



INDIAN SCHOOL AL WADI AL KABIR

Post Mid-Term Examination (2025-26)

Class: VIII

Sub: MATHEMATICS

Max Marks: 30

Date: 30/11/2025

Set - 2

Time: 1 hour

Instructions:

Section A: Multiple Choice Questions (Q.1 to Q.8)

Section B: Source based questions (Q.9 to Q.12)

Section C: Long Answer Questions (Q.13 to Q.16)

Section D: 4 Marks Question & Case study Question (Q.17 to Q.18).

NOTE: This question paper consists of **3** printed pages.

Section A: Multiple Choice Question (Q.1 to Q.8) of **1** mark each

- The area of trapezium with parallel sides 12cm and 18cm and the distance between the parallel sides 7cm is:
A 115cm² **B** 150cm² **C** 105cm² **D** 151cm²
- The one's place digit in cube of 142 is
A 8 **B** 2 **C** 4 **D** 6
- The lateral surface area of cube is 484cm². Its side length is:
A 9cm **B** 7cm **C** 8cm **D** 11cm
- Aravind took membership in a tennis club. The charge for using the tennis court for 3 hours is ₹180. How money does he have to pay if he uses the tennis court for 7 hours?
A ₹360 **B** ₹420 **C** ₹480 **D** ₹350
- Which of the following the numbers is a perfect cube?
A 2700 **B** 64000 **C** 13310 **D** 9000

6. If x varies directly as y and $x=21$ when $y=27$, find x when $y=63$
- A** 56 **B** 42 **C** 49 **D** 54
7. The number of cubes of side length 7cm can be placed in a cuboidal box of dimensions $42\text{cm}\times 35\text{cm}\times 28\text{cm}$ is:
- A** 120 **B** 115 **C** 110 **D** 125
8. The volume of a cuboid is 738 cm^3 , and its base area is 82 cm^2 . The height of the cuboid is:
- A** 8cm **B** 11cm **C** 9cm **D** 13cm

Section B: Source based questions (Q.9 to Q.12) of **1** mark each

A toy factory packs small wooden beads into cubical boxes. Each bead is numbered, and the factory arranges the beads in such a way that the total number of beads in each box is always a perfect cube. One day, a worker mistakenly packs 864 beads into a box. Based on the information, answer the following questions:



9. If $864 = 2\times 2\times 2\times 2\times 2\times 3\times 3\times 3$, The smallest number by which 864 to be multiplied to get a perfect cube is:
- A** 3 **B** 4 **C** 2 **D** 9
10. How many beads must be added to reach the next perfect cube 1000?
- A** 136 **B** 126 **C** 140 **D** 100
11. The worker removed the excess beads and arranged 729 beads in the box. The $\sqrt[3]{729}$ is:
- A** 7 **B** 9 **C** 13 **D** 17
12. The value of $\frac{\sqrt[3]{512}}{\sqrt[3]{64}} \times \sqrt[3]{125}$ is:
- A** 5 **B** 12 **C** 10 **D** 15

Section C: Long Answer Questions (Q13 to Q.16)

- 13.** The area of a rhombus shaped field is 168m^2 . If one of its diagonals is 16m , find the length of the other diagonal of the field. (2m)
- 14.** Find the cube root of 2744 by prime factorisation. (2m)
- 15.** A dairy stores milk in cylindrical containers. Each container has a radius of 7cm and a height of 32cm . Find the volume of the container. If the dairy stores milk in 50 such containers, what is the total quantity of milk stored? ($\pi = \frac{22}{7}$) (3m)
- 16.** Six students need 21 m^2 of space for doing yoga exercises. (1) How much space is required for 16 students? (2) How many students can do yoga in 84 m^2 of space? (3m)

Section D: Long Answer Question of 4 marks & Case study (Q.17 & Q.18)

- 17.** The school has decided to polish 5 old storage cabinets in the classrooms. Each cabinet is in the shape of a cuboid with length 120 cm , breadth 45 cm , and height 90 cm . Find the total area of all the outer surfaces, including the base, of the five cabinets to be polished so that they look new and shiny. (4m)

18. Case Study:

Due to a sudden increase in orders, a factory hired part-time workers to help meet production targets. Each worker is paid according to the number of hours they work. The table below shows the working hours and earnings of a part-time worker over a week. Find the missing values. (4m)



Working hours	3	5	b	10	D
Earning in ₹	750	a	2250	c	3000
