**Answer Template for Lab 2: Logistic Equation**

**ENGR 232 – Dynamic Engineering Systems**

**Summer 2022**

**Name: \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ Section: \_\_ \_\_** }

*First Last*

**Questions 1-2:** Paste your graph with 21 sigmoidal curves and their 21 mirror images (with ) here. Your logistic curves should gradually transition from red to blue through shades of purple.

**Grader: Solution must have no background**

**Question 3:** The exact solution satisfying P(10) = 50 is

or

**Q4:** Replace the sample, with your own graph. Your answer must not include the colorful background pattern.

**Q5.** The slope is: f(10,50) = \_ \_ \_ \_ \_ \_

**Questions 6-10:** Replace **the sample below, with your own graph. (5 points)**

The LHS of your graph must not include the colorful pattern.

**Grader will award one point for each feature in this list. 5 points.**

**1.** Both Euler approximate solutions are shown correctly.

**2.** There are small yellow and green triangles.

**3.** The ode45 solution is shown with **green** diamonds with **red** outlines

**4.** Graph includes the points backwards in time on the LHS.

**5.** The legend does not obscure the data points.

**Ready to Submit?**

Be sure all ten questions are answered. When your lab is complete, be sure to submit three files:

1. Your **completed Answer Template** as a PDF file
2. A copy of your **MATLAB Live Script**
3. A **PDF** copy of your **MATLAB Live Script** (Save-Export to PDF…)

The due date is the day after your lab section by **11:59pm** to receive full credit. You have one more day, to submit the lab (but with a small penalty), and then the window closes for good and your grade will be zero.