2. Study the information below and then answer the questions that follow.

## FROM RAIN TO SUNSHINE

Sally Jean discovered her talent whilst at school when she was asked to decorate a local restaurant for the end of year 'prom' or ball. She chose a rainforest theme with lots of bamboo and this was the birth of her small business with bamboo as her trade-mark material. She set up her interior design business to cater for the niche market. Since then, the orders have come in regularly for the design of places like restaurants, wedding venues, children's nurseries, playgrounds and children's bedrooms.

As the business grew, she expanded into the small-scale manufacturing of conservatory furniture for some of her clients. Her boyfriend Billy helped her; she designed it and he hand-crafted it. The business, although successful, is still small and Sally is eager to move into the mass market. She also intends applying for a **BSI Kitemark**. She wants to expand into the large-scale production of bamboo conservatory furniture. Much of the design work at the moment is done using a CAD package, and she thinks that she can use her skill to link this with a CAM package for the manufacture of the conservatory furniture.



With expansion in mind, Sally Jean has been gathering opinions from various sources and has received conflicting advice. Jim, her father, says she should start slowly and stick to job production. However, her boyfriend, Billy advises her that, unless she goes for batch or flow production, the venture won't be profitable because she won't be able to benefit from **internal economies of scale**. The local business development agency says that she should consider sub-contracting the work to a factory in China.

- (a) Briefly explain:
  - (i) why Sally Jean wants a BSI Kitemark; [2]
  - (ii) the meaning of *internal economies of scale*. [4]
- (b) Explain the advantages to Sally of using CAD and CAM packages. [6]
- (c) Compare the suitability of job, batch and flow production methods for Sally Jean's proposed new venture. [8]