

NORTH-EX PUBLIC SCHOOL
(Senior Secondary, Affiliated To CBSE)
School Block, Jain Nagar, Sector-38, Rohini, Delhi– 81
HALF YEARLY EXAMINATION (2023-24)
SUBJECT – MATHS
CLASS – VII

TIME- 2 Hrs. 30 mins

M.M.- 60

General Instructions:

1. There are 5 sections A,B,C,D,and E .All questions are compulsory.
2. Section A comprises 10 questions of 1 mark each.
3. Section B comprises 4 questions of 2 marks each.
4. Section C comprises 4 questions of 3 marks each.
5. Section D comprises 4 questions of 5 marks each
6. Section E comprises 2 questions of 5 marks each (Case Study based)

SECTION - A

- Q1. Write the coefficient of X in $7xyz$.
- Q2. Solve $x/8 = 1$.
- Q3. Write the formula of simple interest.
- Q4. Which is greater 4:5 or 5:4.
- Q5. How many integers are there between - 4 and 1.
- Q6. $-144 \div 12 = \underline{\hspace{2cm}}$.
- Q7. Multiply $3/4 \times 7/3$.
- Q8. Write degree of the following polynomials - $2x^2-3x^2y^8$.
- Q9. Compare $-6/7$ and $1/2$.
- Q10. Find the absolute value of (- 18).

SECTION - B

- Q11. The sum of two consecutive numbers is 79 find the numbers.
- Q12. Find S.P, if C.P is ₹600 and profit is 10%.
- Q13. Divide ₹ 4200 in the ratio 3: 4.
- Q14. The cost of $3/5$ kg sugar is ₹ 27, find the cost of 2 kg sugar.

SECTION - C

- Q15. Find any three equivalent ratios of 7: 11
- Q16. If the cost of 8 boxes is ₹1600, find the cost of 20 boxes.
- Q17. Find three equivalent rational numbers of $(-7/4)$.
- Q18. (a) $(-1)^{21} = \underline{\hspace{2cm}}$ (b) $(1)^{2020} = \underline{\hspace{2cm}}$

SECTION - D

- Q19. An alloy contains 50% of metal A 20% of metal B and 10% of metal C.
Calculate the number of metals in 8 kg of alloy.
- Q20. Classify the following into monomials, binomials or trinomials:
- (a) $2x+y -7$
 - (b) X^2-7y
 - (c) $73yz$
 - (d) X^3-1
 - (e) $7x+3y+78$

Q21. If $x = -1$, $y = -2$ then find the value of the following polynomials:

(a) $2x^2 + 3y - 15$

(b) $x + y + 2$

Q22. Add $(7m + 6)$, $(13m + 4n)$ and $13m + 25$

SECTION - E

Q23. 50 toys are distributed among three children Ajay, Bhumi and Palak in the ratio 2:3:5:

Answer the following questions.

(a) How many toys does a get?

(b) How many does Bhumi get?

(c) How many toys does Palak get?

(d) Find the difference between the toys of Palak and Ajay.

(e) How toys are useful for children?

Q24. A shopkeeper buys a shirt of rupees 500 and sales it at rupees 550.

(a) What is the cost price of a shirt?

(b) What is the selling price of a shirt?

(c) Find the profit.

(d) Calculate profit percentage.

(e) If shopkeeper wants ₹ 200 as a profit, then what will be the selling price of a shirt.