

**O. P. JINDAL SCHOOL, SAVITRI NAGAR**  
**Periodic Test - I (2023 – 2024)**

**Class: X**  
**Subject: Mathematics**

**MM: 20**  
**Time: 1 Hour**

**General Instructions:**

i) All questions are compulsory.

ii) Question no. 1 to 8 carries 1 mark each, question no. 9 to 11 carries 2 marks each, question no. 12 and 13 carries 3 marks each.

iii) There is no overall choice. However, internal choice has been provided.

**SECTION A**

1. If the LCM of a and 18 is 36 and HCF of a and 18 is 2, then a =  
a) 2                      b) 3                      c) 4                      d) 1
2. A quadratic polynomial, sum of whose zeroes is -5 and their product is 6, is  
a)  $x^2 + 5x + 6$       b)  $x^2 - 5x + 6$       c)  $x^2 + 5x - 6$       d)  $-x^2 + 5x + 6$
3. The 4<sup>th</sup> term from the end of the A.P: -11, -8, -5, ..., 49 is  
a) 37                      b) 40                      c) 43                      d) 58
4. If the pair of linear equation in two variables is consistent, then the lines represented by two equations are  
a) intersecting      b) parallel      c) always coincident      d) intersecting or coincident

**OR**

If  $x=a$ ,  $y = b$  is the solution of the system of equations  $x - y = 2$  and  $x + y = 4$ , then the values of a and b are respectively

- a) 3 and 1                      b) 3 and 5                      c) 5 and 3                      d) -1 and -3
5. The quadratic equation  $2x^2 - \sqrt{5}x + 1 = 0$  has  
a) two distinct real roots      b) two equal real roots      c) no real roots      d) more than 2 real roots
  6. If one root of the quadratic equation  $2x^2 + kx + 4 = 0$  is 2, then the other root is  
a) 6                      b) -6                      c) -1                      d) 1
  7. Which term of an A.P 21, 42, 63, 84, ... is 210?  
a) 9<sup>th</sup>                      b) 10<sup>th</sup>                      c) 11<sup>th</sup>                      d) 12<sup>th</sup>

**OR**

The sum of first 20 odd natural numbers is

- a) 100                      b) 210                      c) 400                      d) 420
8. Assertion: The system of linear equations  $3x + 5y - 4 = 0$  and  $15x + 25y - 25 = 0$  is inconsistent.  
Reason: The pair of linear equations  $a_1x + b_1y + c_1 = 0$  and  $a_2x + b_2y + c_2 = 0$  represents parallel lines, if  

$$\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}.$$
a) Both assertion and reason are true and reason is the correct explanation of assertion.  
b) Both assertion and reason are true and reason is not the correct explanation of assertion.  
c) Assertion is true and reason is false.  
d) Assertion is false and reason is true.

# O. P. JINDAL SCHOOL, SAVITRI NAGAR

## BLUE PRINT OF QUESTION PAPERS OF PERIODIC TEST 1

Class X

Subject: Mathematics

Sl no.	CHAPTER NO. AND NAME	No. of VSA	No. of SA1	No. of SA2	Total
1.	1. Real Numbers	1(1)	1(2)	-	2(3)
2.	2. Polynomials	1(1)	1(2)	-	2(3)
3.	3. Pair of linear equation in two variables	2(2)	-	1(3)	3(5)
4.	4. Quadratic Equation	2(2)	1(2)	-	3(4)
5.	5. Arithmetic Progression	2(2)	-	1(3)	3(5)
<b>Total</b>		8(8)	3(6)	2(6)	13(20)

Abbreviations: VSA- Very Short Answer(1mark) , SA1: Short Answer1(2 marks) ,SA2: Short Answer2(3 marks)