

5.1.9 Industrial Applications



Candidates should be able to:

- (a) understand the following commercial production methods: (2b)

job production;

batch production;

repetitive flow;

continual flow process.

- (b) *understand the following commercial manufacturing systems:*

cell production;

in-line assembly;

Range of activities:

understand that this involves producing 'one off' products. Every item produced is different. It is labour intensive.

- (2c) understand that this involves the production of a specified quantity of a product. Batches can be repeated as many times as required. This type of production method is flexible and can be used to produce batches of similar products with only a small change to the tooling.

understand that this involves producing large numbers of identical products for a relatively low cost. The production is usually broken down into sub assemblies of smaller components. This form of mass production can be labour intensive or completely automated depending on the product being manufactured.

understand that this involves uninterrupted 24 hrs/day production of a basic commodity such as steel, chemicals, oil or basic food products. This type of production continues because it is expensive to shut down and then re-start. Only a small workforce is needed to maintain the process.

understand that this is a number of work stations grouped together to produce a single component

understand that this is used to mass produce many everyday items especially cars. Many in-line assembly systems are fully automated and only require people to ensure continual flow.

just in time;

this philosophy requires materials, components and sub-assemblies to arrive from other factories 'just in time' for production. Finished products are despatched immediately they are made. This system reduces any storage of stock and allows for changes to the product to be made quickly without the need to use up stock items first.

logistics.

understand that the production of products relies upon the availability of materials and components when required.

(c) understand the packaging, marketing, and advertising implications of a product;

information about the product, consumer preference, legislation, labelling, legal requirements, storage, distribution, *cultural and European influences.*

(d) understand that control is a necessary part of production and marketing.

procedures to ensure a quality product *quality guarantees, consumer rights i.e. ISO 9000*

(2c)

understand that quality control helps to ensure that the customer is satisfied with a product.

understand that a product should meet the criteria listed in the specification