



PERIODIC TEST-1 (2026-27)

MATHEMATICS

MARKING SCHEME

Class: VIII

Date: 12.06.26

Admission no:

Time: 1 hr.

Max Marks:25

Roll no:

Choose the correct alternative and write the complete answer along with the letter of alphabet
(5x1=5)

1. Which of the following is not perfect square?
a) 144 b) 160000 c) 1024 d) **243**
2. How many numbers lie between the square of 16 and 17
a)24 b)**32** c)30 d)40
3. Express $6 \times 6 \times 6 \times 6 \times 6$ in exponential form
a) 2^6 b) 5^6 c) **6^5** d) 8^6
4. Any number to the power zero
a)2 b)8 c)**1** d)0
5. The square of any even number is
a) **Even** b)odd c)prime d) none of these

SECTION B

6. Sum of odd numbers

Rule: n^2 = sum of first n odd numbers

a) 49

$$49 = 7^2$$

$$= 1 + 3 + 5 + 7 + 9 + 11 + 13$$

b) 100

$$100 = 10^2$$

$$= 1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 + 19$$

7. Square root of 19600

$$= 140$$

8. Simplify

a) $5^7 \div 5^4$

$$= 5^{7-4}$$

$$= 5^3$$

b) $(13^{-2})^{-3}$

$$= 13^{(-2 \times -3)}$$

$$= 13^6$$

9. If $12^2 = 144$

a) $(1.2)^2$

$$= (12/10)^2$$

$$= 144/100$$

$$= 1.44$$

b) $(0.12)^2$

$$\begin{aligned}
 &= (12/100)^2 \\
 &= 144/10000 \\
 &= 0.0144
 \end{aligned}$$

SECTION C

10. Side of square

$$\text{Area} = 441$$

$$\begin{aligned}
 \text{Side} &= \sqrt{441} \\
 &= 21 \text{ m}
 \end{aligned}$$

11. Cube root

a) 27000

$$27000 = 30^3$$

$$\sqrt[3]{27000} = 30$$

b) 10648

$$10648 = 22^3$$

$$\sqrt[3]{10648} = 22$$

12. Write 64^3 as product (3 ways)

$$64 = 2^6$$

$$\text{So, } 64^3 = (2^6)^3 = 2^{18}$$

Now write in different ways:

1. $2^6 \times 2^6 \times 2^6$
2. $2^{10} \times 2^5 \times 2^3$
3. $2^8 \times 2^4 \times 2^6$

Any 3 correct forms

13. Simplify

$$(3^2 \times 9^3) \div 27^2$$

Convert to same base:

$$9 = 3^2 \rightarrow 9^3 = 3^6$$

$$27 = 3^3 \rightarrow 27^2 = 3^6$$

$$= (3^2 \times 3^6) \div 3^6$$

$$= 3^2$$

Answer: 9