Question 15:

a. Technological advances in machinery:

CAD - Computer Aided Design. This has made things much more easier for the designer who can quickly change colours due to a new current trend.
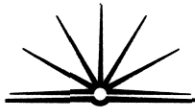
CAM - Computer Aided Manufacture. This manufactures parts of textiles, for instance, stitches buttonholes.

Computers - Computers are improving every year. They can be used to layout patterns to utilise every space on the fabric.

Robotics - Used to replace employees for making clothes, such as stitching seams.

Machine embroidery - Instead of traditional embroidery which is timeconsuming, designs can be chosen on sewing machines which have a database of designs, and the machine automatically stitches them.
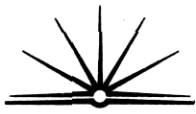
b. The impact of technological advances in machinery on the changing nature of the industry:

CAD: Computer aided design:

* Computer aided design helps the manufacture to quickly change the design - such as a colour, if a new current trend comes into the fashion industry. This saves time and money, and increases production, and makes industry more internationally competitive.

* CAD increases productivity and also gives a consistent quality, aswell as a reduction in staff levels which saves money for the industry in the long term. However, it is expensive in the short term.

CAM: /and robotics Computer aided manufacture helps ~~with stitching~~ in the production of the textiles item.

* CAM increases productivity as they can work day and night without breaks.

* CAM is expensive in the short term and can affect profits in the short term. However, they save the business money in the long term as they replace employees, and ~~they don~~ replace

money ~~asse~~ normally given to employees such as wages, bonuses, fringe benefits.

* They are a disadvantage in that they increase ~~emplo~~ unemployment. However they make industry more internationally competitive.

* Increase efficiency and improve quality as there is no human error.

Computers: Such as pattern layering software and associated machinery improve quality and increase efficiency.
This one would utilise the space very well on a fabric, and cut very quickly. They increase productivity, and save time, (as work around the clock - day & night) and money in the longterm because there is a reduction in staff levels but increase unemployment. But make industry more internationally competitive because they save money.
Machine embroidery: Save time as they are very quick, and increase productivity, increase quality and efficiency, reduce money but increase unemployment.

These make ATCFAI more internationally competitive but address social issues like an increase in unemployment.