ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

WORKSHEET-21

SUBJECT – STATISTICS

Term : 1st

Topic – Dispersion **Class: XI**

Full Marks: 15 **Date:03 .08. 2020**

Q1. Select the correct alternative of the following questions.

(i) The marks of 5 students in a class test are 1, 2, 4, 7, 8, 11. The standard deviation is

(a) 2 (b)4 (c)8 (d) none of these

(ii) The standard deviation is used to calculate the average of

(a) all values (b) observation in GP (c)observation in AP (d) none of these

(iii) The marks of 5 students in a class test are 2, 4, 4, 7, 7, 8, 23. The standard deviation is

(a) 2 (b)4 (c)11 (d) none of these

(iv) If all the Observation is equal to - $\frac{1}{7}$, then the standard deviation is equal to

(a) 0 (b) $\frac{1}{5}$ (c)-5 (d) none of these

(v) Standard deviation of -(2n+3), ..., -1, 0, 1, ... , (2n-1) is

(a) -1 (b) 0 (c) $\frac{n-1}{2}$ (d) none of these

(vi) standard deviation of cast of several people

(a)n-1 (b) 0 (c) $\frac{n-1}{2}$ (d) none of these

(vii) Standard deviation 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= 9y and standard deviation of x is 7, then mean deviation about mean of y is

(a) 0 (b)1 (c)0. 5 (d) none of these

(ix) The combined standard deviation depends upon the

(a) 1st set (b) 2nd set (c) both (d)none of these

(x) The combined standard deviation is less than the range of the given sets which is

(a) maximum (b) minimum (c) both (d) none of these

(xi) The standard deviation is greater than the geometric mean of the given sets which is

(a) maximum (b) minimum (c) both (d) none of these

(xii) The variance of first 7 narural numbers is

(a) -1 (b) 4 (c) 0 (d) none of these

(xiii) There are 10 observations with standard deviation 3. If 0.3 is added to all the observations then the standard deviation of the new set is

(a) 3 (b) 3.3 (c) 30 (d) none of these

(xiv) There are 10 observations with standard deviation 4. If all the observations be multiplied by 4 then the standard deviation of the new set is

(a)4 (b) 8 (c) 16 (d) none of these

(xv) The observations are 1, 3, 4, 5, 6 then variance is

(a) 0 (b) 7 (c) 8 (d) none of these

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