YEAR 9 THEORY –1 Impact of new & emerging technologies Name: --------------

1) Technology push is when products are re-designed because of changes in materials or manufacturing methods.

Give 2 examples of how ***technology-push*** has influenced the development of a mobile phone. (4 marks)

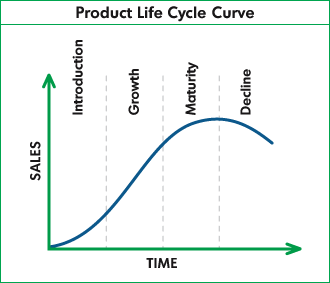
i)----------------------------------------------------------------------------

------------------------------------------------------------------------(2 marks)

ii) ------------------------------------------------------------------------

-----------------------------------------------------------------------(2 marks)

2) The Product Life Cycle below shows the sales of laptops at each stage throughout its life cycle.



1. Describe what happens during the Growth stage of the product. (2 marks)

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1. Give a reason why product obsolescence might occur. (1 mark)

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1. What can businesses do to try and extend a products life cycle? (2 marks)

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1. Fill in the blanks to the sentence below. (1 mark)

JIT

1. Just-in- --------- manufacturing is when materials/components are ordered so they arrive just as they are needed
2. Give an advantage of JIT to a manufacturer. (1 mark)

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1. What is the name for the symbol below? (1 mark)



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1. The “Consumer Rights Act” gives consumers a number of rights to protect them when buying products.

A products quality must meet 3 requirements, can you give one of these requirements? (1 mark)

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1. There are many moral and ethical factors related to the manufacture and use of products.

Name one moral/ethical reason why the manufacture or use of a mobile phone can have a negative effect. (2 marks)

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1. CAD (computer aided design) and CAM (computer aided manufacture) are widely used in industry.

Fill in the table below, giving the advantages and disadvantages for both. (4 marks)

|  |  |  |
| --- | --- | --- |
|  | Advantage | Disadvantage |
| CAD |  |  |
| CAM |  |  |

1. CNC is a term used in manufacture. Complete the blank below (1 mark)

Computer – numerically - ------------------------------------

9) Many different types of CAM machinery is used in the manufacture of products, including a “CNC Router”

Describe what a “CNC Router” does. (1 mark)

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What products is it commonly used for? (1 mark)

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Total marks= your mark /22 Percentage= Grade=