



INDIAN SCHOOL SOHAR
TERM II EXAMINATION – (2019-2020)

Class VIII

MATHEMATICS

Max. Marks: 80

Date: 03.03.2020

Duration: 3hrs

General Instructions:

All questions are compulsory.

This question paper consists of 40 questions divided into four sections A, B, C & D. Section A comprises of 20 questions of 1 mark each, Section B comprises of 6 questions of 2 marks each, Section C comprises of 8 questions of 3 marks each & Section D comprises of 6 questions of 4 marks each.

There is no overall choice in the paper. However an internal choice is provided in two questions of 1 mark, two questions of 2 marks, three questions of 3 marks and two questions of 4 marks.

SECTION A

- The solution of the equation $ax + b = 0$ is
a) $x = \frac{a}{b}$ b) $x = -b$ c) $x = \frac{-b}{a}$ d) $x = \frac{b}{a}$
- How many natural numbers are there between 1024^2 and 1025^2 ?
a) 2050 b) 2047 c) 2049 d) 2048
- If marked price of an article is Rs 1200 and discount is 12% then the selling price of the article is
a) Rs 1056 b) Rs 1344 c) Rs 1212 d) 1188
- The sum of $9xy + 5yz - 3xz$ and $3yz + 2xz - 5x$ is
a) $9xy + 8yz - 5xz + 5x$ b) $9xy + 8yz - xz - 5x$ c) $9xy - 8yz + 5xz - 5x$
d) $6xy + 8yz - xz + 5x$
- The volume of a cuboidal box with length $5ax$, breadth $3by$ and height $2cz$ is
a) $30abcxyz$ b) $15abc$ c) $30xyz$ d) $10abcxyz$
- The standard form of 3,64,00,000 is
a) 3.64×10^7 b) 364×10^5 c) 364×10^7 d) 364×10^5
- If 15 men can do a piece of work in 20 days, in how many days can 25 men finish the same work?
a) 12 b) 15 c) 2 d) 18

(OR)

A car covers a distance of 135 km with 10 litres of petrol The amount of petrol needed to cover a distance of 216 km is

- a) 15 litres b) 16 litres c) 18 litres d) 12 litres.

8. The volume of a cube is 64 cm^3 , then its edge is
 a) 2 cm b) 3 cm c) 4 cm d) 12 cm
9. If $3^{x+1} = 81$, then the value of x is
 a) 5 b) 6 c) 3 d) 4
10. The H.C.F of $17abc, 34ab^2, 51a^2b$ is
 a) $17abc$ b) $17ab$ c) $17ac$ d) $17a^2b^2c$
11. Any value of the variable which makes both sides of an equation equal is known as
 a..... of the equation.
12. The diagonals of a rhombus are 7.5 cm and 12 cm. Then its area is
13. The speed and travel time areproportional.
14. Factorised form of $18mn + 10mnp$ is
15. The price of a TV is Rs. 13000. The sales tax charged on it is 12%. The amount including tax
 that Vinod has to pay to buy it is
16. Write 49 as the sum of 7 odd natural numbers.
17. Find the product of 297×303 using identities.
18. Express 1.0001×10^9 in usual form.
19. If 20 articles cost Rs 90, then what will be the cost of 9 articles?
20. Factorise: $5xy + 10x$

(OR)

Factorise: $2xy + 6yz$

SECTION B

21. Marked price of an article is Rs. 990. It is sold at a discount of 10%. Find the selling price of
 the article.
22. Find the product of $(y - 8)$ and $(3y - 4)$
23. Evaluate : $\frac{27^{-1} \times 5^2}{3^{-4}}$
24. There are 80 students in a hostel. Food provision is available for them for 15 days. How
 many days the food provision will last if 20 more students join the hostel.

(OR)

In a camp sufficient food was stored for 16 people for 45 days. After 15 days 6 people left
 the camp. How many days the food will last, for the remaining men?

25. A right circular cylinder has radius 8 cm and height 35 cm. Find the curved surface area of the cylinder.
26. Factorise: $64x^2 + 16x + 1$

SECTION C

27. Kareem is three times old as his son. After 10 years, the sum of their ages will be 76 years. Find their present ages.
28. Find the square root of 5184 by prime factorization method.
29. Shankar bought a refrigerator for Rs 25000. He spent Rs 5000 for its repair and sold it for Rs 33000. Find the loss or gain percent

(OR)

Find the compound interest on Rs 20000 for 3 years at 10% per annum compounded annually.

30. Find the square of $\left(\frac{2}{3}m + \frac{3}{2}n\right)^2$ using identities.

(OR)

Find the product of $(4x - 5)(4x - 1)$ using identities.

31. The floor of a rectangular hall has a perimeter of 250 m. If it has height 6 m, find the cost of painting its four walls at the rate of Rs. 20 per square metre.
32. If 3 kg sugar contains 12×10^6 crystals, how many sugar crystals are there in 4 kg of sugar?
33. Divide: $96abc(3a - 12)(5b - 30) \div 144(a - 4)(b - 6)$

(OR)

Divide: $5y(x^2 - 5x - 6) \div 5(x - 3)$

34. Plot the following points on a graph sheet. Verify if they lie on a line.
A (4,0), B (4,2), C (4,6), D (4, 2.5)

SECTION D

35. Three consecutive integers are such that when they are taken in increasing order and multiplied by 2, 3 and 4 respectively they add up to 74. Find these numbers.

(OR)

The sum of the digits of a two digit number is 11. If the digits of the number are interchanged the new number obtained is 9 more than the original number. Find the original number.

36. Find the smallest number to be added to 1750 so as to get a perfect square? Find the perfect square number and its square root.

37. Find the compound interest on Rs 16000 at 10% per annum compounded half yearly for $1\frac{1}{2}$ years.

38. Show using identities that $\left(\frac{4}{3}m - \frac{3}{4}n\right)^2 + 2mn = \frac{16}{9}m^2 + \frac{9}{16}n^2$.

39. Simplify and evaluate: $\left\{\left(\frac{1}{3}\right)^{-2} - \left(\frac{1}{2}\right)^{-3}\right\} \div \left(\frac{1}{4}\right)^{-2}$

40. Draw a linear graph for the following

Liters of petrol	10	15	20	25	30
Cost of petrol in Rs	400	600	800	1000	1200

(OR)

The maximum temperatures on first 6 days of January 2020 in a city are given below. Draw a line graph.

Date	January 1	January 2	January 3	January 4	January 5	January 6
Temperature in oC	15	15.5	16.5	13	14	14.5
