Attempt all questions. Present your arguments clearly and concisely.

1. Briefly define the following terms [5 marks]:
   a. Sustainability;
   b. “Tragedy of the commons”;
   c. Unintended environmental consequences;
   d. “Design for Environment”;
   e. “Life-cycle Assessment”.

2. Present appropriate examples of:
   a. Cleaner processes;
   b. Cleaner products;
   c. Sustainable resource use;

in current industrial activity [6 marks].

3. You work for General Daimford Motor Company. Your manager has asked you to lead the design team for a new vehicle that will be marketed as a “green” consumer transport solution. Discuss briefly how you might use the “Design for Environment” formalism to identify for such a vehicle (throughout its lifecycle):
   a. The important areas of environmental impact;
   b. Potential improvements that would reduce these impacts [9 marks].