

## TEST PAPER: MATHEMATICS

Time: 50 Minutes Class: 8<sup>th</sup> C.B.S.E.

Max. Marks: 30 Marks Date: 1<sup>st</sup> July, 2018

Marking Scheme: Questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

## Question 1:

- **A.** i. Express 49 as the sum of seven odd numbers.
  - ii. Express 36 as the sum of six odd numbers.
- $\textbf{B.} \quad \text{i. Without adding, find the sum using the property of squares. Also state the property you have used.}$

(1+3+5+7+9+11+13+15+17)

- ii. Find the value of  $\sqrt{441}$
- **C.** Find square root of 426409 by the method of long division

## Question 2:

- **A.** Find the square root of 7744 by the method of long division
- **B.** Find the square root of 7744 by the method of prime factorization.
- **C.** Select the correct option:
  - i. Which of the following is the difference between the squares of 21 and 22?
    - (i) 21
- (ii) 22
- (iii) 42
- (iv) 43
- ii. Which of the following is the number of zeros in the square of 900?
  - (i) 3
- (ii) 4
- (iii) 5
- (iv) 2
- iii. Which of the following can be a perfect square?
  - (i) A number ending in 3 or 7
  - (ii) A number ending with odd number of zeros
  - (iii) A number ending with even number of zeros
  - (iv) A number ending in 2.

## Question 3:

- **A.** How many numbers lie between squares of the following numbers?
  - (i) 12 and 13
  - (ii) 25 and 26
  - (iii) 99 and 100
- **B.** Find the square root of 6400 by prime factorization.
- **C.** What will be the "one's digit" in the square of the following numbers?
  - (i) 1234
  - (ii) 26387
  - (iii) 52698
  - (iv) 9106