The City School

North Nazimabad Boys Campus

**Topic: Mixed Concept (Paper I)**

**Mr. MohsinZaki**

**Subject: Mathematics**

Q1: Factorize 3x2 – 12

Q2: Given that 4(9-3𝑥) ≤ 11/2, find the smallest possible value of if 𝑥 is an integer.

Q3: Find the value of

1. 1/8 of $12
2. 200m3 in cm3
3. 5% of 45kg

Q4: Express 784 as a product of its prime factor. Hence find its square root.

Q5: The area of a rectangle is 92cm2. If the length of rectangle is 4cm longer than the width, find the width of rectangle.

Q6: The base of a triangle is 4cm more than the altitude. If the area of triangle is 49cm2, calculate the altitude of triangle, giving your answer correct to two decimal places.

Q7: Consider three consecutive numbers. If the third number is subtracted from the sum of the first two numbers, the result is 10. Find the numbers.

Q8: Write down the next two terms of each of the following sequence.

1. 2,4,7,11,16…….
2. 1,5,,13,29,61……

Q9: If q is inversely proportional to p, and q = 60 when p = 2

1. Form an equation connecting p and q
2. Calculate q when p=5

Q10: The gradient of line joining the points (7 , k) and (k , 3) is 4 / 5. Calculate the value of k.

Q11: Find the total area of A and B considering that A and B both are squares:

