

Babcock University; Illishan-Remo, Ogun State.

Department of Basic Sciences,

Mid-Semester Examination: 2017/2018 Session.

STA 101: Descriptive Statistics.

CS Students.

Time Allowed: 45 Minutes.

Instruction: Answer **ALL** Questions.

1. If the mean of the data in the table below is 7.

x_i	4	k	6	7	9	11
f_i	2	4	6	10	6	2

find the value of k

(4 Marks)

2. Given below are the number of tools produced by workers in a factory:

~~37~~ ~~46~~ ~~44~~ 57 ~~63~~ ~~71~~ 40 ~~64~~ ~~45~~ ~~36~~ ~~78~~ ~~48~~ ~~77~~ ~~44~~ ~~49~~ ~~33~~ ~~36~~
~~55~~ ~~47~~ ~~61~~ ~~53~~ ~~32~~ ~~65~~ 40 ~~26~~ 59 ~~43~~ ~~66~~ ~~44~~ 41 ~~25~~ ~~55~~ 58
~~49~~ ~~45~~ ~~61~~ 41 ~~54~~ ~~50~~ ~~45~~ ~~82~~ ~~71~~ ~~48~~ ~~46~~ ~~69~~ ~~38~~ ~~72~~ ~~45~~ ~~92~~

- (a) Prepare a frequency distribution table (b) Construct Class boundaries and Cumulative percentages for the distribution (c) How many workers produced (i) More than 55 tools and (ii) Less than 43 tools.

(8 Marks)

3. A manufacturing company pays its sales men N63.52, N67.28 or N72.46. The corresponding weight is 18, 12 and 9 respectively. Determine the weighted average mean. (3 Marks)