $(a+b)^2=a^2+2ab+b^2$
 (c) $(a-b)^2=a^2 -2ab+b^2$ (d) $a^2 - b^2=(a+b)(a-b)$

Q33: Use suitable identity to evaluate 99^2 .

- (a) 9801 (b) 10199 (c) 10201 (d) 10001

Q34: Evaluate $(4x+y)^2$ by suitable identity

- (a) $4x^2+y^2+8x$ (b) $4x+y+8xy$ (c) $16x^2+y^2+8xy$ (d) $16x^2+y^2+8$

Q35: Find the value of 95×102 by suitable identity.

- (a) 10310 (b) 10290 (c) 10690 (d) 9690

Q36: Simplification of $(t+s^2)(t^2-s)$ is

- (a) $t^3+s^3-s^2t^2- ts$ (b) $t^3-s^3 +s^2t^2-st$ (c) $t^3-s^3+s^2t^2+st$ (d) $t^3 + s^3- s^2t^2+st$

Q37 : $(a-b)^2$ is equal to

- (a) $a^2+b^2- 2ab$ (b) $a^2 - b^2 + 2ab$ (c) $a^2 - b^2$ (d) $(a-b)(a+b)$

Q38: Using identity $a^2 - b^2 = (a+b)(a-b)$, find $4^2 - 6^2$

- (a) -20 (b) 20 (c) -12 (d) 12

Q39: The expression in one variable is

- (a) $x+x^2+1$ (b) $x+y$ (c) $x+9y$ (d) xyz

Q40: $(a+b)(a-b)$ is equal to

- (a) $a^2 - b^2$ (b) a^2+b^2 (c) $a^2+b^2+ 2ab$ (d) $a^2+b^2- 2ab$

ANSWER KEY

<u>QUESTION NUMBER</u>	<u>ANSWER</u>	<u>QUESTION NUMBER</u>	<u>ANSWER</u>
<u>Q1</u>	<u>c</u>	<u>Q21</u>	<u>b</u>
<u>Q2</u>	<u>b</u>	<u>Q22</u>	<u>a</u>
<u>Q3</u>	<u>b</u>	<u>Q23</u>	<u>c</u>
<u>Q4</u>	<u>d</u>	<u>Q24</u>	<u>b</u>
<u>Q5</u>	<u>a</u>	<u>Q25</u>	<u>d</u>
<u>Q6</u>	<u>b</u>	<u>Q26</u>	<u>a</u>
<u>Q7</u>	<u>c</u>	<u>Q27</u>	<u>d</u>
<u>Q8</u>	<u>d</u>	<u>Q28</u>	<u>b</u>
<u>Q9</u>	<u>b</u>	<u>Q29</u>	<u>d</u>
<u>Q10</u>	<u>b</u>	<u>Q30</u>	<u>b</u>
<u>Q11</u>	<u>c</u>	<u>Q31</u>	<u>c</u>
<u>Q12</u>	<u>d</u>	<u>Q32</u>	<u>a</u>
<u>Q13</u>	<u>c</u>	<u>Q33</u>	<u>a</u>
<u>Q14</u>	<u>b</u>	<u>Q34</u>	<u>c</u>
<u>Q15</u>	<u>c</u>	<u>Q35</u>	<u>d</u>
<u>Q16</u>	<u>B</u>	<u>Q36</u>	<u>a</u>
<u>Q17</u>	<u>A</u>	<u>Q37</u>	<u>a</u>
<u>Q18</u>	<u>D</u>	<u>Q38</u>	<u>a</u>
<u>Q19</u>	<u>B</u>	<u>Q39</u>	<u>a</u>
<u>Q20</u>	<u>C</u>	<u>Q40</u>	<u>a</u>

KEY FOR ANALYSIS

<u>Basic Concepts</u>	<u>Question nos.</u>
Concept of terms , factors and coefficient, concept of monomial, binomial, trinomial and polynomial	<u>1,2,3,4,5,6,7,8,10,11,13,14,15,21,23,24,30,39</u>
<u>Addition, subtraction, multiplication, division,</u>	<u>9,12,16,17,18,19,20,22,25,28,29,36</u>
<u>Concept of identities:</u> $(x+a)(x+b)=x^2+(a+b)x+ab$ $(a+b)^2=a^2+2ab+b^2$ $(a-b)^2=a^2-2ab+b^2$ $a^2 - b^2=(a+b)(a-b)$	<u>26,27,32,33,34,35,37,38,40</u>

MULTIPLE CHOICE QUESTIONS
CLASS VIII
TOPIC: MENSURATION

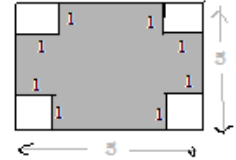
TIME: 30 MINUTES

TOTAL QUESTIONS = 40

011

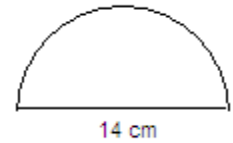
Q.1. In fig., a square of side 5 cm, the area of shaded portion is

- (a) 9000 cm² (b) 90 cm² (c) 9 cm² (d) 900 cm²



011Q.2. The area of adjoining figure is

- (a) 154 cm (b) 154 cm² (c) 77 cm² (d) 77 cm



Q.3. The area of a trapezium is

- (a) $\frac{1}{2}$ (sum of parallel sides) \times h (b) 2 (sum of parallel sides) \times h
 (c) (sum of parallel sides) \times h (d) $\frac{1}{2}$ (sum of parallel sides) + h

Q.4. In a quadrilateral, half of the product of the sum of the lengths of parallel sides and the parallel distance between them gives the area of

- (a) rectangle (b) parallelogram (c) triangle (d) trapezium

Q.5. The area of rhombus is

- (a) side \times side (b) $d_1 \times d_2$ (c) $d_1 + d_2$ (d) $\frac{1}{2} d_1 \times d_2$

Q.6. Which of the following has the formula $\frac{1}{2}$ (sum of parallel sides) \times h

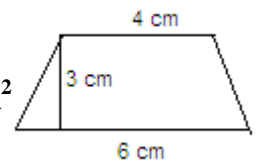
- (a) area of rectangle (b) area of rhombus
 (c) area of quadrilateral (d) area of trapezium

Q.7. The length of parallel sides of trapezium is 14 cm and 6 cm and its height is 5 cm. Its area will be

- 11 (a) 50 cm² (b) 100 cm² (c) 210 cm² (d) 10 cm²

Q.8. The area of trapezium in the adjoining figure is

- (a) 30 cm² (b) 42 cm² (c) 15 cm² (d) 12 cm²



Q.9. Which of the following is an example of two dimensions

- (a) cuboid (b) cone (c) sphere (d) circle

Q.10. Which of the following shape has two dimensions

- (a) ring (b) soap (c) chalk box (d) cylinder

Q.11. Two dimensional figure is a

- (a) solid figure (b) plane figure (c) cylinder figure (d) None of these

Q.12. Plane figures are

- (a) 3 D (b) 2 D (c) 1 D (d) 4 D

Q.13. Solid figures are

- (a) 3 D (b) 2 D (c) 1 D (d) 4 D

Q.14. Which of the following is an example of 3 D

- (a) rectangle (b) circle (c) triangle (d) sphere

Q.15. Pyramid is an example of

- (a) 1 D (b) 2 D (c) 3 D (d) 4 D

Q.16. In a right circular cylinder, the line segments joining the centre of circular faces is _____ to the base

- (a) parallel (b) rectangular (c) circular (d) perpendicular

Q.17. The amount of space occupied by a three dimensional objects is called its

- (a) area (b) surface area (c) volume (d) lateral surface area

Q.18. The standard unit of volume is

- (a) m^2 (b) m (c) m^3 (d) cm^2

Q.19. The formula for finding the surface area of cube is

- (a) $3(\text{side})^2$ (b) $4(\text{side})^2$ (c) $5(\text{side})^2$ (d) $6(\text{side})^2$

Q.20. If the side of the cube is 2 m , then the surface area of the cube is

- (a) $12 m^2$ (b) 12 m (c) $24 m^2$ (d) 24 m

Q.21. The formula for finding total surface area of cuboid is

- (a) $2(lb \times bh \times hl)$ (b) $2(lb + bh + hl)$
(c) $2h(l + b)$ (d) $2lb(bh + hl)$

Q.22. The formula for lateral surface area of cuboid is

- (a) $2h(l + b)$ (b) $2l(h + b)$ (c) $2b(l + h)$ (d) $2(lb + bh + hl)$

Q.23. The area of four walls of the room is

- a) $2(lb + bh + hl)$ (b) $2l(h + b)$
(c) $2(lb \times bh \times hl)$ (d) $2h(l + b)$

Q.24. The formula for volume of cube is

- (a) l^3 (b) $6l^2$ (c) $4l^3$ (d) $6l^3$

Q.25. The quantity that a container holds is called its

- (a) surface area (b) lateral surface area (c) capacity (d) volume

Q.26. 1 m^3 is _____ .

- (a) 10 L (b) 100 L (c) 1000 L (d) 10000 L

Q.27. The height of cuboid whose volume is 200 cm^3 and base area is 20 cm^2 is

- (a) 220 cm (b) 100 cm (c) 10 cm (d) 20 cm

Q.28. $1 \text{ ml} =$ _____ .

- (a) 1 cm^3 (b) 10 cm^3 (c) 100 cm^3 (d) 1000 cm^3

Q.29. If each edge of a cube is doubled, its surface area will increase

- (a) two times (b) three times (c) four times (d) five times

Q.30. The formula for finding total surface area of cylinder is

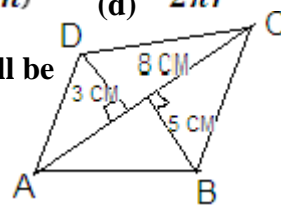
- (a) $2\pi rh$ (b) $2\pi r(r + h)$ (c) $\pi r^2 h$ (d) $2\pi r + 2\pi^2$

Q.31. The formula for finding lateral surface area of cylinder is

- 11 (a) $2\pi rh$ (b) πr^2 (c) $2\pi r(r + h)$ (d) $2\pi r$

Q.32. In the adjoining figure, area of quadrilateral ABCD will be

- (a) 12 cm^2 (b) 32 cm^2
(c) 20 cm^2 (d) 8 cm^2



Q.33. If the diagonals of rhombus are 6 cm & 8 cm, its area will be

- (a) 48 cm^2 (b) 24 cm (c) 48 cm (d) 24 cm^2

Q.34. Diagonals of rhombus are

- (a) equal (b) half of one diagonal (c) of different length (d) none of above

Q.35. If the base of rhombus of 7 cm and its altitude is 4 cm, its area will be

- (a) 14 cm^2 (b) 28 cm (c) 14 cm (d) 28 cm^2

Q.36. $1 \text{ L} =$ _____ cm^3

- (a) 100 (b) 1000 (c) 10 (d) 10,000

Q.37. If the length of edge of cube is 4 cm, its volume is

- (a) 16 cm^2 (b) 64 cm^3 (c) 64 cm^2 (d) 16 cm^3

Q.38. The volume of cuboid of dimensions 4 cm, 2 cm and 3 cm is

- (a) 24 cm^3 (b) 12 cm^3 (c) 24 cm^2 (d) 26 cm^3

Q.39. The formula for finding volume of cuboid is

- (a) side \times side (b) $l \times b \times h$ (c) side + side + side (d) $l \times b$

Q.40. The formula for finding volume of cylinder is

- (a) $2\pi r^2 h$ (b) $2\pi r h$ (c) $\pi r h$ (d) $\pi r^2 h$

**ANSWER KEY
MENSURATION
CLASS VIII**

QUESTIONS	CORRECT ANSWER	QUESTIONS	CORRECT ANSWER
Q.1.	(c)	Q.21.	(b)
Q.2.	(d)	Q.22.	(a)
Q.3.	(a)	Q.23.	(d)
Q.4.	(d)	Q.24.	(a)
Q.5.	(d)	Q.25.	(c)
Q.6.	(d)	Q.26.	(c)
Q.7.	(a)	Q.27.	(c)
Q.8.	(c)	Q.28.	(a)
Q.9.	(d)	Q.29.	(c)
Q.10.	(a)	Q.30.	(b)
Q.11.	(b)	Q.31.	(a)
Q.12.	(b)	Q.32.	(b)
Q.13.	(b)	Q.33.	(d)
Q.14.	(d)	Q.34.	(c)
Q.15.	(c)	Q.35.	(a)
Q.16.	(d)	Q.36.	(b)
Q.17.	(c)	Q.37.	(b)
Q.18.	(c)	Q.38.	(a)
Q.19.	(b)	Q.39.	(b)
Q.20.	(a)	Q.40.	(d)

**ANALYSE YOUR PERFORMANCE
CLASS VIII**

QUESTIONS	TALLY MARKS	REVISE THESE CONCEPTS
3, 4, 5, 6, 18, 19, 21, 22, 23, 24, 31, 34, 39		Knowledge of formulae
16, 17, 25, 26, 28		Concept of terms
1, 9, 10, 12, 13, 14, 15, 29, 30, 36		Understanding of concepts
2, 7, 8, 20, 27, 32, 33, 35, 37, 38, 40		Applications

MULTIPLE CHOICE QUESTIONS
CLASS VIII
TOPIC: EXPONENTS AND POWERS

TIME: 30 MINUTES

TOTAL QUESTIONS = 40

- Q 1. The value of 2^5 is _____ .
(a) 3 (b) 10 (c) 32 (d) 7
- Q 2. The Base in the expression 10^{24} is _____ .
(a) 1 (b) 10 (c) 0 (d) 24
- Q 3. The value of 3^0 is _____ .
(a) 0 (b) 3 (c) 1 (d) None of these
- Q 4. Multiplicative inverse of 7^{-2} is _____ .
(a) 49 (b) 5 (c) 7 (d) -14
- Q 5. Fill in the blank $a^m \times a^n = a^{\dots\dots\dots}$ where m and n are natural numbers:-
(a) mn (b) $m + n$ (c) $m - n$ (d) m/n
- Q 6. The exponential form of $1/8 \times (3)^{-3}$ is given by which of the following expression:
(a) 6^{-3} (b) 2^3 (c) 3^{-6} (d) 5^{-3}
- Q 7. The value of $1/3^{-2}$ is equal to
(a) 9 (b) 1 (c) -6 (d) $1/3$
- Q 8. In exponential form 149,600,000,000 m is given by :
(a) 1.496×10^{11} m (b) 1.496×10^8 m (c) 14.96×10^8 m (d) 14.96×10^{11} m
- Q 9. In simplified form $(3^{-1} + 4^{-1} + 5^{-1})^0$ is equals to
(a) 12 (b) -3 (c) 12^{-1} (d) 1
- Q 10. The value of $(2/3)^{-2}$ is
(a) $4/9$ (b) $-2/9$ (c) $9/4$ (d) 0
- Q 11. In standard form 21600000 is written as
(a) 2.16×10^7 (b) 216×10^7 (c) 2.16×10^5 (d) 216×100000
- Q 12. Usual form of the expression 3×10^{-5} is given by
(a) 0.00003 (b) 0.000003 (c) 30×10^{-4} (d) 0.03×10^{-3}
- Q 13. 1 micron is equals to
(a) $1/10000$ m (b) 10^6 m (c) 10^{-6} m (d) 10^{-5} m

Q 14. The approximate distance of moon from the earth is 384,467,000 m and in exponential form. This distance can be written as

- (a) $3.84,467 \times 10^8$ m (b) $384,467 \times 10^{-8}$ m (c) $384,467 \times 10^{-9}$ m (d) $3.844,67 \times 10^{-13}$ m

Q 15. 7×10^{-5} m is the standard form of which of the following

- (a) 0.0007 m (b) 0.000007 m (c) 0.0000007 m (d) 0.00007 m

Q 16. The standard form of 4050000 is given by

- (a) 4.05×10^6 (b) 40.5×10^9 (c) 405×10^6 (d) 4.05×10^{-6}

Q 17. Which one of the following is the value of 1^{15}

- (a) 0 (b) 15 (c) 1 (d) None of these

Q 18. $1/125$ is the multiplicative inverse of

- (a) 5^{-3} (b) $1/5^{-3}$ (c) -125 (d) 5^3

Q 19. 16 is the multiplicative inverse of

- (a) 2^{-4} (b) 2^8 (c) 8^2 (d) 2^4

Q 20. Value of $(3^0 + 2^0) \times 5^0$ is

- (a) 1 (b) 25 (c) 2 (d) 0

Q 21. The value of 7^2 is

- (a) 7 (b) 49 (c) 2 (d) 14

Q 22. The Base in the expression 8^{100} is

- (a) 10 (b) 100 (c) 8 (d) 800

Q 23. The value of 1000^0 is

- (a) 0 (b) 1000 (c) 1 (d) None of these

Q 24. Multiplicative inverse of 5^{-2} is

- (a) -10 (b) 25 (c) 3 (d) 7

Q 25. Value of $(2^3)^2$ is given by

- (a) 64 (b) 32 (c) 12 (d) None of these

Q 26. The value of $8^2 \div 2^3$ is given by.....

- (a) $\frac{1}{4}$ (b) 8 (c) $\frac{1}{8}$ (d) -8

Q 27. The value of $1/5^{-3}$ is equal to

- (a) -3 (b) 125 (c) -15 (d) $\frac{1}{5}$

- Q 28. In exponential form 140,000,000,000 Kg is given by
- (a) 1.4×10^{10} Kg (b) 1.4×10^9 Kg (c) 14×10^8 Kg (d) 1.4×10^{11} Kg
- Q 29. The expression , $(5^{-1} + 7^{-1} + 3^{-1})^0$ is equals to
- (a) 15^{-3} (b) -3 (c) 15^{-1} (d) 1
- Q 30. The value of $(1/3)^{-2}$ is
- (a) 9 (b) -2/3 (c) 1/9 (d) 0
- Q 31. In standard form 56700000 is written as
- (a) 5.67×10^7 (b) 567×10^7 (c) 5.67×10^5 (d) 567×100000
- Q 32. Usual form of the expression 9×10^{-5} is given by
- (a) 0.00009 (b) 0.000009 (c) 90×10^{-4} (d) 0.09×10^{-3}
- Q 33. The number 86,800,000,000,000,000,000,000 Kg is equals to
- (a) 8.68×10^{25} K (b) 868×10^{23} Kg (c) 86.8×10^{-25} Kg (d) 868×10^{-23} m
- Q 34. Charge of an electron is 0.000,000,000,000,000,000,16 coulomb and in exponential form it can be written as
- (a) 16×10^{-18} coulomb (b) 1.6×10^{-21} coulomb
(c) 1.6×10^{-19} coulomb (d) 16×10^{-21} coulomb
- Q 35. 13×10^{-7} Km is the standard form of which of the following
- (a) 0.00000013 Km (b) 0.0000013 Km
(c) 0.000000000013 Km (d) 0.00000000013 Km
- Q 36. The standard form of 9030000000 is given by
- (a) 9.03×10^9 (b) 90.3×10^7 (c) 903×10^6 (d) 9.03×10^{-9}
- Q 37. Which one of the following is the value of 3^5
- (a) 3 (b) 15 (c) 2 (d) 243
- Q 38. 3^2 is the multiplicative inverse of
- (a) 1/9 (b) $1/3^{-2}$ (c) 6 (d) $1/2^3$
- Q 39. 64 is the multiplicative inverse of
- (a) 2^{-8} (b) 8^2 (c) $1/8^2$ (d) 2^4
- Q 40. The value of $2^0 \times 3^0 \times 4^0$ is
- (a) 1 (b) 0 (c) 24 (d) None of these

ANSWER KEY

1.(c)	2. (d)	3. (c)	4. (a)	5. (b)	6. (a)	7.(a)	8.(a)
9. (d)	10. (c)	11. (a)	12.(a)	13. (c)	14.(a)	15.(d)	16.(a)
17. (c)	18.(d)	19. (a)	20.(c)	21. (b)	22.(c)	23. (c)	24.(b)
25. (a)	26.(b)	27. (b)	28. (d)	29.(d)	30.(a)	31.(a)	32.(a)
33. (a)	34.(c)	35.(b)	36.(a)	37.(d)	38.(a)	39.(c)	40.(a)

ANALYSIS

QUESTION NUMBERS	TALLY MARKS	CONCEPTS
2 , 22 , 37		Understanding of Base and Exponents
8 , 11 , 13 , 14 , 15 , 16 , 28 , 31 , 33 , 34 , 36 , 39, 40		Ability to Express in Exponential Form
1 , 3 , 4 , 6 , 7, 9 , 10 , 12 , 17 , 21 , 24 , 27 , 30, 32 , 35		Simplification of positive and negative Exponents
5 , 18 , 19 , 20 , 23 , 25 , 26 , 29 , 38		Applications of Laws of Exponents
