## KHM HIGHER SECONDARY SCHOOL VALAKKULAM

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

## **MATHEMATICS**

STD:X.

Max.Marks:20

**1.** The algebraic expression of an arithmetic sequence is 5n+2, then (2)

Time: 45 Minutes.

- a) Find the common difference.
- b) Form the arithmetic sequence
- 2. 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.... (4)

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 (4)

(3,0) ,(8,0),(11,4),(6,4).

b) Join the marked points regularly and draw a quadrilateral?

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