BCM SCHOOL, BASANT AVENUE, DUGRI, LUDHIANA. **DECEMBER ASSIGNEMENT** **CLASS- VI (MATHEMATICS)**	
SECTION –A (MULTIPLE CHOICE QUESTIONS)	
1.	Which of these shapes do **NOT** have *both* reflection and rotational symmetry? (a) Rhombus (b) Regular Pentagon (c) Circle (d) Trapezium
2.	What number cancels out +5 to bring you back to zero? (a) -4 (b) +4 (c) +5 (d) -5
3.	Maximum number of Super cells in a table of 21 cells in a row are (a)9 (b) 10 (c) 11 (d) 12
SECTION – B(2 MARKS QUESTIONS)	
4.	The time now is 02:15. How many minutes until the clock shows the next palindromic time? What about the one after that?
5.	What is the order and angle of rotational symmetry of: a) A square b) A rectangle c) A regular pentagon d) A rhombus
SECTION – C (3 MARKS QUESTIONS)	
6.	Write any three 4-digit palindromic numbers. Check whether each number remains the same when its digits are reversed.
7.	Draw a rectangle with sides of length 4 cm and 6 cm. After drawing, check if it satisfies both the rectangle properties.
SECTION – D (5 MARKS QUESTIONS)	
8.	Construct a rectangle in which one of the diagonals divides the opposite angles into 55° and 35°.
9.	Check if Collatz Conjecture holds for the starting number 190.
SECTION – E (CASE STUDY)	
10.	The Ashoka Chakra is an important national symbol of India. It has 24 evenly spaced spokes arranged in a circular pattern. Because of this equal spacing, the Ashoka Chakra shows several types of symmetry. Students of Class 6 are learnt about line symmetry and rotational symmetry and observed the circular design with identical spokes repeats itself after certain angles and also looks the same when folded along some imaginary lines. Based on the passage, answer the following questions: (a) How many lines of symmetry does the Ashoka Chakra have? (b) What is the angle of rotational symmetry of the Ashoka Chakra? (c) Find all angles of symmetry? How many such angles are there?