

There are a large number of students at a particular college. The heights, in metres, of a random sample of 8 students are as follows.

1.75      1.72      1.62      1.70      1.82      1.75      1.68      1.84

You may assume that heights of students are normally distributed.

- (i) Test, at the 5% significance level, whether the population mean height of students at this college is greater than 1.70 metres. [7]
- (ii) Find a 95% confidence interval for the population mean height of students at this college. [3]