SOLUTION OF WORKSHEET-9

SUBJECT – STATISTICS

Term : 1st

Topic – CENTRAL TENDENCY   **Class: XI**

Full Marks: 15   **Date:27.06.2020**

Q1.   Select the correct alternative of the following questions.

(i)   Arithmetic mean of first n natural numbers is
         (a)$\frac{n+1}{2}$ (b) $\frac{n}{2}$ (c) $\frac{n-1}{2}$ (d) none of these

(ii)   Arithmetic mean of first n odd natural numbers is
         (a)$\frac{n+1}{2}$ (b) $\frac{n}{2}$ (c) $\frac{n-1}{2}$ **(d) none of these**

(iii)   Arithmetic mean of first n even natural numbers is
         (a)n-1   **(b)n+1**   (c) $\frac{n-1}{2}$ (d) none of these

(iv)   If all the Observation is equal to 3, then the am is equal to
         (a)2   **(b)3**   (c)4   (d) none of these

(v)   Arithmetic mean of –n,-(n-1), ..., -1, 0, 1, ... , (n-1), n is
         (a)n-1   **(b) 0**   (c) $\frac{n-1}{2}$ (d) none of these

(vi)   Arithmetic mean of 3 km and 5 kg is
         (a)n-1   (b) 0   (c) $\frac{n-1}{2}$ **(d) none of these**

(vii)   Arithmetic mean is calculated of
         (**a) variable**   (b) attribute(c) both   (d) none of these

(viii)   If 2x+3y =5 and Arithmetic mean of x is 1, then Arithmetic mean of y is
         (a) 0   **(b)1**   (c) 2   (d) none of these

(ix)   Arithmetic mean depends upon the change of
         (a) base   (b) scale   **(c) both**   (d)non of these

(x)   Arithmetic mean of first n observations with same frequencies as the observation is

(a) $\frac{(n+1)(2n+1)}{6}$ (b) $\frac{(n-1)(2n+1)}{6}$ (c) $\frac{(n+1)(2n-1)}{6}$ (d) none of these

(xi)   If all the observations have value -4, then the arithmetic mean is
(a) -1   (b) -2   **(c) -4**   (d) none of these

(xii)   AM of first n observations with same frequencies as the square of observation

(a) $\frac{n(n+1)^2}{4}$ (b) $\frac{n(n-1)^2}{4}$ (c) $\frac{n(n+1)^2}{2}$ (d) none of these

(xiii)   There are 10 observations with am. 3. If 3 be added to all the observations then the mean of the new set is
(a)4   (b) 5   **(c) 6**   (d) none of these

(xiv)   There are 10 observations with am. 4. If 4 be muliplied to all the observations then the mean of the new set is
(a)14   (b)1 5   **(c)1 6**   (d) none of these

(xv)   Arithmetic mean is .... rigidly defined
(a) always   (b) not   (c) some times(d) none of these

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