

Maharaja Manindra Chandra College

Practical Examination- 2022

Statistics Sem.- 3(GE)

Date: 28.01.22

Time: 11:00 am – 01:30 pm

Total - 30

Answer all the questions:

1. The breaking strength of pieces of a type of string has mean 8.19 kg, and standard deviation 0.95 kg. A new method of manufacture of strings is supposed to give a higher mean breaking strength, but for this the standard deviation is known to be practically the same. Fifteen pieces manufactured by the new method have breaking strength (in kg.) as follows:

9.45, 8.64, 7.83, 7.60, 8.05, 7.56, 8.28, 8.10, 9.81, 7.16, 8.91, 8.68, 9.23, 7.92, 9.86.

Do these results indicate that the new method is really better one?

(Given: $t_{0.05} = 1.645$)

(marks= 20)

2. The heights (in inches) of 10 males of a given locality are found as follows:
70, 67, 62, 68, 61, 68, 70, 64, 64, 66
Is it reasonable to believe that the average height is greater than 64 inches?
State your assumptions clearly. Given $t_{.05, 9} = 1.83$
(marks=10)