SECOND TERM EVALUATION 2017-18
MATHEMATICS

STANDARD - 7   Time: 2hours

Instructions :

1. 15 minutes cool off time is to be allotted to read and understand the activities before evaluation begins.

2. Answer any six activities from the following.

Activity - 1

a. Draw a triangle of sides $xy = 12$ cm, $yz = 6$ cm, $\angle y = 60°$.

b. Measure and write xz.

c. What are the features of the triangle you have drawn ?

Activity - 2

828, 784, 1089, 442, 3025, 963

In these numbers,

a. Which are the square numbers?

b. Factorize each square number and find the square roots.

c. Write the square number 36 as the sum of two consecutive triangular numbers.

Activity - 3

Syam and Binu took a job contract. Given below is a table that shows the ratio and other details of their salary for 5 months. Complete the table.

Month	Salary (Rs)	Ratio	Syam got (Rs)	Binu got (Rs)
January	6000	3:2	....	....
February	4400	6:5	2400	....
March	....	....	3200	1600
April	....	11:10	3300	....
May	4800	5.3	....	....

Activity - 4

a   Which are the suitable measures for drawing triangles from :

   1.   PQ = 8 cm,   QR = 3 cm,   PR = 5 cm
   2.   PQ = 12 cm,   QR = 7 cm,   PR = 4 cm
   3.   PQ = 10 cm,   QR = 6 cm;   PR = 5 cm
   4.   PQ = 3 cm,   QR = 6 cm,   PR = 10 cm

b.   Mention the reason why some of the above measures are not suitable for drawing triangles.

c.   Draw a triangle PQR using any of the above measures.

Activity - 5

Joseph had a PSC test at 2 pm. Examination centre was 140 km. away from his house. He reached the centre before 1 hour. Average speed of the bus he travelled was 40 km./hr. When did he start his journey from home? After the test he got into the bus at 4.30 pm. and reached home at 7 pm. What was the average speed of the bus Joseph travelled?

Activity - 6

Last year the ratio of the female teachers and male teachers of Ramapuram U P School was 6:1.

a.   If the number of male teachers is 6, what is the number of female teachers?

Instead of the female teachers who got transfer from the school, male teachers joined there. Now the ratio of the female teachers and male teachers is 11:10.

b.   How many female teachers got transfer this year?

c.   This year some female teachers will retire in March. Then the ratio of the female teachers and the male teachers will be 1:1. If so, how many female teachers will retire this year?

Activity - 7

The inauguration of 'Good reading, Good learning, Good life', programme was conducted in Vimalapuram UP School. They arranged 576 chairs in equal rows and columns on that day.

a.   How many rows and columns are there?

b.   When the chairs were found short, they arranged one more extra row and column of chairs. Now, how many rows and columns are there?

c.   How many extra chairs were arranged?

d.   There are 268 NCC cadets in that school. How many students should be excluded to arrange them in equal rows and columns for the inaugural parade?

Activity - 8

A train of length 340 m has the speed of 72 km/hr.

a.   How long will the train travel in one second?

b.   How long will the train take to travel a bridge of 140 m length?