

**ANSWER KEY UJJWALAM 2021****SUBJECT MATHEMATICS SET 1**

Qn No	Value Points	Score	Total
1	18	1	1
2	60	1	1
3	4/10	1	1
4	d = 2 Tenth term = $2 \times 10 + 3 = 23$	1 1	2
5	$\angle D = 30$ $\angle ABD = 90$	1 1	2
6	Algebraic form = $4n + 1$ Not a term .Dividing with d leaves 3 as remainder not 1	1 1	2
7	d = - 1 $X_{24} = x_{17} + 7d = 7 + - 7 = 0$ $S_{47} = 47 * x_{24}, (x_{24} \text{ Middle term}) = 47 \times 0 = 0$	1 1 1	3
8	$\angle BDC = 70$ 2 numbers , ABEC & BDCE $\angle BEC = 110$	1 1 1	3
9	$4/20 = 1/5$ $10/20 = 1/2$ $8/20 = 2/5$	1 1 1	3
10	To draw circle of radius 4 cm To measure central angle 120 To measure central angle 100 To draw triangle	1 1 1 1	4
11	Third term = $150/5 = 30$ $X_3 + x_8 = 550/5 = 110$ $X_8 = 110 - 30 = 80$ d = $50/5 = 10$	1 1 1 1	4
12	l + b = $100/2 = 50$ Length = $50 - x$ $X(50 - x) = 600, x^2 - 50x = - 600$ To find length = 30cm and breadth = 20 cm	1 1 1 1	4
13	34, 37 , 40 , 43 , 46 and 49 , 52 , 55 , 58 , 61 , 64 $1+2+3+\dots+10 = 55$ $X_{55} = 4 + 54 \times 3 = 4 + 162 = 166$ $X_{46} = 166 - 9 \times 3 = 166 - 27 = 139$ $S = 55/2 ( 4 + 166 ) = 4675$	1 1 1 1 1	5
14	To draw rectangle To draw diameter To draw semi circle To draw perpendicular To draw square	1 1 1 1 1	5