

KENDRIYA VIDYALAYA SANGATHAN, TINSUKIA REGION

SESSION ENDING EXAM 2018-19

SUBJECT - MATHEMATICS

MAX.MARKS - 80

CLASS – VIII

DURATION – 2:30 HRS

General instructions:-

- (i). All questions are compulsory.
 - (ii). This question paper contains 30 questions divided into four Sections A, B, C and D.
 - (iii). Section A comprises of 6 questions of 1 mark each. Section B comprises of 6 questions of 2 marks each. Section C comprises of 10 questions of 3 marks each and Section D comprises of 8 questions of 4 marks each.
 - (iv). Use of Calculators is not permitted
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SECTION – A

1. Write an example of a trinomial.
2. What is the square of 17?
3. Find the 40% of 40.
4. Find the side of a cube whose surface area is 24 cm^2 .
5. Factorise : $9p^2 - 3p$
6. Write the test of divisibility by 6.

SECTION - B

7. Find the square root of 81 by repeated subtraction method.
8. The price of a TV is ₹ 13000. The sales tax charged on the TV is at the rate of 12%. Find the amount that Ajay will have to pay if he buys it.
9. Draw a prism.
10. A car travels 30 km in 30 minutes. If the speed remains the same, how far can it travel in 4 hours?
11. 6 pipes are required to fill a tank in 1 hour and 20 minutes. How long will it take if only 5 pipes of the same type are used?

12. Find the A and B in given addition.

$$\begin{array}{r} 1 \quad 2 \quad A \\ +6 \quad A \quad B \\ \hline A \quad 0 \quad 9 \end{array}$$

SECTION – C

13. Simplify : $3(5z - 7) - 2(9z - 11) = 4(8z - 13) - 17$

14. Find the square root of 2304 by Division method.

15. Arif took a loan of ₹ 80,000 at an interest rate of 10 % per annum; find the amounts he would be paying after $1\frac{1}{2}$ years if the interest is compounded half yearly.

16. Simplify : $(3x - 5)^2 - (3x + 5)^2$

17. Can a polyhedron have 10 faces, 15 edges and 25 vertices?

18. Find m if : $2^{m+1} \times 2^3 = 2^9$

19. Find the height of a cuboid whose base area is 180 cm^2 and volume is 900 cm^3 .

20. If a box of sweets is divided among 24 children, they will get 5 sweets each. How many would each get, if the number of children is reduced by 4?

21. Factorise $x^2 + 5x + 6$

22. Draw the line passing through (2, 3) and (3, 2). Find the coordinates of the points at which this line meets the x- axis and y-axis.

SECTION-D

23. A grand father is ten times older than his granddaughter. He is also 54 years older than her. Find their present ages.

24. The population of a place increased to 54,000 in 2003 at the rate of 5% per annum. What would be its population in 2005?

25. Using identities, evaluate. (i) 102^2 (ii) 297×303

26. A milk tank is in the form of cylinder whose radius is 1.5 m and length is 14 m. Find the quantity of milk in liters that can be stored in the tank?

27. Express the following numbers in standard form.

(i) 1 micron is equal to $\frac{1}{1000000}$

(ii) 6020000000000

28. Divide : (i) $(5m - 25) \div m - 5$ (ii) $x(2x + 2)(x + 3) \div (x + 1)$

29. Draw a graph for the following tables of values, with the suitable scales on the axes.

Cost of books

Number of books	1	2	3	4	5
Cost (in ₹)	20	40	60	80	100

30. If $31y5$ is a multiple of 3, where y is a digit, what might be the values of y ?
