



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

AGRICULTURAL MANAGEMENT PRACTICES

EXAMINATION GUIDELINES

GRADE 12

2021

These guidelines consist of 17 pages.

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1. OVERVIEW

1.1 Introduction

The Curriculum and Assessment Policy Statement (CAPS) for Agricultural Management Practices outlines the nature and purpose of the subject Agricultural Management Practices. This guides the philosophy underlying the teaching and assessment of the subject in Grade 12. In addition to the Grade 12 material, candidates will be expected to have mastered the content outlined for Grades 10 and 11.

The purpose of these Examination Guidelines is to:

- Provide clarity on the depth and scope of the content to be assessed in the Grade 12 National Senior Certificate Examination in Agricultural Management Practices.
- Assist teachers to adequately prepare learners for the examinations.

This document deals with the final Grade 12 external examinations. It does not deal in any depth with the school-based assessment (SBA), practical assessment tasks (PATs) or final external practical examinations, as these are clarified in a separate PAT document which is updated annually.

These Examination Guidelines should be read in conjunction with:

- The *National Curriculum Statement (NCS) Curriculum and Assessment Policy Statement (CAPS): Agricultural Management Practices*
- The National Protocol of Assessment: *An addendum to the policy document, the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), regarding the National Protocol for Assessment (Grades R–12)*
- The national policy pertaining to the programme and promotion requirements of the National Curriculum Statement, Grades R–12

1.2 Aims

These are not listed in order of priority. The aims of the Agricultural Management Practices curriculum derive from the aims outlined in the CAPS document. A course based on this syllabus should be to:

- 1.2.1 Provide, through well-designed studies of experimental and practical application of Agricultural Management an educational experience for all learners, whether they go on to study in the agricultural field, to enable them to acquire sufficient understanding and knowledge:
- To understand the social contribution of Agricultural Management Practices to promote a culture of human rights
 - Economic growth and sustainability as a tool for change by improving quality of life and providing solutions
 - To be responsive to individual and community needs
 - To be suitably prepared for studies beyond Grade 12 level for life-long learning and possible career opportunities
 - To be competent, informed and responsible citizens in the field of agriculture, to care for the environment by addressing indigenous knowledge (IK) and social issues

1.2.2 Develop knowledge and skills:

- Master and apply the skills they gain; communicate effectively by using verbal, written, visual, graphical and electronic communication skills
- Mathematical skills as applied to Agricultural Management Practices
- Think creatively and critically in an agribusiness environment and develop and enhance entrepreneurial skills
- Acquire and safe use of relevant technology in agriculture
- Help with the management of a farming enterprise and be aware of the discipline that is required by a well organised farm

1.2.3 The subject promotes the following skills:

- *Management skills*: the knowledge and skills required to plan, organise, guide, control and evaluate production factors to achieve sustainable production enterprises
- *Entrepreneurial skills*: the ability to manage risks and combine production factors creatively to produce superior goods and services
- *Operational skills*: involve the day-to-day management of crop and animal enterprises
- *Marketing skills*: those value-adding activities in the agricultural supply chain that deal with various agricultural production lines, including post-harvesting aspects such as storage, processing, food safety, product packaging and distribution to consumers in domestic and global markets
- *Research skills*: involve aspects of problem identification; setting objectives; data collection, analysis, evaluation and report writing

1.2.4 Develop attitudes relevant to agriculture such as:

- Adopting a positive attitude towards rural lifestyles associated with farming
- Organising and manage activities responsibly and effectively collect, analyse, critically evaluate and present agricultural information
- Identifying and solving problems by being exposed to the agribusiness management environment

1.2.5 Stimulate interest in protecting the environment through the management of natural resources and the acceptable treatment of animals and plants

2. ASSESSMENT

2.1 Assessment objectives

As outlined in the CAPS document, assessment is meant to:

- Enable the teacher to make reliable judgement about a learner's progress
- Inform learners about their strengths, weaknesses and progress
- Assist teachers, parents and other stakeholders in making decisions about the learning process and progress of the learners

The attainment of these objectives will be determined through an assessment of certain minimum skills and competencies such as those set out below, at the end of the Agricultural Management Practices Grade 12.

2.1.1 Knowledge and understanding

Learners should be able to demonstrate knowledge and understanding with respect to:

- Scientific and management phenomena, facts, laws, definitions, concepts, theories
- The use of scientific and management vocabulary, terminology, conventions (including symbols, quantities and units)
- The manipulation of agricultural equipment as well as the safety measures required
- Scientific quantities and their determination
- Scientific, management and technological applications with their social, economic, and environmental implications

The syllabus content defines the factual knowledge that candidates may be required to recall and explain. Questions testing these objectives will often begin with one of the following words: define, state, describe or explain. See the cognitive level weighting explained below.

Cognitive level weighting:

The table on page 7 provides a guide for the cognitive level weighting applicable to the paper. The key verb is used as a guide to judge the appropriate cognitive level of a question. The context of the question will provide more details to measure the level of difficulty of a question to place it at the most appropriate level.

The marks per cognitive level need to reflect the overall cognitive balance as a percentage (40% knowledge and comprehension, 40% application and 20% analysis, synthesis and evaluation) for the question paper. The cognitive levels will be scaffolded within a question.

Cognitive levels, context words and key verbs for examination and test papers:

The levels of difficulty

Each of the cognitive levels A (basic knowledge and comprehension), B (application) and C (analysis, synthesis and evaluation) are mainly determined by the key verbs used in the questions. The level of difficulty for each of these categories must also be judged based on the context of each question. The level of difficulty fall into three different categories: difficult, moderate and easy for each of the cognitive levels. The weighting of these categories should be equal to each of the cognitive levels.

The following contextual issues need to be considered when assessing a question for its level of difficulty:

- The detail of the knowledge or concepts required in the responses
- The amount/quantity of knowledge or concepts that is needed in the responses
- The complexity of the knowledge or concepts that is required in the responses
- The type and complexity of skills needed to complete the question
- The complexity of the phrasing of a question
- The level of extended thinking needed to respond to a question
- The basic context of a question

Each of the contextual issues above needs to be carefully evaluated in each question to make a judgement on the level of difficulty of a question. This classification of questions needs to be justified by the expected performances and perception of candidates to them.

Refer to the exemplar question paper for some examples in this regard.

2.1.2 Handling, applying, and evaluating information

Candidates should be able to (in words or by using written, symbolic, graphical and numerical forms of presentation):

- Solve problems
- Locate, select, organise, and present information from a variety of sources
- Translate information from one form to another
- Manipulate numerical and other data
- Use information to identify patterns, report trends, draw inferences and report conclusions
- Present reasoned explanations for phenomena, patterns, and relationships
- Apply knowledge, including principles, to novel situations
- Evaluate information and hypotheses

2.1.3 Practical skills and investigations

Candidates should be able to:

- Follow a detailed set of sequence of instructions and use techniques, apparatus and materials safely and effectively
- Make observations and measurements with due regard for precision and accuracy, interpret experimental data and make observations
- Identify a problem, design and plan investigations, design or select methods and techniques, suggest possible improvement (For this purpose, planning and designing will include ability to identify variables, state hypothesis, select, set up and use the appropriate apparatuses)
For example, in an examination, the apparatus may be set up and learners may be required to label, or even criticise the setup, where this refers to a formal prescribed experiment.
- Record observations, measurements, methods and techniques with due regard for precision, accuracy and units

2.2 Scheme of external assessment

All candidates will write one external paper in Grade 12 as prescribed.

2.2.1 Format of question papers

Paper	Type of paper	Duration	Total	End of Year	Assessed
1	SECTION A: Terminology, multiple-choice questions – 50 marks SECTION B: Structured questions – 150 marks	3 hours	200	October/November	Externally

Questions in Paper 1 will assess performance at different cognitive levels with an emphasis on process skills, critical thinking, scientific reasoning, and strategies to investigate and solve problems in a variety of scientific, technological, environmental and everyday contexts as outlined earlier.

2.2.2 Weighting of cognitive levels

The distribution of cognitive levels in Agricultural Management Practices papers is given below.

A – Knowledge 40% (including definitions)

B – Comprehension and Application 40%

C – Analysis, Evaluation, Synthesis 20%

COGNITIVE LEVEL WEIGHTING %	CONTEXT WORDS	KEY VERBS
A 40%	Knowledge recall	name, state, give, indicate, provide, arrange, define, label, list, outline, locate, recognise, select, state and supply
B 40%	Comprehension Application	describe, identify, restate, review, summarise, classify, compare, define, distinguish, interpret, match and select, apply, calculate, draw, explain, identify, illustrate, prepare, operate, practice, solve, draw (sketch), modify, adapt, compute, discover, survey, gather, prepare, use and show
C 20%	Analysis, Evaluation and Synthesis	analysis, categorise, compare, distinguish, discuss, examine, investigate, test, deduce, distinguish, relate, classify, contrast, explain, generalise, predict and solve arrange, compose, formulate, organise, plan, assemble, construct, combine, create, depict, design, develop, incorporate, integrate, invent, predict, produce and structure appraise, assess, comment on, critically analyse, evaluate, conclude, interrogate, judge, predict, compare, score, justify, critique and recommend

2.2.3 Weighting of prescribed content

	Content	Marks	Total	Duration
SECTION A	Equal distribution from content	50	50 marks	3 hours
	SECTION B	Farm planning (farming resources, physical planning, farming systems and alternative enterprises)	50	
Farm planning (business planning, entrepreneurship, marketing, and management)		50		
Financial statements, recording, harvesting, processing, value adding and packaging		50		

2.3 School-based assessment (SBA)

Formal assessment tasks are control tests, examinations and assignments or assessment tasks as mentioned under 2.3.1. The weighting of tasks in the program of assessment is provided in the table below:

SCHOOL-BASED ASSESSMENT					
Term 1		Term 2		Term 3	
Type	%	Type	%	Type	%
Assignment	25				
Control Test	75	Mid-year Assessment	100	Trial Examinations	100
TOTAL: 100 marks		TOTAL: 100 marks		TOTAL: 100 marks	

2.3.1 Assignments in AMP – Grade 12

The practical task as mentioned in the CAPS creates confusion and is therefore replaced by the term 'assignment'. An assignment is a problem-solving exercise with clear guidelines and a specified length. It is shorter focused, more structured, and less open-ended than a project and does not necessarily involve strict adherence to a prescribed procedure. An assignment can be a practical task, but the practical task does not replace the practical tasks needed for the PAT.

Assignments provide learners with opportunities to develop and practice specific knowledge, skills, values, and attitudes.

Possible evidence:

- Case studies/Simulations/Scenarios
- Demonstration
- Analysis and interpretations of data (worksheet)
- Translation/Interpretation activity (worksheet)

Assignments should be designed from the content as set out in each grade:		
GRADE 10	GRADE 11	GRADE 12
<ul style="list-style-type: none"> • Crop production and crop management • Soil and water management • Animal production and animal production management • Farm management 	<ul style="list-style-type: none"> • Crop production and management • Soil and water management • Animal production and animal management • Fertiliser management and application 	<ul style="list-style-type: none"> • Farm planning • Recording • Product harvesting • Marketing • Value adding • Processing • Packing and distribution

2.3.2 Control tests

All summative assessment pieces adhere to the weighting of cognitive levels and topics given in the tables below.

Control test – Agricultural Management Practices focus			
(Term 1)			
Content	Marks	Total	Duration
SECTION A: Term 1 content	25	100 marks	1½ hours
SECTION B: Term 1 content	75		
(Term 2)			
SECTION A: Term 2 content	25	100 marks	1½ hours
SECTION B: Term 2 content	75		
(Term 3)			
SECTION A: Term 3 content	25	100 marks	1½ hours
SECTION B: Term 3 content	75		

2.3.3 Examinations

Trial examination

Paper 1: Primary focus			
Content	Marks	Total	Duration
SECTION A: QUESTION 1: Terminology, multiple-choice questions, etc.	50	200 marks	3 hours
SECTION B: Structured questions			
QUESTION 2: Farm planning (farming resources, physical planning, and farming systems, and alternative enterprises)	50		
QUESTION 3: Farm planning (business plan, entrepreneurship, marketing, price determination and the management process)	50		
QUESTION 4: Financial statements and recording, harvesting, processing, value adding and packaging	50		

Moderation: All SBA tasks must be moderated internally. Provincial and national moderation will be done by the National Department of Basic Education (DBE) and/or the respective provincial departments.

2.4 Practical assessment task (PAT)

1. The aim of the practical assessment task (PAT) for Agricultural Management Practices (AMP) is to assess management skills, entrepreneurial skills, research skills, marketing skills, operational skills and technical skills of learners in the production enterprises which they are exposed to.
2. In Grades 10–12 a total of at least TWO production enterprises must be utilised that would consist of ONE animal production enterprise and ONE plant production enterprise.
3. The context in which the subject is offered is subjected to the wide range of different production systems, production enterprises, management approaches and ecological differences between the different regions in the country. The PAT must allow for this wide range of possible approaches and applications.
4. These PAT guidelines would provide criteria to assist in the standardisation of this wide variety of possibilities which is possible in Agricultural Management Practices (AMP).
5. The PAT will show progression in complexity, content, and context from Grades 10 to 12.
6. The PAT activities should link with the content of the relevant grades.
7. The PAT for Grades 10 and 11 is internally set, marked/assessed and moderated. The PAT for Grade 12 is internally set and marked/assessed and externally moderated.
8. The components of the PAT are completed under controlled conditions and evidence of each activity or task is combined into a learner file for each learner.
9. The PAT in Grades 10–12 consists of the following components:
 - Management overview based on the annual production plans for the management of the relevant enterprises
 - Practical tasks/Assignment which are comprehensively assessed and consist out of various activities
 - Management test which consist of application questions, case studies and scenarios based on activities in the above management plans for production
 - Record sheet of the time that the learner spends in a practical situation or production enterprise

Summary of the minimum number of tasks/activities required for the PAT in Grades 10–12:

PAT component	Number of activities			Weighting	Focus
	Grade 10	Grade 11	Grade 12		
Management overview	1	1	1	20%	Planning
Practical activities	6	6	4	50%	Operational skills
Management test	1	1	1	20%	Application
Records of time	Record sheet of learners			10%	Experience

NOTE: Also see PAT document for clearer instructions.

3. ELABORATION OF SUBJECT CONTENT

Subject content as listed in the CAPS were regrouped to make content clear and will assess in the following topics as listed below. Definitions will always form part of the examinable content.

TOPIC	CONTENT	SUGGESTED CONTENT SEQUENCE
QUESTION 2		
Farm Planning (Physical)	Resources available for enterprise planning. (How available resources are determined and used for enterprise planning)	<p>Resource utilisation</p> <ul style="list-style-type: none"> • Natural resource utilisation <ul style="list-style-type: none"> ○ Soil as resource, functions of soil ○ Vegetation/Pastures (natural and cultivated)/different types – planted pastures ○ Topography and slope: Terrain and slope ○ Climate: influence of light, wind, temperature (influence on plant growth) and rain • Humans as a resource and influence on productivity: influence of diseases on production and farm management • Financial resources: Capital: sources of capital, different types of capital and definition
	Pasture and soil usage: Planning, usage and conservation	<ul style="list-style-type: none"> • Veld/Grazing for animals <ul style="list-style-type: none"> ○ Carrying capacity: Ecological-, physiological principals and classification and pasture planning ○ Principles of laying out camps ○ Reasons for camps and management; advantages: discuss the advantages of camps • Soil for cultivation: Planning, usage, and conservation <ul style="list-style-type: none"> ○ Soil: the production ability of soil and influences on soil; soil data (collection, interpretation for utilisation and application) depth: crop specific; discuss the role of soil depth on crop production, drainage and moisture conservation, structure/texture: characteristics of different types, pH; correction of pH • Pollution, degradation, and conservation of soil/veld <ul style="list-style-type: none"> ○ Degradation of soil, degradation of veld ○ Criteria and reasons for contours, methods used and advantages, disadvantages
	Farming systems available and be able to determine the best one for production based on available resources	<p>Farming systems, farming methods, farming techniques</p> <ul style="list-style-type: none"> • Production systems – reasons, differences and examples, production methods • Precision farming as an intensive production system (crop and animal example) <ul style="list-style-type: none"> ○ Definition; application and technology used, technical and economic applications resources available; agronomic, advantages and disadvantages • Mechanisation and application: <ul style="list-style-type: none"> ○ Implements in the production process (acquiring of implements) ○ General advantages and disadvantages of equipment and implements • Alternative enterprises and niche markets <ul style="list-style-type: none"> ○ Agritourism ○ Niche markets

QUESTION 3		
Farm planning (business plan, entrepreneurship, marketing, price determination and the management process)	Development of a basic business plan	<p>Description and explanation of a business plan</p> <ul style="list-style-type: none"> • A simple business plan with reference to the following aspects: <ul style="list-style-type: none"> ○ General overview of the business ○ Suitability of the farm in terms of the business plan ○ Planning, including SWOT analysis ○ Vision and mission ○ Financial details ○ Marketing plan
	Entrepreneurship	<ul style="list-style-type: none"> • Definition • Qualities of an entrepreneur • Entrepreneurial skills <p>Business creation in agriculture (business opportunities).</p> <ul style="list-style-type: none"> • Different types of business with reference to: <ul style="list-style-type: none"> ○ Manufacturing ○ Primary, e.g. agriculture ○ Secondary, e.g. manufacturing ○ Tertiary, e.g. services • Business survival strategies with reference to: <ul style="list-style-type: none"> ○ Diversification, specialisation, insurance ○ Producing a unique product/niche market ○ Value-adding marketing, e.g. milk to cheese • The occupation of niche markets
	Price setting in agricultural produce	<ul style="list-style-type: none"> • Methods of setting price • The marketing chain and its costs (include calculations) – farmer to consumer; value adding • Market research – reasons for market research: where, why, what and how? • Customer and competitor information (examples to illustrate the equilibrium position in the market); direct and indirect competition • The effect of supply and demand on price – demand and supply curve • Break-even point involving cost and profit
	Marketing and control of agricultural products	<ul style="list-style-type: none"> • Marketing systems: free marketing/co-operative marketing/marketing agents • Marketing Acts: Marketing of Agricultural Products Act • Importance of marketing: selling of products • Marketing functions: planning/transport/processing/standardisation, grading and storing • Advertising: aim of advertising in marketing; advertising methods

	<p>Role of producer/product organisations in agriculture</p>	<p>Type of organisation</p> <ul style="list-style-type: none"> • Local, national, multinational • Advantages and disadvantages of organisations <p>The role of the product/producer organisation in the marketing of products:</p> <ul style="list-style-type: none"> • Marketing research and advertising • Quality control and standardisation
	<p>Farm Management:</p> <p>Planning:</p> <p>Organising:</p> <p>Motivation/Leadership:</p> <p>Control:</p> <p>Coordination and evaluation:</p>	<ul style="list-style-type: none"> • Decision-making and steps in the decision-making process • Reasons for planning • Organising an enterprise • Use of labour and other resources • Plan own enterprise/farm organogram • Advantages of good planning – profit and productivity • Human resources (training) • Motivation (incentives) • Delegating (creating responsibility) • Communication (address issues) • Development of standards-steps in the development of standards • Corrective measures – changes to standards and methods • Advantages of good control – economically and productivity • Coordination between steps in the process • Advantages of coordination • Coordination of labour, tasks and machinery
	<p>Labour management</p>	<ul style="list-style-type: none"> • Types of labour • Labour legislation: influence of labour legislation on labour, labour contracts <ul style="list-style-type: none"> ○ Basic Conditions of Employment Act, UIF, etc. ○ Occupational Health and Safety Act, general safety principles ○ Rules and regulations for safe use of pesticides and herbicides: correct use of; pollution prevention • Functions of labour in a specific enterprise: drawing up a job description • Staff management: steps in the management process • Labour problems • Labour: improvement of production: methods of improvement

QUESTION 4		
Financial planning and record keeping, Harvesting, value adding and packaging	Economic planning: Budgets	<ul style="list-style-type: none"> • Budgets: basic elements of budget, steps to draw up a budget <ul style="list-style-type: none"> ○ Definition, aim, types and examples of budgets ○ Distinguish between whole-farm and enterprise budgets • Farm valuation importance, inter-reliance of different enterprises <ul style="list-style-type: none"> ○ Profitability of enterprises – basic profit and loss calculations ○ Viability of enterprises – basic calculations ○ Choices regarding enterprise
	Financial statements	<ul style="list-style-type: none"> • Cash flow statement <ul style="list-style-type: none"> ○ Definition ○ Setting a cash flow budget: use a basic example • Income and expenses statement: <ul style="list-style-type: none"> ○ Definition and example ○ Drawing up statements ○ Profit or loss calculations of a specific enterprise • Balance sheet <ul style="list-style-type: none"> ○ Use and interpretation ○ Required and supporting documents • Trial balance: <ul style="list-style-type: none"> ○ Definition and reason for use
	Records aims, advantages, use and types of records	<ul style="list-style-type: none"> • Aims and advantages • Types of records: reasons to keep certain records and identification: <ul style="list-style-type: none"> ○ Records such as climatologically (how it influences decision-making) ○ Financial (profit or loss), labour (contracts, working hours, leave) ○ Physical inventory ○ Mechanical maintenance and logbook ○ Production and harvesting records, marketing prices and movement in the market ○ Complete records
	Recording of financial data and use	<ul style="list-style-type: none"> • <i>Invoice</i>: examples and basic knowledge • <i>Cheques</i>: examples and basic knowledge • <i>Depreciation</i>: basic concept and calculations • <i>Deposit books</i>: concept and application • <i>Petty cash</i>: concept and application
	Product harvesting and quality control of agricultural produce	Harvesting, value adding <ul style="list-style-type: none"> • Harvesting and quality control • Regulations and legal aspects (Acts); regarding grading, requirements for the delivery of certain products • Handling products: basic principles; collection and transport • Storing products: methods of storing; advantages of storing • Sorting and grading products

	Value adding and processing of agricultural products	<p>Value-adding methods</p> <ul style="list-style-type: none"> • Types of products • Advantages: higher income, job creation and longer shelf life
		<p>Processing</p> <ul style="list-style-type: none"> • Methods/Principles of processing/preservation techniques • Advantages/Reasons: longer shelf life, food security and better quality products • Factors indicating the viability of value-adding equipment, facilities and demand
	Packing and distribution of agricultural products/produce	<p>Packaging</p> <ul style="list-style-type: none"> • Types, ways, characteristics, application of packing methods and materials: packing facilities; packaging store; wrapping • Distribution channels • Transport requirements: rules and regulations regarding safe transporting of animals
	Labelling of agricultural produce and food legislation in South Africa	<p>Labelling</p> <ul style="list-style-type: none"> • Importance and necessity • Legislation <p>Food legislation in South Africa – those of relevance</p> <ul style="list-style-type: none"> • Registration Acts: interpretation and application of the Act • Regulations and Acts: Labelling and Marketing Act

4. CONCLUSION

This Examination Guideline document is meant to articulate the assessment aspirations espoused in the CAPS document. It is therefore not a substitute for the CAPS document which teachers should teach to.

Qualitative curriculum coverage as enunciated in the CAPS cannot be over-emphasised.