



## ANNUAL EXAMINATION 2024-'25 PRACTICE QUESTION PAPER MATHEMATICS

**CLASS : 7**

**TIME : 2 Hours**

**Score: 30**

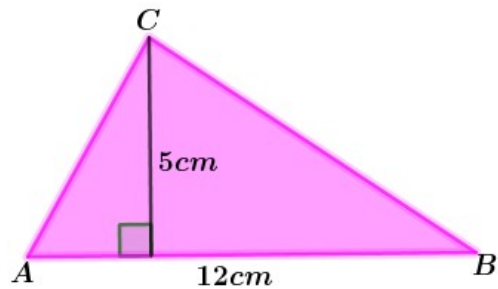
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**Instructions :**

- There will be a cool off time of 15 minutes before writing the examination.
  - This time is to read and comprehend the questions well.
  - You have to answer only 6 activities out of the given 8 activities.
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### Activity 1

A) What is the area of triangle ABC ?



a) 60 Sq.cm   b) 17 Sq.cm   c) 24 Sq.cm   d) 30 Sq.cm

(1)

B) A right triangle has the same area of this triangle ABC. If one of its perpendicular sides is 12 cm, what is the length of the other side?

(1)

C) What is the length of the longest side of the triangle.

(1)

D) Draw this right triangle

(2)



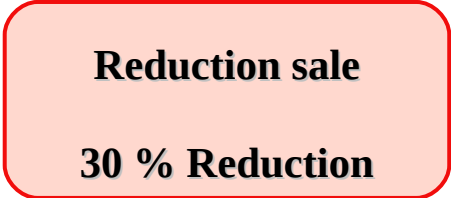
# SAMAGRA PLUS

## Activity 2

A) A shop offers 20 rupees reduction on each 100 rupees. If a watch of price 950 rupees is bought from this shop, how much reduction will we get?

- a) ₹ 200   b) ₹ 190   c) ₹ 180   d) ₹ 150 ( 1 )

B) This is the reduction offer displayed in a shop in connection with Onam.



a) Raju bought a mobile phone of cost rupees 7500. What is the amount he has to pay after the reduction ? ( 2 )

b) Lissy got a reduction of 3600 rupees when she bought a T V from this shop. What was the price of this T V displayed in the shop? ( 2 )

## Activity 3

A) If the middle number of three consecutive even numbers is taken as x, what will be the first number?

- a)  $x+2$    b)  $x - 2$    c)  $2x$    d)  $x - 1$  ( 1 )

B)

$$2 + 4 + 6 = 12$$

$$4 + 6 + 8 = 18$$

$$6 + 8 + 10 = 24$$

.....

.....



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Write the next two lines (1)

C ) What is the relationship between sum of three consecutive even numbers and their middle number? (1)

D ) Explain this relationship using algebra. (2)

## Activity 4

A ) What is the area of a square of perimeter as 40 centimetres?

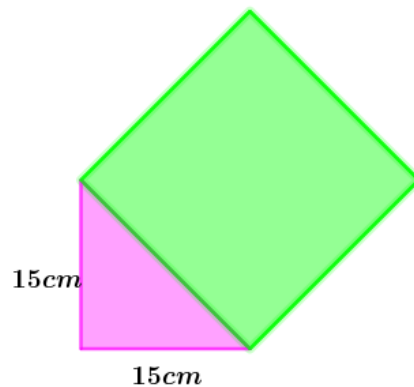
a) 400 Sq.cm b) 200 Sq.cm c) 100 Sq.cm d) 80 Sq.cm (1)

B ) We can write

$$1764 = 2^2 \times 3^2 \times 7^2$$

What is the length of one side of a square of area 1764 sq. centimetre? (1)

C ) Find the area of the square in the given figure. (1)



D) Draw a square of area  $24\frac{1}{2}$  square centimetres. (2)



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## Activity 5

A kudumbasree unit took a loan of rupees 480000 from a Co-operative bank for a period of one year to start a computer institute. The bank collects  $6\frac{1}{4}$  % interest for one year. They spend 60% of the amount to buy computers and the rest to buy furniture.

**A )** What is the fraction corresponding to  $6\frac{1}{4}$  % ? ( 1 )

**a)**  $\frac{1}{6}$       **b)**  $\frac{1}{4}$       **c)**  $\frac{1}{12}$       **d)**  $\frac{1}{16}$

**B )** How much amount is spent on buying computers? ( 1 )

**C )** What is the difference between the amounts used for buying computers and furniture? ( 1 )

**D )** What is the amount to be paid in the bank after one year? ( 2 )

## Activity 6

The numbers given below are got by starting with 11 and adding the number 9 again and again .

**11, 20, 29, 38, .....**

**A )** What is the largest two digit number among these numbers?

**a)** 90      **b)** 92      **c)** 88      **d)** 98 ( 1 )

**B )** What is the remainder on dividing each of these numbers by 9? ( 1 )



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C ) Is 200 a number among these? ( 1 )

D ) Write the common form of these numbers using algebra. ( 2 )

## Activity 7

A ) Among the set of numbers given below, which set of numbers can be the sides of a right triangle? ( 1 )

a) 7, 8, 9

b) 6, 8, 10

c) 5, 10, 15

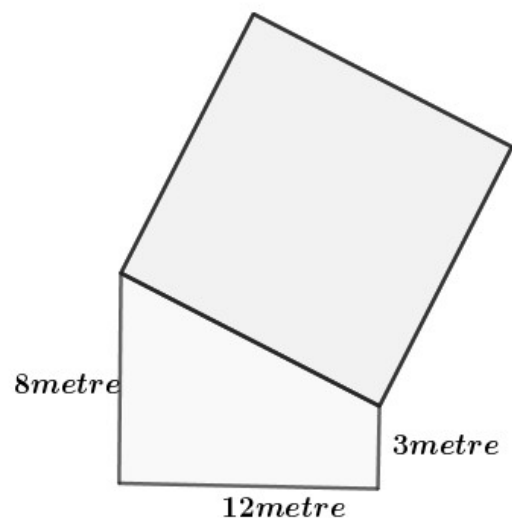
d) 8, 10, 12

B ) The adjacent sides of a rectangle are 8 centimetres and 3 centimetres. What is the area of the square drawn on the diagonal of this rectangle ? ( 1 )

C ) The figure shows the drawing of a plot.

What is the area of the square shaped plot given in the figure?

What is the total area of the plot? ( 3 )

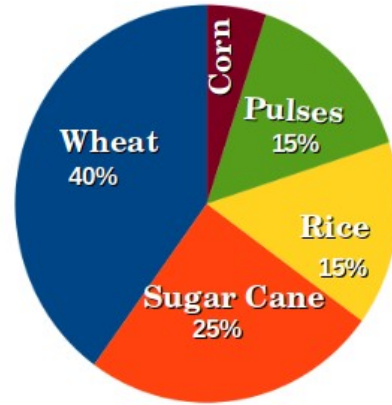


## Activity 8



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This pie chart shows the annual production of different crops in a state .



**A )** What percent of the total production is the corn?

**a) 15 % b) 5 % c) 10 % d) 40**  
(1)

**B )** What is the difference between the production percent of rice and wheat?

(1)

**C )** If the total production in this state is 4800 tons in the state , how much ton is the production of wheat?

( 1 )

**D )** In the pie chart, what is the central angle of the part showing the production of sugarcane?

( 2 )

## Answer Key:

### Activity 1

**A)**  $\frac{1}{2} * (12 * 5) = 30$  Sq. Cm (1)

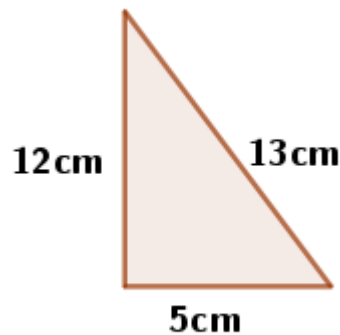
**B)** 5 cm (1)

**C)** 13 cm (1)

**D)**

Draw a right triangle with its perpendicular sides 12 and 5 centimetres

(2)



### Activity 2

**A)** 190 (1)

**B)**

**a)** ₹5250 (2)

**b)** ₹12000 (2)

### Activity 3

**A)**  $x - 2$  (1)

**B)**  $8 + 10 + 12 = 30$  (1)

$10 + 12 + 14 = 36$

**C)** The sum of three consecutive even numbers will be equal to three times of the middle number. (1)



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D)  $x-2 + x + x + 2 = 3x$  (2)

## Activity 4

A) 100 (1)

B) 42 (1)

C) 450 Sq.cm (1)

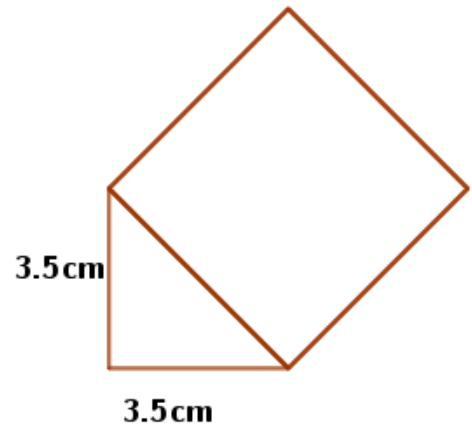
D)

Area of a right triangle with its

perpendicular sides 3.5 cm  $= (3.5)^2 + (3.5)^2$

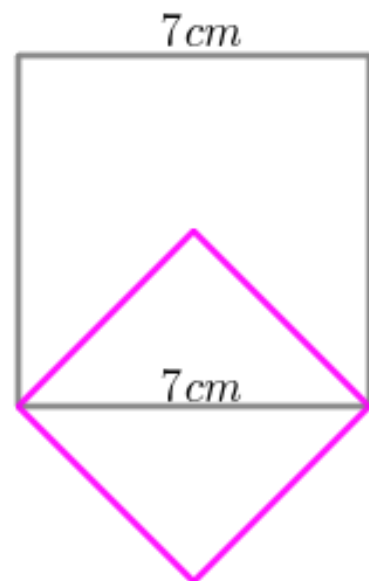
$= 24.5$

(2)



**OR**

Draw a square with sides 7 cm and draw a square with diagonal as its one side.







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## Activity 5

A)  $\frac{1}{16}$  (1)

B) Amount spent for buying Computers =  $480000 \times \frac{60}{100}$   
 $= ₹ 288000$  (1)

C) Difference between the amount percents =  $60 - 40 = 20\%$

Difference between the amounts =  $480000 \times \frac{20}{100}$   
 $= ₹ 96000$  (1)

D)  $480000 \times \frac{1}{16} = 30000$

Amount to be repaid to the bank =  $480000 + 30000 = ₹ 510000$  (2)

## Activity 6

A) 92 (1)

B) 2 (1)

C) Yes (1)

D)  $9n+2$  , Here  $n= 1, 2, 3, \dots$  (2)

## Activity 7

A) 6, 8, 10 (1)

B)  $8^2 + 3^2 = 73$  Sq. m (1)

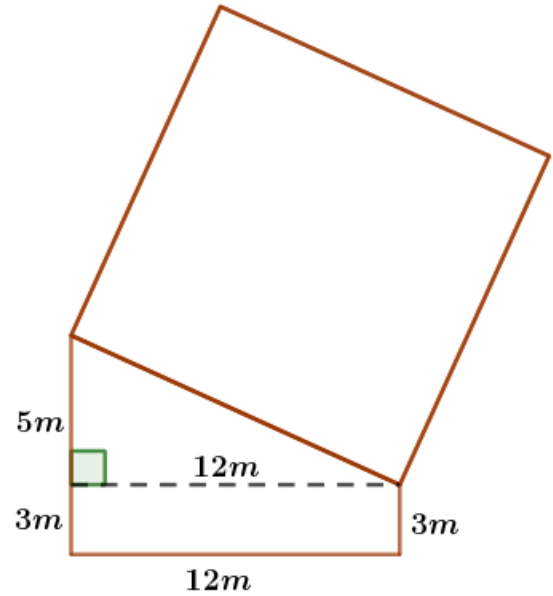
C )

$$\begin{aligned} \text{Area of the square} &= 5^2 + 12^2 \\ &= 169 \text{ Sq. m} \end{aligned} \quad (1)$$

$$\begin{aligned} \text{Area of the right triangle} &= \frac{1}{2} \times 12 \times 5 \\ &= 30 \end{aligned} \quad (1)$$

$$\text{Area of the rectangle} = 12 \times 3 = 36$$

$$\text{Total area} = 169 + 30 + 36 = 235 \text{ Sq. m} \quad (1)$$



## Activity 8

A) 5% (1)

B)  $4800 \times \frac{40}{100} = 1920 \text{ Ton}$  (1)

C) 25% (1)

D)  $360 \times \frac{25}{100} = 90^0$  (2)