

Date - 04-05-2026

Class - 6th

Monday Test

4, 5, 16, 25

One-Mark-Questions

Section - A

Subject - Maths

[30 Marks]

Q1 Sum of 3rd power of 3 + 7th power of 2, is [1x8=8]
 (A) 127 (B) 132 (C) 164 (D) 155.

Q2 Sum of first six Vivananka numbers (starts with 1, 2) is
 (A) 16 (B) 32 (C) 64 (D) 128.

Q3 If we add up pairs of consecutive triangular numbers like 1+3, 4+6, 9+10, and so on, then the sum of fifth pair of numbers is
 (A) 10th squared number (B) 10th Vivananka number (C) 10th cubed number
 (D) 10th odd number.

Q4 The sequence 1, 7, 19, 37, ---- is called as
 (A) squares (B) cubes (C) Triangular numbers (D) Hexagonal numbers

Q5 The missing Term in the sequence 1, 4, 9, 16, 25, is
 (A) 9 (B) 10 (C) 15 (D) 36.

Q6 8th Vivananka number is 34

Q7 Number of dots in sixth triangular number is 21

Q8 A Regular polygon is a shape with all sides and angles equal.

[2x1=2]

Q9 Match column - I with column - II

Column - I

Column - II

(A) Sum of 13th triangular number and odd number is

(1) 386

$1^2 + 3^2 + 5^2 + 7^2 + 9^2$

(B) 10th Vivananka number is

(2) 91

$1 + 9 + 25 + 49 + 81$

(C) Sum of squares of first five odd natural numbers is

(3) 89

50
34
81
165

(D) Difference of cubes of 7 and 9 is

(4) 165.

$4-1=3-1=2$

SECTION-B

Two marks

Questions

$18^1, 19^2$

$1^2, 2^2$

$10 \times 5 = 10$

$1, 4, 9$

$2 \times 1 = 2$

Q10] What is the importance of mathematics in our daily life?

Q11] Define powers of 2, powers of 3 with Rule for forming the numbers.

Q12] What sequence do you get when you start to add the ALL 1's sequence up? ^{Counting 10} What sequence do you get when you add the ALL 1's sequence up and down? _{odd numbers}

Q13] What sequence do you get when you start to add the counting numbers up? Can you give a smaller pictorial Explanation? _{Triangular numbers}

Q14] What is a regular polygon? Draw a neat diagram of first Five Regular polygons. $[3 \times 2 = 6]$

Three Marks Question SECTION-C

Q15] You have noticed that 36 is both a triangular number and a square number. That is, 36 dots can be arranged perfectly both in a Triangle and in a square. Make pictures in your notebook illustrating this!

This show that the same number can be represented differently and play different roles, depending on the context. Try representing some other numbers pictorially in different ways!

$2, 4, 8, 16, 32 \rightarrow \text{powers of } 2$

Q16] What happens when you start to add up powers of 2 starting with 1, i.e. take $1, 1+2, 1+2+4, 1+2+4+8, \dots$?

Now add 1 to each of these numbers - what numbers do you get? Why does this happen?

Four Marks Question

SECTION-D

$[4 \times 1 = 4]$

Q17] What happens when you multiply the triangular numbers by 6 and add 1? What sequence do you get? Can you explain it with a picture? _{Hexagonal numbers}