PHYA10F – 2022 TEST#1

Last Name First Student #

Practical group # (or TA name):

Instructor: Prof. Salam Tawfiq ***Oct. 21, 2022***

Time: ***90 Minutes***

You may use a non-programmable calculator and one aid sheet. ***The aid sheet must be hand-written on a normal (8.5 by 11) page, one side is acceptable with a maximum of 20 equations***. It should contain formulae only no definitions, graphs, explanation or problems and will be collected at the end of the test. No other aids are allowed. This includes neighboring students. Cell phones and other electronic devices will be confiscated if they make noise or if you are using them.

Answer all the questions. ***There are 10 multiple-choice questions and 3 short answer questions & problems.*** The multiple-choice questions are worth 3 marks each. The short answer questions and problems are worth 10 marks each. The test is out of a total of 60 marks.

Use the Scantron sheet to answer the multiple-choice questions. Fill in the bubbles completely. Use **pencil to fill** in the Scantron sheet. For part B, **answer the questions in the space provided, if more space needed** you may write on the back of the question.

If you do not fill in the "bubbles" for your name and student's number on the Scantron sheet you will lose 5 marks on this test!

Please do not remove the staple.