Agriculture
Paper 2

General Instructions

• Paper 2 should be attempted only by students who have studied Electives
• Reading time – 5 minutes
• Working time – 1 hour
• Write using black or blue pen
• Board-approved calculators may be used

Total marks – 30

• Attempt TWO questions from Questions 1–6
• Allow about 30 minutes for each question
Total marks – 30
Attempt TWO questions from Questions 1–6
Allow about 30 minutes for each question

Answer each question in a SEPARATE writing booklet. Extra writing booklets are available.

Question 1 — Agribusiness (15 marks)

(a) Describe a technique that can be used to analyse the financial situation of a farm. 3

(b) Assess a marketing option or selling system that is available for a particular agricultural product. 4

(c) Discuss the impacts of a large agricultural corporation or company on the biological and physical components of the industry. 8

Question 2 — Animal Management (15 marks)

(a) Name an animal breeding program and outline the role of objective measurement within the program. 3

(b) Explain how chemical resistance may occur in target organisms when managing animal pests or disease. 4

(c) Explain how knowledge of natural animal reproductive hormones assists farmers to manipulate reproductive cycles in animal production systems. 8

Question 3 — Horticulture (15 marks)

(a) Name a horticultural system and describe the production cycle within the system. 3

(b) Explain the influence of changing international markets on post-harvest handling in horticulture. 4

(c) Analyse the components of a horticultural system that can be managed to balance economic viability and environmental sustainability. 8

Question 4 — Innovation and Diversification (15 marks)

(a) How has the introduction of a new production system or technology had an impact on farm management? 3

(b) Why is there a need for research prior to the full implementation of alternative enterprises? 4

(c) Evaluate techniques that may be used to market an innovation in Australian agriculture. 8
Question 5 — Plant Management (15 marks)

(a) Outline the anatomy and function of a type of cell found in plant leaves. 3
(b) Explain the role of plant hormones in fruit production. 4
(c) Analyse the process of photosynthesis and how management of the inputs to this process may affect plant growth. 8

Question 6 — Sustainable Land and Resource Management (15 marks)

(a) Explain, using an example, how a farm practice can affect the level of soil acidification. 3
(b) How do governments intervene in land and water management in agricultural systems? 4
(c) Compare the cause and management of both dryland and irrigation salinity. 8

End of paper