

Introduction to Scientific Computing Software HW3

Student ID : < **Student ID** >

Write a **MATLAB script file** to solve following problem.

1. Beating (Plot three functions in the same figure)

(a)  $\sin(100x) + \sin(110x)$  : (in red solid line with square markers).

(b)  $2 \cos(5x)$  : (in blue dotted line with “o” markers).

(c)  $-2 \cos(5x)$  : (in yellow dashed line with “+” markers).

Features:

- Figure title :  $100\text{Hz} + 110\text{Hz} \Rightarrow f_{beat} = 10\text{Hz}$ .
- Location of the legend : West-South of the figure.
- Range of  $x$  :  $[0, 2\pi]$ .