

Question 13 (8 marks)

Many products are designed to have a limited 'lifespan' – that is, they are designed to be replaced rather than repaired.

- (a) Give reasons why designers develop new products with a limited 'lifespan'. 2

Some reasons that a designer will develop a product with a limited lifespan is that ~~the~~ some crucial ~~products~~ components may only last a short time so the other components have no need to last any longer. Another reason is that if a product only has a limited lifespan, when the product ceases to work the consumer must buy another product causing increased revenue for the manufacturer. 6

(b) Explain the effects on society and the environment of designing products with a limited lifespan.

Effects on society and the environment that a product has when it is designed with a limited lifespan are sometimes planned effects by the designer or are unplanned or a by-product that was unforeseen. Examples of these are an effect on society is that when the products lifespan finishes they must purchase another product to fulfil a vacant need. This has an effect on the business in a positive way by increased revenue but a negative on the family or individual through loss of income into a product that isn't made to last. An effect is that some products have harmful materials that are necessary for production incorporated into them. These materials along with the constant use of new materials to produce new items can have a detrimental affect on the environment through contaminated land fill and destroyed resources.