



**ST. LAWRENCE HIGH SCHOOL**  
A JESUIT CHRISTIAN MINORITY INSTITUTION



**SOLUTION OF WORKSHEET-14**

**SUBJECT - STATISTICS**

Term : 1<sup>st</sup>

**Topic – CENTRAL TENDENCY**

**Class: XI**

**Full Marks: 15**

**Date:04 .07. 2020**

Q1. Select the correct alternative of the following questions.

- (i) The marks of 5 students in a class test are 2, 4, 7, 8, 11. The harmonic mean is greater than  
(a) 2 (b) 4 (c) 8 (d) none of these
- (ii) The HM is used to calculate the average of  
(a) all values (b) observation in HP (c) observation in AP (d) none of these
- (iii) The marks of 5 students in a class test are 2, 4, 7, 8, 11. The harmonic mean is less than  
(a) 2 (b) 4 (c) 11 (d) none of these
- (iv) If all the Observation is equal to  $\frac{1}{5}$ , then the hm is equal to  
(a) 1 (b)  $\frac{1}{5}$  (c) -5 (d) none of these
- (v) Harmonic mean of  $-(2n+3), \dots, -1, 0, 1, \dots, (2n-1)$  is  
(a) -1 (b) 0 (c)  $\frac{n-1}{2}$  (d) none of these
- (vi) Harmonic mean of honesty of several people  
(a)  $n-1$  (b) 0 (c)  $\frac{n-1}{2}$  (d) none of these

- (vii) Harmonic mean can always be calculated of a set having observation  
 (a) countably infinite (b) uncountably infinite  
 (c) uncountably finite (d) **none of these**
- (viii) If  $5x=0.7y^2$  and harmonic mean of x is 7, then harmonic mean of y is  
 (a) 0 (b) 1 (c) 0.5 (d) **none of these**
- (ix) The combined harmonic mean depends upon the harmonic mean of  
 (a) 1<sup>st</sup> set (b) 2<sup>nd</sup> set (c) **both** (d) none of these
- (x) The composite Harmonic mean is less than the harmonic mean of the given sets which is  
 (a) **maximum** (b) minimum (c) both (d) none of these
- (xi) The composite Harmonic mean is greater than the harmonic mean of the given sets which is  
 (a) maximum (b) **minimum** (c) both (d) none of these
- (xii) The sum of differences of harmonic mean from to all the observations is  
 (a) -1 (b) 1 (c) 0 (d) **none of these**
- (xiii) There are 10 observations with harmonic mean 3. If 0.3 is added to all the observations then the geometric mean of the new set is  
 (a) -30 (b) 10 (c) 30 (d) **none of these**
- (xiv) There are 10 observations with hm. 4. If all the observations be subtracted by 4 then the sum of the reciprocal of those are  
 (a) 0 (b) 2 (c) 1 (d) **none of these**
- (xv) The suitable measure to find the average of any rate measure is  
 (a) AM (b) GM (c) **HM** (d) none of these

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