Sheet1

## ANSWER KEY UJJWALAM 2021

## SUBJECT MATHEMATICS SET 1

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Qn No	Value Points	Score	Total
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	18	1	1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	2	60	1	1
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	3	4/10	1	1
Itenth term = 2 x 10 + 3 = 23   1     5   <	4	d = 2	1	2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			1	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	5		1	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			1	
Not a term .Dividing with d leaves 3 as reminder not 1     d = -1   1     7   X24 = x17 + 7d = 7 + - 7 = 0   1   3     S47 = 47 * x24, (x24 Middle term) = 47 x 0 = 0   1   3     8   2 numbers , ABEC & BDCE   1   3     8   2 numbers , ABEC & BDCE   1   3     9   10/20 = 1/2   1   3     9   10/20 = 1/2   1   3     8/20 = 2/5   1   3     10   To draw circle of radius 4 cm   1     10   To draw triangle   1   4     10   To measure central angle 120   1   4     11   X3 + x8 =550/5 = 110   1   4     11   X8 = 110 - 30 = 80   1   4     12   Length = 50 - x   1   4     12   Length = 50 - x   1   4     12   X(50 - x) = 600, x^2 - 50x = -600   1   4     12   Length = 30cm and breadth = 20 cm   1   4     13   X <sub>55</sub> = 4 + 54 x 3 = 4	6	•	1	2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			1	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	7		1	3
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			1	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			1	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	8		1	3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			1	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			1	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	9		1	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			1	3
$ \begin{array}{ c c c c c c } 10 & To measure central angle 120 & 1 & 4 \\ \hline To measure central angle 100 & 1 & 1 & 4 \\ \hline To draw triangle & 1 & 1 & 1 & 1 \\ \hline Third term = 150/5 = 30 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & $			1	
10 To measure central angle 100 1 4   Image: Third term = 150/5 = 30 1 1   11 Third term = 150/5 = 30 1   11 X3 + x8 =550/5 = 110 1   11 X8 = 110 - 30 = 80 1   d = 50/5 = 10 1 4   12 I + b = 100/2 = 50 1   Length = 50 - x 1 4   X(50 - x) = 600, x <sup>2</sup> - 50x = - 600 1 4   To find length = 30cm and breadth = 20 cm 1 4   34, 37, 40, 43, 46 and 49, 52, 55, 58, 61, 64 1 1   13 X <sub>55</sub> = 4 + 54 x 3 = 4 + 162 = 166 1 5   X <sub>46</sub> = 166 - 9 x 3 = 166 - 27 = 139 1 5   X <sub>46</sub> = 166 - 9 x 3 = 166 - 27 = 139 1 5   X <sub>46</sub> = 166 - 9 x 3 = 166 - 27 = 139 1 5   To draw rectangle 1 1 1   To draw diameter 1 1 1			1	4
$\begin{array}{ c c c c c c c }\hline To draw triangle & 1 \\ \hline Third term = 150/5 = 30 & 1 \\ X3 + x8 = 550/5 = 110 & 1 \\ X8 = 110 - 30 = 80 & 1 \\ d = 50/5 = 10 & 1 \\ \hline \\ 12 & 1 + b = 100/2 = 50 & 1 \\ Length = 50 - x & 1 \\ X(50 - x) = 600, x^2 - 50x = -600 & 1 \\ \hline \\ To find length = 30cm and breadth = 20 cm & 1 \\ \hline \\ 34, 37, 40, 43, 46 and 49, 52, 55, 58, 61, 64 & 1 \\ 1+2+3++10 = 55 & 1 \\ X_{46} = 166 - 9 \times 3 = 166 - 27 = 139 & 1 \\ \hline \\ X_{46} = 166 - 9 \times 3 = 166 - 27 = 139 & 1 \\ \hline \\ \hline \\ X_{46} = 166 - 9 \times 3 = 166 - 27 = 139 & 1 \\ \hline \\ \hline \\ \hline \\ To draw rectangle & 1 \\ \hline \\$	10	e e	1	
$\begin{array}{ c c c c c c c c } \hline Third term = 150/5 = 30 & 1 & 1 & 1 & 4 \\ \hline X3 + x8 = 550/5 = 110 & 1 & 1 & 4 & 1 & 4 \\ \hline X8 = 110 - 30 = 80 & 1 & 1 & 1 & 4 & 1 & 4 & 1 & 1 & 4 & 1 & 1$		·	1	
$\begin{array}{ c c c c c c c } 11 & X3 + x8 = 550/5 = 110 & 1 & 1 & 4 \\ & X8 = 110 - 30 = 80 & 1 & 1 & 4 \\ & & & & & & & & & & & & & \\ & & & &$		*	1	
$ \begin{array}{ c c c c c c c } 11 & X8 &= 110 - 30 = 80 & 1 & 4 \\ & d &= 50/5 = 10 & 1 & 1 \\ \hline & & 1 + b &= 100/2 = 50 & 1 & \\ & & Length &= 50 - x & 1 & 4 \\ \hline & & X(50 - x) &= 600 &, x^2 - 50x = -600 & 1 & 4 \\ \hline & & X(50 - x) &= 600 &, x^2 - 50x = -600 & 1 & 4 \\ \hline & & To find length = 30cm and breadth = 20 cm & 1 & 4 \\ \hline & & To find length = 30cm and breadth = 20 cm & 1 & 1 \\ \hline & & 34, 37 &, 40 &, 43 &, 46 & and 49 &, 52 &, 55 &, 58 &, 61 &, 64 & 1 & \\ \hline & & & 1 + 2 + 3 + \dots + 10 &= 55 & 1 & \\ \hline & & & 13 & X_{55} = 4 + 54 \times 3 = 4 + 162 = 166 & 1 & 5 \\ \hline & & X_{46} = 166 - 9 \times 3 = 166 - 27 = 139 & 1 & \\ \hline & & X_{46} = 166 - 9 \times 3 = 166 - 27 = 139 & 1 & \\ \hline & & X_{46} = 166 - 9 \times 3 = 166 - 27 = 139 & 1 & \\ \hline & & To draw rectangle & 1 & \\ \hline & & To draw rectangle & 1 & \\ \hline & & To draw diameter & 1 & \\ \hline \end{array} $			1	4
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	11		1	
$\begin{array}{ c c c c c c c c } & & & & & & & & & & & & & & & & & & &$			1	
$\begin{array}{ c c c c c c c } 12 & Length = 50 - x & 1 & 1 & 4 \\ \hline X(50 - x) = 600 \ , x^2 - 50x = -600 & 1 & 1 & 4 \\ \hline To find \ length = 30cm \ and \ breadth = 20 \ cm & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & $			1	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	12		1	4
To find length = 30cm and breadth = 20 cm 1   34, 37, 40, 43, 46 and 49, 52, 55, 58, 61, 64 1 $1+2+3++10 = 55$ 1   13 $X_{55} = 4 + 54 \times 3 = 4 + 162 = 166$ 1 5 $X_{46} = 166 - 9 \times 3 = 166 - 27 = 139$ 1 5   S = 55/2 (4 + 166) = 4675 1 1   To draw rectangle 1 1		•	1	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13		1	5
$X_{46} = 166 - 9 \times 3 = 166 - 27 = 139$ 1 $S = 55/2 (4 + 166) = 4675$ 1   To draw rectangle 1   To draw diameter 1			1	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		X <sub>55</sub> = 4 + 54 x 3 = 4 + 162 = 166	1	
S   = 55/2 (4 + 166) = 4675   1     To draw rectangle   1     To draw diameter   1			1	
To draw rectangle1To draw diameter1			1	
To draw diameter 1	14		1	5
		5	1	
		To draw semi circle	1	
To draw perpendicular 1			1	
To draw square 1		· ·	1	