

# AGRICULTURAL AND HORTICULTURAL STUDIES

## End-of-year examination – Units 3 and 4

### Description

Examination time – 1½ hours

Contribution to study score – 34%

All areas of study and outcomes in Units 3 and 4 are examinable.

The examination will assess aspects of each area of study and outcome. Where aspects of an outcome are not examinable, for example the implementation of production skills related to a business plan for a small commercial agricultural/horticultural enterprise, the mark value of questions associated with the outcome will be adjusted accordingly.

The examination will assess students' understanding of environmental modification, the use of appropriate technology, enterprise management practices, and sustainability in agriculture and horticulture. Students will answer a set of questions requiring responses of varying lengths, some of which will be based on case study material presented in the paper. In some cases alternative questions will be presented to ensure that both agriculture and horticulture students have access to the highest grades.

### Examination criteria

The examination will address all of the criteria. All students will be examined against each criterion.

1. understanding of techniques for modifying climate, soil, and topography
2. understanding of plant and animal pests and diseases
3. understanding of the impact of mechanisation on production operations
4. understanding of recent technological developments in agriculture/horticulture and their effectiveness
5. understanding of types of environmental degradation
6. understanding of techniques for rectifying degraded land and water
7. understanding of the relationship between the management of enterprises and environmental health
8. understanding of concepts of sustainability and management techniques for achieving sustainability
9. understanding of the roles of external agencies in managing enterprises for sustainability
10. understanding of techniques for planning, conducting, monitoring and evaluating enterprises

# DESIGN AND TECHNOLOGY

## End-of-year examination – Units 3 and 4

### Description

Examination time – 1½ hours

Contribution to study score – 30%

Approved materials and equipment – Students may use coloured pencils, markers, a shape template and a human figure template (for fibres/yarns, fabrics focus students).

Students will answer questions set by an examination panel about product development in industry, and the marketing of products. In addition, students will respond to design briefs.

Students will answer a series of questions requiring responses of varying lengths. In some cases, alternative design briefs and questions will be provided for each of the materials categories specified in the Design and Technology Study Design (wood, metal, plastic, fibres/yarn fabrics and industrial ceramics) to ensure that students who are familiar with working with these particular materials have access to the highest grades. Students will respond to these questions in writing and/or using graphic techniques. All areas of study and outcomes are examinable.

### Examination criteria

The examination will address all of the criteria. All students will be examined against each criterion.

1. understanding of the role of the designer, factors affecting design and the techniques and methods used to develop and modify design options.
2. knowledge of design and production in industry.
3. understanding of aesthetic appeal and function of products and how they meet the needs of consumers
4. understanding of the role of marketing in design and development
5. understanding of the role of comparison and evaluation in design and production

# FOOD AND TECHNOLOGY

## End-of-year examination – Units 3 and 4

### Description

Examination time – 1½ hrs

Contribution to study score – 30%

Students will answer a set of questions about product development and marketing, modified food products, food preparation and processing, and food production controls.

The examination will cover content from Units 3 and 4.

Students will answer a series of questions requiring responses of varying lengths set by an examination panel. The questions will be based on the areas of study and outcomes in Units 3 and 4. Each area of study will be approximately equally weighted on the examination paper.

### Examination criteria

The examination will address all of the criteria. All students will be examined against each criterion.

1. understanding of the processes involved in the development and marketing of a food product
2. understanding of the development, properties and use of modified food products
3. understanding of food preparation and processing
4. understanding of food production controls in Australia's food industry

# SYSTEMS AND TECHNOLOGY

## End-of-year examination – Units 3 and 4

### Description

Examination time – 1½ hours

Contribution to study score – 30%

Approved materials and equipment – One approved graphics calculator and/or one scientific calculator.

**If a graphics calculator is used, the memory must be cleared prior to entering the examination.**

The examination will cover content from Units 3 and 4.

Students will answer a series of questions requiring responses of varying lengths set by an examination panel. Students will respond to these questions in writing and/or using graphic techniques. The questions will be based on the outcomes and areas of study in Units 3 and 4.

### Examination criteria

The examination will address all of the criteria. All students will be examined against each criterion.

1. knowledge of technological concepts and principles associated with integrated systems
2. knowledge of technological concepts and principles associated with the control of integrated systems
3. understanding of the function of, and the interrelationships between, a system and its subsystems
4. understanding of the relationship between technological systems and the natural environment
5. understanding of the role of diagnosis, evaluation, adjustment and repair
6. understanding of the role of design in the production of a technological system