

**Question 25 (6 marks)**

- (a) Why is it necessary to produce a prototype during the development of a food product? 2
- Prototypes are a 'practice run' to therefore ensure the food products optimum characteristics - taste/touch/visual to therefore consumer appeal.
- \* exact quantities of ingredient to whether changes are required to recip.
- \* ensure product will work without costly faults in final production.
- (b) How can food product prototypes be tested? 4
- \* Taste tests - within company / external - consumer groups (acceptability)
- \* Nutritional value - science lab
- \* Characteristics - touch, shape, look, smell
- \* Packaging - strength tests, nutritional value after packaging
- \* Shelf-life of product - sealed/not sealed (safety)
- \* Whether contamination will occur - chemical, microbial, phys
- \* Availability of ingredients
- \* Feasibility test - Financial; cost of production/ingredients, break-even estimation
- Technical; facilities, ingredient availability