B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL

TERM-1 EXAMINATION (2025-26)
MATHEMATICS

Class : VIII
Date : 08 -09-2025

MARKING SCHEME

Duration: **3 Hrs**
Max. Marks: **80**

SECTION A

Each question carries 1 mark. (mcq)

1. -1 [B]
2. 1 X 10^{-6} [D]
3. None of these [D]
4. Rs 200 [C]
5. $\frac{p}{q}$ [D]
6. Both + v e and – v e [C]
7. 3 z -3 = 3 [C]
8. 5 [B]
9. x= 10 [A]
10. Rectangle [A]
11. 110^0 [C]
12. 360^0 [C]
13. 6 [A]
14. 343 [C]
15. $\frac{4}{6}$ [C]
16. 4 [B]
17. 1.5 [C]
18. Odd [A]
19. [C]
20. [A]

SECTION B

21. 1

Distance (km)	432	x
Petrol (litres)	48	20

$\frac{x}{20} = \frac{432}{32}$

$x = 180\ km$ 1

22. $5x = 4x + 40$ 1

$5x - 4x = 40$ ½

$x = 40$ ½

OR

$5x - 3x = 5 - 9$ 1

x = -4 1

x = -2

23. $2x + 3x$ = 180 ---------- adjacent angles ½

$5x$ = 180 ^{0} ½

x = 36 ½

Angles are 72 ^{0} , 72 ^{0} and 54 ^{0} , 54 ^{0} ½

24. 7 (x -3) = 4 (x + 1)

7 x – 21 = 4 x + 4 ½

7 x – 4 x = 4 + 21 ½

3 x = 25 ½

x = $\frac{25}{3}$ ½

25. I) 81= 1 ii)272 = 8 iii) 1234 = 4 iv) 55555 2

OR

Prime factors of 600 = 2 x 2 x 2 x 3 x 5 x 5 2

SECTION C

26. $(\frac{1}{2}+\frac{1}{5}+\frac{1}{10})$ **x** $\frac{8}{5}$ = $(\frac{5}{10}+\frac{2}{10}+\frac{1}{10})$ **x** $\frac{8}{5}$ **(LCM = 10)** 1 ½

= $\frac{8}{10}$ X $\frac{8}{5}$ 1

= $\frac{32}{25}$ ½

27 1 ½

No of bottles	840	x
Time (hrs)	6	5

x = $\frac{840}{6}$ x 5 1

x = 700 bottles can be filled in 5 hrs ½

OR 1½

No of men	18	15
Days	50	x

15 x x = 18 x 50 1

x = 60 days ½

28. i) $\frac{3}{4}$ x $\frac{2}{5}$ x $\frac{3}{10}$ = $\frac{9}{100}$ 1½

ii) $\frac{54}{28} \div \frac{66}{35}$ = $\frac{54}{28}$ x $\frac{35}{66}$ 1

= $\frac{45}{44}$ ½

29. $\frac{4}{5} + \frac{8}{3} + \frac{2}{5} - \frac{2}{3} = \frac{4}{5} + \frac{8}{3} + \frac{2}{5} - \frac{2}{3}$ (LCM = 15) 1 ½

$= \frac{12}{15} + \frac{40}{15} + \frac{6}{15} - \frac{10}{15}$ ½

$= \frac{48}{15}$ ½

$= \frac{16}{5}$ ½

30. y = 80 ^{0} Opposite angles ½

$x + y$ = 180 ^{0} Adjacent angles 1

x = 100 ^{0} ½

z = 80 ^{0} Corresponding angles 1

OR

x = 90 ^{0} given ½

$x + y + 30^0 = 180^0$ 1

y = 180 – 120 ½

y = 60 ^{0} ½

z = 60 ^{0} alternate angles ½

31. 13824 = 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 x 3 x 3 x 3 1 ½

$\sqrt[3]{}$ 13824 = $\sqrt[3]{}$ 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 x 3 x 3 x 3 ½

= 2 x 2 x 2 x 3 ½

= 24 ½

32. a) i) 1.2 x 10 $^{-7}$ ii) 4.05 x 10 ^{6} iii) 5.6 x 10 $^{-6}$ 3 (1 + 1 + 1)

b) i) 5412 00 ii) 0.000009543 2 (1 + 1)

33. $\frac{2}{3} + \frac{5}{11} - \frac{1}{3} - \frac{3}{11} + \frac{7}{11} = \frac{22}{33} + \frac{15}{33} - \frac{11}{33} - \frac{9}{33} + \frac{21}{33}$ 1+1 (LCM = 33)

$= \frac{22+15+-11-9+21}{33}$ 1 ½

$= \frac{38}{33}$ 1 ½

34. a) Square root of 5776 =

	76	
7	5776	
+ 7	49	
146	0876	
	0876	
	X	

1

1

$\sqrt{}$ 5776 = 76 1

b) Side of Square = $\sqrt{}$441 ½

= $\sqrt{}$21 x 21 1

= 21 m

OR

2645 = 5 X 23 X 23 2

Smallest number to be divided is 5

$\frac{2645}{5} = \frac{5 \text{ X } 23 \text{ X } 23}{5}$ 1

529 = 23 x 23 1

$\sqrt{529}$ = 23 1

35.

x	12	**16**	4	**18**	**2**	48
y	**12**	9	36	8	72	**3**

OR

Length of trench (m)	$\frac{27}{4}$	27
Number of men	11	x

2

$\frac{27}{4} \div 11 = \frac{27}{x}$ 1

$\frac{27}{4} \times \frac{1}{11} = \frac{27}{x}$ 1

x = 44 1

∴ To dig 27m long trench of same type in one day requires 44 men

36. i) 2560 = 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 x 5 2

No , its not perfect cube.

ii) Smallest number to be multiplied is 5 x 5 1

OR

Cube root of 2560 = 40 1

iii) One's place of cube of 9999 = 9 1

37. i) 9 children left out 2

ii) No , its not perfect square 1

OR

6561 1

iii) 81 students form a square

38.i) Exterior angle = 360^0 1

ii) Yes , Regular Hexagon 1 + 1

OR

Each exterior angle = 60^0 and each interior angle is 120^0 1 + 1

iii) No 1

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