

### Arithmetic mean, weighted mean, Combined mean

1. Mean of the first  $n$  terms of the A.P.  $a, (a + d), (a + 2d), \dots$  is-

- (1)  $a + \frac{nd}{2}$  (2)  $a + \frac{(n-1)d}{2}$   
 (3)  $a + (n-1)d$  (4)  $a + nd$

2. The A.M. of first  $n$  even natural number is -

- (1)  $n(n+1)$  (2)  $\frac{n+1}{2}$  (3)  $\frac{n}{2}$  (4)  $n+1$

3. The A.M. of  ${}^nC_0, {}^nC_1, {}^nC_2, \dots, {}^nC_n$  is -

- (1)  $\frac{2^n}{n}$  (2)  $\frac{2^{n+1}}{n}$  (3)  $\frac{2^n}{n+1}$  (4)  $\frac{2^{n+1}}{n+1}$

4. If the mean of numbers 27, 31, 89, 107, 156 is 82, then the mean of numbers 130, 126, 68, 50, 1 will be-

- (1) 80 (2) 82 (3) 75 (4) 157

5. If the mean of  $n$  observations  $x_1, x_2, \dots, x_n$  is  $\bar{x}$ , then the sum of deviations of observations from mean is :-

- (1) 0 (2)  $n\bar{x}$   
 (3)  $\frac{\bar{x}}{n}$  (4) None of these

6. The mean of 9 terms is 15. If one new term is added and mean become 16, then the value of new term is :-

- (1) 23 (2) 25 (3) 27 (4) 30

7. If the mean of first  $n$  natural numbers is equal

to  $\frac{n+7}{3}$ , then  $n$  is equal to-

- (1) 10 (2) 11  
 (3) 12 (4) none of these

8. The mean of first three terms is 14 and mean of next two terms is 18. The mean of all the five terms is-

- (1) 15.5 (2) 15.0 (3) 15.2 (4) 15.6

9. If the mean of five observations  $x, x+2, x+4, x+6$  and  $x+8$  is 11, then the mean of last three observations is-

- (1) 11 (2) 13 (3) 15 (4) 17

10. The mean of a set of numbers is  $\bar{x}$ . If each number is decreased by  $\lambda$ , the mean of the new set is-

- (1)  $\bar{x}$  (2)  $\bar{x} + \lambda$  (3)  $\lambda - \bar{x}$  (4)  $\bar{x} - \lambda$

11. The mean of 50 observations is 36. If its two observations 30 and 42 are deleted, then the mean of the remaining observations is-

- (1) 48 (2) 36  
 (3) 38 (4) none of these

12. In a frequency dist., if  $d_i$  is deviation of variates

from a number  $l$  and mean  $= l + \frac{\sum f_i d_i}{\sum f_i}$ , then  $l$  is :-

- (1) Lower limit  
 (2) Assumed mean  
 (3) Number of observation  
 (4) Class interval

13. The A.M. of  $n$  observation is  $\bar{x}$ . If the sum of  $n-4$  observations is  $K$ , then the mean of remaining observations is-

- (1)  $\frac{\bar{x} - K}{4}$  (2)  $\frac{n\bar{x} - K}{n-4}$   
 (3)  $\frac{n\bar{x} - K}{4}$  (4)  $\frac{n\bar{x} - (n-4)K}{4}$

14. The mean of values  $1, \frac{1}{2}, \frac{1}{3}, \dots, \frac{1}{n}$  which have frequencies 1, 2, 3,  $\dots, n$  resp., is :-

- (1)  $\frac{2n+1}{3}$  (2)  $\frac{2}{n}$  (3)  $\frac{n+1}{2}$  (4)  $\frac{2}{n+1}$

15. The sum of squares of deviation of variates from their A.M. is always :-

- (1) Zero  
 (2) Minimum  
 (3) Maximum  
 (4) Nothing can be said

16. If the mean of following freq. dist. is 2.6, then the value of  $f$  is :-

$x_i$	1	2	3	4	5
$f_i$	5	4	$f$	2	3

- (1) 1 (2) 3  
 (3) 8 (4) None of these