## ANSWER KEY UJJWALAM 2021

SUBJECT mathematics set 2

| Qn No | Value Points | Score | Total |
| :---: | :---: | :---: | :---: |
| 1 | $\mathrm{d}=4$ | 1 | 1 |
| 2 | 90 | 1 | 1 |
| 3 | 3/10 | 1 | 1 |
| 4 | $\begin{gathered} \hline \text { First term }=5 \\ d=3 \end{gathered}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | 2 |
| 5 | $<C=50$ <br> Out side the circle | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | 2 |
| 6 | Third term $=45 / 5=9$ 1, 5 | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | 2 |
| 7 | $\begin{gathered} d=3 \\ X_{10}=5+9 \times 3=32 \end{gathered}$ <br> No, 100 is not a multiple of 3 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | 3 |
| 8 | $\begin{aligned} & \angle E D B=60 \\ & \angle E C B=60 \\ & \angle D B C=20 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | 3 |
| 9 | $\begin{aligned} & \hline 13 / 25 \\ & 8 / 25 \\ & 9 / 25 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | 3 |
| 10 | To draw circle of radius 3 cm <br> To measure central angle 100 <br> To measure central angle 120 or 140 To draw triangle | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | 4 |
| 11 | $\begin{gathered} d=42 / 7=6 \\ \mathrm{X}_{13}=70+6=76 \\ \mathrm{~S}_{25}=\text { Thirteenth term } \times 25 \\ 76 \times 25=1900 \end{gathered}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | 4 |
| 12 | $\begin{gathered} \text { I }+\mathrm{b}=10 \\ \text { Length }=10-\mathrm{x} \\ \mathrm{X}(10-\mathrm{x})=24, \mathrm{x}^{2}-10 \mathrm{x}=-24 \\ \text { Length }=6 \mathrm{~cm}, \text { breadth }=4 \mathrm{~cm} \end{gathered}$ | $\begin{aligned} & \hline 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | 4 |
| 13 | $\begin{gathered} 20 \times 21 / 2=210 \\ 3 \times 210=630 \\ 630+20=650 \end{gathered}$ <br> Sum of Qn b and Qn c $630+650=1280$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | 5 |
| 14 | To draw rectangle To draw diameter To draw semi circle To draw perpendicular To draw square | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | 5 |

