**GENERAL HUMAN BIOLOGICAL SCIENCE**

**TASK 8 – MICRO-ORGANISMS GROWTH INVESTIGATION**

**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ WEIGHTING: 8% MARK:\_\_\_\_\_ /47**

**Part A = \_\_\_\_/ 16**

**Part B = \_\_\_\_/ 31**

***PART A – RESEARCH AND INVESTIGATION DEVELOPMENT (16 MARKS)***

Have you ever wondered why some people are really picky about cleaning? Why hospitals are so sterile? Why you shouldn’t eat food off of the floor? What makes one thing cleaner than another?

1. You are to investigate why micro-organisms are able to survive and thrive in certain environments/conditions better than on others. Submit your responses in a **report format**.

(5 Marks)

* + What are common micro-organisms can you find in or on your body?
  + Why are we not affected by most bacteria that we come in contact with?
  + What are the optimal conditions in which bacteria grow?
  + How do bacteria infect a host?
  + How do bacteria reproduce in a host?
  + Bacterial Infections:
    1. How can a bacterial infection be treated?
    2. How does this compare to other pathogenic infections?
  + Bacterial Colony:
    1. What is a bacterial colony?
    2. What is bacterial colony morphology?
    3. Include a diagram explaining bacterial colony morphology.
  + How does the body defend itself against pathogenic invasions?

1. Design an experiment to test different surfaces and see what kind of bacteria grows.

(11 Marks)

* + You can use anything available in a lab including:
    - Agar
    - Agar plates (petri dish)
    - Sterile swap
    - Fume hood

***PART B – INVESTIGATION (31 MARKS)***

You will conduct an experiment to test a number of surfaces around the school that you think are and are not dirty. Based on your findings you will respond to a series of questions.