## KHM HIGHER SECONDARY SCHOOL VALAKKULAM

## **SELF EVALUATION, JAN - 2021**

## MATHEMATICS

STD:X.

Time:45 Minutes.

Max.Marks:20

- **1.** The algebraic expression of an arithmetic sequence is 5n+2, then (2)
  - a) Find the common difference.
  - b) Form the arithmetic sequence
- Even natural numbers below 9 are written in small papers and put (2)
  Into a box.
  - a) How many papers are in the box.
  - b) One number is taken from the box at random, what is the probability
    - of getting a prime number.
- 3. Two sides of a triangle are 16cm, 12cm and the angle between (2)

Them is 40 degrees.

- a) draw a rough figure.
- b) find the area of the triangle .
  - (sin 40=0.64, cos40= 0.77, tan40=0.84)
- 4.Draw a rectangle with sides 6cm and 3cm . Draw a square with the (3) Same Area.
- 5. The products of two even natural number is 168. Find the numbers? (3)

- 6.Consider the arithmetic sequence 4,10,16....
  - a) Find the common difference?
  - b)Find the 8<sup>th</sup> term ?
  - c) check whether 100 is a term in the sequence.
  - d) Find the sum of the 1<sup>st</sup> 15 terms of the sequence?
- 7. a)Draw X,Y axis and mark the points
  - (3,0),(8,0),(11,4),(6,4).
  - b) Join the marked points regularly and draw a quadrilateral?

(4)

(4)

c) Find the length of the sides of the quadrilateral ?