UNIVERSITY OF ABUJA
DEPARTMENT OF PHYSICS
FIRST SEMESTER 2018/2019 SESsSION EXAMINATION
COURSE TITLE: Basic Experimental Physies III
COURSE CODE: PHY 211
INSTRUCTTONS: Answer question number 1 and any other one question.
1. In an experiment performed 5 times by a student to verify the length of his graph
TIME ALLOWED: 1hr
sheet, he recorded these observations.
OBSERVATIONS LENGTH
(CM)_
31.33
31.15:
1.20
51.02
31.20
(a). Determine the standard deviation
(6). Determine the standard error
CHence, what is the average paper length?
2(a). The following values were obtained to determine acceleration due to gravity by using bifilar suspension for 20 0scillations.
Lcm)_
40.0
50.0
S/n
Time t(S)
|Period T (S)T)
1D,0
T. .0
60.0
70.0
80.0
19.0
23.
i.) Copy and complete the table above
ii.) Plot a graph of T on the vertical axis and L on the horizontal axis
ii). Determine the slope of the graph and state two precautions taken during the experiment
b. Define the term "cóuple" as it relates to rotational or oscillatory systems
3a. What do you understand by precision and accuracy?
b. Define each parameter in the straight line equetion: $y = mx + c$