15.

Class	f	x	u	fu
$-40-(-30)$	20	-35	-4	-80
$-30-(-20)$	28	-25	-3	-84
$-20-(-10)$	30	-15	-2	-60
$-10-0$	42	-5	-1	-42
$0-10$	65	5	0	0
$10-20$	180	15	1	180
$20-30$	10	25	2	20
	$n=375$			$\Sigma fu=-66$

Assumed $A=5$

Let, $u=\frac{x-A}{d}=\frac{x-5}{10}$

$\therefore \bar{x}=A+\frac{\Sigma fu}{n}\times d$

$=5+\left(\frac{-66}{375}\times\frac{10}{10}\right)$

$=5-\frac{44}{25}$

$=5-1.76$

$=3.24$ Ans.

16.

Class	f	x	u	fu
4000 – 5000	10	4500	4	40
3000 – 4000	25	3500	3	75
2000 – 3000	20	2500	2	40
1000 – 2000	15	1500	1	15
0 – 1000	10	500	0	0
-1000 – 0	8	-500	-1	-8
-2000 – (-1000)	6	-1500	-2	-12
-3000 – (-2000)	4	-2500	-3	-12
-4000 – (-3000)	2	-3500	-4	-8
	n = 100			Σfu = ~~120~~ 130

Assumed $A = 500$

Let, $u = \frac{x - A}{d} = \frac{x - 500}{1000}$

$\therefore \bar{x} = A + \frac{\Sigma fu}{n} \times d$

$= 500 + \frac{130}{100} \times 1000$

$= 500 + 1300$

$= 1800$ Ans.