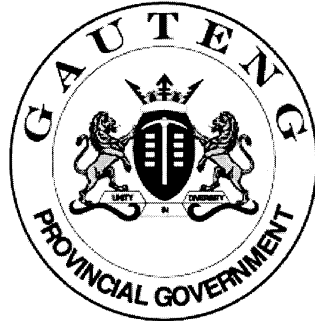


**SENIOR CERTIFICATE
EXAMINATION
SENIORSERTIFIKAAT-EKSAMEN**



**FEBRUARY / FEBRUARIE
MARCH / MAART**

2005

AGRICULTURAL SCIENCE

**LANDBOU-
WETENSKAP**

SG

802-2/0

AGRICULTURAL SCIENCE SG

**11 pages
11 bladsye**



X05



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GAUTENGSE DEPARTEMENT VAN ONDERWYS

SENIORSERTIFIKAAT-EKSAMEN

LANDBOUWETENSKAP SG

TYD: 3 uur

PUNTE: 300

BENODIGHEDE:

- 'n Goedgekeurde (nieprogrammeerbare) sakrekenaar. Kandidate moet hulle eie sakrekenaars verskaf.

INSTRUKSIES:

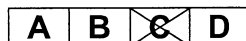
- Die eksamenvraestel bestaan uit TWEE afdelings.
- Beantwoord AL die vrae.
- Beantwoord Vraag 1 (Meervoudige Keusevrae) op die **antwoordblad** aan die **binnekant van die omslag** van jou **antwoordboek**.
- Skryf asseblief netjies en leesbaar.

AFDELING A

**VRAAG 1A
MEERVOUDIGE KEUSEVRAE**

Verskeie moontlikhede word as antwoorde op die volgende vrae voorgestel, waarvan slegs een korrek is. Dui die korrekte antwoord aan deur 'n kruis (X) oor die toepaslike letter te trek langs die vraagnommer op die **antwoordblad** aan die **binnekant van die omslag** van jou **antwoordboek**.

VOORBEELD:



Indien daar meer as een kruisie verskyn, sal geen punte toegeken word nie.

1.1 Produksie van gal vind plaas in die _____.

- A. galblaas
- B. maag
- C. lewer
- D. nier

1.2 Die proses waardeur voedingstowwe deur die dunderm opgeneem word, staan bekend as _____.

- A. vertering
- B. adsorpsie
- C. absorpsie
- D. assimilasie

**GAUTENG DEPARTMENT OF EDUCATION
SENIOR CERTIFICATE EXAMINATION**

AGRICULTURAL SCIENCE SG

TIME: 3 hours

MARKS: 300

REQUIREMENTS:

- An approved (non-programmable) pocket calculator. Candidates must supply their own calculators.

INSTRUCTIONS:

- The examination paper consists of TWO sections.
- Answer ALL the questions.
- Answer Question 1 (Multiple-choice questions) on the **answer sheet** on the **inside cover** of your **answer book**.
- Please write neatly and legibly.

SECTION A

**QUESTION 1A
MULTIPLE-CHOICE QUESTIONS**

Various possibilities are suggested as answers to the following questions, only one of which is correct. Indicate the correct answer by making a cross (X) over the appropriate letter next to the question number on the **answer sheet** on the **inside cover** of your **answer book**.

EXAMPLE:

A	B	X	D
---	---	---	---

If more than one cross appears, no marks will be awarded.

1.1 Production of bile is done by the _____.

- A. gall bladder
- B. stomach
- C. liver
- D. kidney

1.2 The process by which nutrients are taken in by the small intestine is called _____.

- A. digestion
- B. adsorption
- C. absorption
- D. assimilation

- 1.3 Swart brak bevat 'n oormaat _____ .
- A. natriumbikarbonaat
 - B. natriumchloried
 - C. natriumsulfaat
 - D. kaliumchloried
- 1.4 Die opwaartse beweging van water deur mikroporieë vind plaas deur middel van _____ .
- A. waterdruk
 - B. swaartekrag (gravitasie)
 - C. kapillariteit
 - D. verdamping
- 1.5 Helling speel 'n belangrike rol in _____ .
- A. grondtemperatuur
 - B. grondbewerking
 - C. grondstruktuur
 - D. reënval
- 1.6 Volume in die rantsoen van 'n herkouer kan verkry word deur _____ .
- A. ruvesel
 - B. ruproteïen
 - C. stikstofvrye ekstrak
 - D. nie-proteïen stikstof
- 1.7 Die faktor wat NIE die verteerbaarheid van 'n voer bepaal NIE, is die _____ .
- A. ouderdom van die plant
 - B. hoeveelheid voer ingeneem
 - C. seisoen van die jaar
 - D. tipe dier
- 1.8 Die teelmetode waar volbloed manlike diere herhaaldelik met minder waardevolle vroulike diere gepaar word, staan bekend as _____ .
- A. lynteling
 - B. opgradering
 - C. inteling
 - D. kruisteling
- 1.9 'n Ystertekort by plante veroorsaak _____ .
- A. rosette
 - B. chlorose
 - C. blaarskroei
 - D. swarthart

- 1.3 Black brack contains an excess of _____ .
- sodium bicarbonate
 - sodium chloride
 - sodium sulphate
 - potassium chloride
- 1.4 Upward movement of water through micropores takes place by means of _____ .
- water pressure
 - gravity
 - capillarity
 - evaporation
- 1.5 Slope plays an important role in _____ .
- soil temperature
 - soil tillability
 - soil structure
 - rainfall
- 1.6 Bulkiness in the ration of a ruminant can be obtained by _____ .
- crude fibre
 - crude protein
 - nitrogen-free extract
 - non-protein nitrogen
- 1.7 The factor that does NOT determine the digestibility of a feed, is the _____ .
- age of the plant
 - quantity of feed taken
 - season of the year
 - type of animal
- 1.8 The breeding method when thoroughbred males are repeatedly mated with inferior females, is called _____ .
- line breeding
 - upgrading
 - inbreeding
 - cross-breeding
- 1.9 An iron shortage in plants causes _____ .
- rosette
 - chlorosis
 - leaf scorch
 - black heart

- 1.10 Die faktor wat NIE 'n produksiefaktor is nie, is _____ .
- A. grond
 - B. vegetasie
 - C. arbeid
 - D. bestuur
- 1.11 Arbeiders wat 'n deel van hul vergoeding *in natura* ontvang, is _____ .
- A. permanente werkers
 - B. loswerkers
 - C. seisoenwerkers
 - D. stukwerkers
- 1.12 'n Uitvloeisel van bodemopnames, is _____ .
- A. weidingsbenutting
 - B. grondkartering
 - C. streek- en plaasbeplanning
 - D. grondbenutting
- 1.13 Savanne is 'n term om _____ te beskryf.
- A. die Karoo
 - B. 'n ware woestyn
 - C. temperatuurwoude
 - D. hoë grasvelde met yl verspreide bome
- 1.14 Die eenheidsprys van KAN (28) is _____ as 'n ton R476 kos.
- A. R 70,00
 - B. R 100,00
 - C. R 270,00
 - D. R 17,00
- 1.15 Die stadium as 'n koei seksueel aktief is, is _____ .
- A. met-estrus
 - B. pro-estrus
 - C. estrus
 - D. di-estrus
- 1.16 Die produksie van spermatogonia vind plaas in die _____ .
- A. selle van Sertoli
 - B. epididimus
 - C. kliere van Cowper
 - D. seminiferiese buisies

- 1.10 The factor that is NOT a production factor, is _____ .
- A. soil
 - B. vegetation
 - C. labour
 - D. management
- 1.11 The labourers who receive part of their wages *in natura* are _____ .
- A. permanent workers
 - B. casual workers
 - C. seasonal workers
 - D. piece workers
- 1.12 An outcome of soil surveys is _____ .
- A. pasture utilisation
 - B. soil mapping
 - C. regional and farm planning
 - D. soil utilisation
- 1.13 Savannah is a term which is used to describe _____ .
- A. the karoo
 - B. a true desert
 - C. temperate forests
 - D. high grassveld with thinly spread trees.
- 1.14 If a ton of LAN(28) costs R476, the unit price will be _____ .
- A. R 70,00
 - B. R 100,00
 - C. R 270,00
 - D. R 17,00
- 1.15 The phase during which a cow is sexually active is called _____ .
- A. met-oestrus
 - B. pro-oestrus
 - C. oestrus
 - D. di-oestrus
- 1.16 The production of spermatogonia takes place in the _____ .
- A. cells of Sertoli
 - B. epididymis
 - C. glands of Cowper
 - D. seminiferous tubules

- 1.17 Die kolon van die herkouer is verantwoordelik vir die _____ .
- A. ekskresie van water
 - B. absorpsie van water
 - C. sekresie van water
 - D. split van watermolekules
- 1.18 Watter van die volgende is NIE 'n eienskap van sandgrond NIE?
- A. Goeie dreinerings
 - B. Hoë vrugbaarheid
 - C. Maklik om te bewerk
 - D. Hoë infiltrasievermoë
- 1.19 Melkkoors ontstaan as gevolg van 'n tekort aan _____ .
- A. fosfor
 - B. vitamien D
 - C. kalsium
 - D. magnesium
- 1.20 Gedurende kunsmatige inseminasie word semen gedeponeer in die _____ .
- A. anus
 - B. serviks
 - C. vagina
 - D. uterus

20x2= [40]

VRAAG 1B

Verskaf die korrekte term vir elk van die volgende stellings:

- 1.21 'n Vertikale snit deur die grond wat die verskillende grondhorisonte aandui.
- 1.22 Die vermoë van die grond om 'n gegewe hoeveelheid water vas te hou nadat dit versadig is en dreinerings plaasgevind het.
- 1.23 Die suur wat gevorm word as koolstofdiksied in water oplos.
- 1.24 Die struktuur in die rumen van 'n kalf wat melk direk neem na die abomasum.
- 1.25 Die funksie van gal deur vet op te breek in klein druppels.
- 1.26 Die sagte sakagtige vergroting in die esofagus van 'n hoender.
- 1.27 Die stof in groen plante wat gebruik word om Vitamien A te sintetiseer.
- 1.28 Die deel van voer wat alle stowwe behalwe water insluit.

1.17 The colon of the ruminant is responsible for the _____ .

- A. excretion of water
- B. absorption of water
- C. secretion of water
- D. splitting of water molecules

1.18 Which of the following is NOT characteristic of sandy soil?

- A. Good drainage
- B. High fertility
- C. Easy to cultivate
- D. High infiltration rate

1.19 Milk fever can be related to a deficiency of _____ .

- A. phosphorus
- B. vitamin D
- C. calcium
- D. magnesium

1.20 During artificial insemination, semen is deposited in the _____ .

- A. anus
- B. cervix
- C. vagina
- D. uterus

20x2= [40]

QUESTION 1B

Provide the correct term for each of the following statements:

- 1.21 A vertical section through soil showing the different soil horizons.
- 1.22 The ability of the soil to hold a given quantity of water, after complete saturation and drainage.
- 1.23 The acid formed when carbon dioxide dissolves in soil water.
- 1.24 The structure found in the rumen of a calf by which milk is directly taken to the abomasum.
- 1.25 The function of bile by which fat is broken up in small droplets.
- 1.26 The soft bag-like enlargement in the esophagus of a fowl.
- 1.27 The substance found in green plants from which vitamin A can be synthesized.
- 1.28 Part of the feed which includes all constituents except water.

1.29 Die proses waardeur 'n ryp ovum in die infundibulum vrygestel word.

1.30 'n Stikstofbevattende kunsmisstof wat op suurgrond gebruik word.

10x2= (20)

VRAAG 1C

Metodes van vegetatiewe voortplanting in plante is:

Risome, bolle, wortellote, steggies, knolle, uitlopers

Kies uit die gegewe lys die mees ekonomiese en effektiewe voortplantingsmetode vir die volgende:

1.31 Aarbeie vir die mark

1.32 Aartappels vir die aartappelskyfie-industrie

1.33 Wyndruiwe wat geplant word vir 'n koöperatiewe kelder

1.34 Kikuyu gras vir tuinbou

1.35 Irisse vir 'n kwekery

(5)

VRAAG 1D

Voltooi elk van die volgende stellings deur die ontbrekende woorde in te vul.

1.36 Geleende geld word na verwys as _____ .

1.37 'n Siekte wat lei tot die verswering en misvorming van die horingvlies van die oë van varke staan bekend as _____ .

1.38 Korrels en krummels is voorbeelde van 'n _____ struktuur.

1.39 'n Horison wat bestaan uit soliede rots is _____ .

1.40 'n Grond met 'n sterk kohesiekrag is _____ .

5x2= (10)

TOTAAL VIR AFDELING A: [75]

1.29 The process by which the ripe ovum is released into the infundibulum.

1.30 The nitrogen containing fertilizer to use on an acid soil.

10x2= (20)

QUESTION 1C

Methods of vegetative reproduction in plants are:

Rhizomes, bulbs, suckers, grafted root cuttings, stem tubers, runners

Choose from the given list, the most economical and effective propagation method for the following:

1.31 Strawberries for the market

1.32 Potatoes for the potato chip industry

1.33 Wine grapes planted for a co-operative cellar

1.34 Kikuyu grass for gardening services

1.35 Irises for a nursery

(5)

QUESTION 1D

Complete each of the following statements by filling in the missing words.

1.36 Borrowed money is referred to as _____ .

1.37 A disease which results in the ulceration and deformation of the cornea of the eyes of pigs is called _____ .

1.38 Granules and crumbs are examples of _____ structure.

1.39 A horizon which consists of solid rock is _____ .

1.40 A soil with strong cohesion force is the _____ .

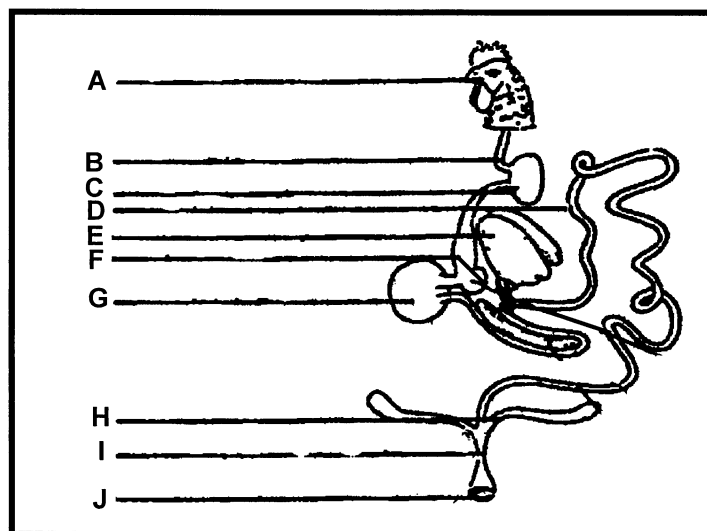
5x2= (10)

TOTAL FOR SECTION A: [75]

AFDELING B

VRAAG 2

Bestudeer die volgende diagram en beantwoord die vrae wat volg.

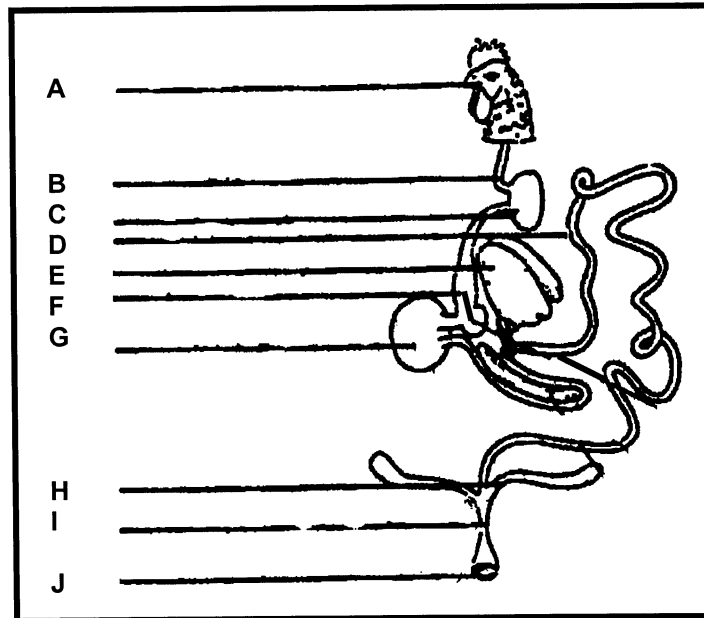


- 2.1 Noem die plaasdier wat so 'n spysverteringstelsel het. (1)
- 2.2 Gee die naam van die deel waar die volgende plaasvind:
- Soutsuur afgeskei word
 - Verteerde voedsel geabsorbeer word
 - Die maal van kos
 - Die stoor en sagmaak van voedsel
 - Die deponering van pankreas-sap (5)
- 2.3 Voorsien die korrekte byskrifte vir A tot I. (9)
- 2.4 Behalwe die vertering van sellulose, beskryf kortliks die ander funksies van die mikro-organismes in die spysverteringstelsel van die herkouer. (6)
- 2.5 Vitamien A is essensieel vir plaasdiere. Noem VIER redes hoekom vitamien A essensieel is vir hierdie diere. (4)
- 2.6 Noem die voedingstoftekort wat vir die volgende siektes verantwoordelik is:
- 2.6.1 Parakeratose
 - 2.6.2 Kropgeswel
 - 2.6.3 Duinetering
 - 2.6.4 Lamkruis
 - 2.6.5 Bloedarmoede
 - 2.6.6 Ragitis
 - 2.6.7 Hipo-magneseemie
 - 2.6.8 Nagblindheid (8)

SECTION B

QUESTION 2

Study the diagram below and answer the questions that follow.



- 2.1 Name the farm animal that has such a digestive system. (1)
- 2.2 Give the name of the part where the following takes place:
- a) Hydrochloric acid is secreted
 - b) Digested nutrients are absorbed
 - c) The grinding of food
 - d) The storage and softening of food
 - e) The depositing of pancreatic juice
- (5)
- 2.3 Name the parts labelled A to I. (9)
- 2.4 Except for the digestion of cellulose, briefly describe the other functions of the micro-organisms in the digestive system of a ruminant. (6)
- 2.5 Vitamin A is essential for farm animals. Name FOUR reasons why vitamin A is essential for these animals. (4)
- 2.6 Name the nutrient deficiency responsible for each of the following diseases:
- 2.6.1 Parakeratosis
 - 2.6.2 Goitre
 - 2.6.3 Wasting disease
 - 2.6.4 Swayback
 - 2.6.5 Anaemia
 - 2.6.6 Rickets
 - 2.6.7 Hypomagnesaemia
 - 2.6.8 Night blindness
- (8)

2.7 Onderskei tussen ruvoere en konsentrate deur te verwys na die volgende:

2.7.1 Definisies

(4)

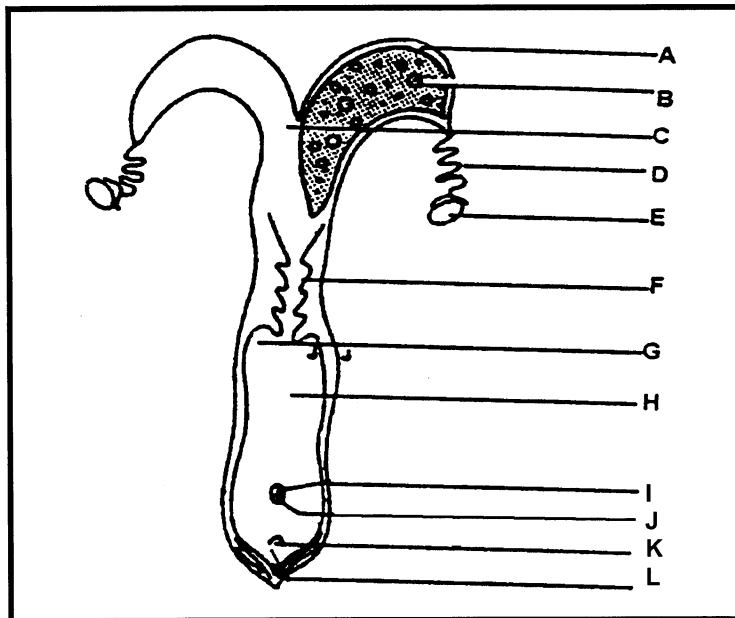
2.7.2 Funksies

(8)

[45]

VRAAG 3

3.1 Bestudeer die diagram van 'n gedeeltelike geopende reproduksiekanaal van 'n koei en beantwoord die vrae wat volg.



3.1.1 Identifiseer die genummerde gedeeltes A tot L.

(12)

3.1.2 Dui die nommer aan van die gedeelte waar die volgende plaasvind:

- a) Deponering van semen tydens kunsmatige inseminasie
- b) Plek van bevrugting
- c) Plek van uitskeiding van die kalf en die plasenta gedurende geboorte
- d) Ovulasie

(4)

3.2 Die estrussiklus is die reëlmatige, wederkerende periode wat voorkom by geslagsryp koeie.

3.2.1 Noem die sigbare tekens van 'n koei in estrus.

(8)

3.2.2 Name AGT voordele van kunsmatige inseminasie.

(8)

3.3 Noem die oorsake van fisiologiese of funksionele onvrugbaarheid by koeie.

(6)

3.4 Noem SEWE nadele van inteling.

(7)

[45]

2.7 Differentiate between roughages and concentrates by stating the following:

2.7.1 Definitions

(4)

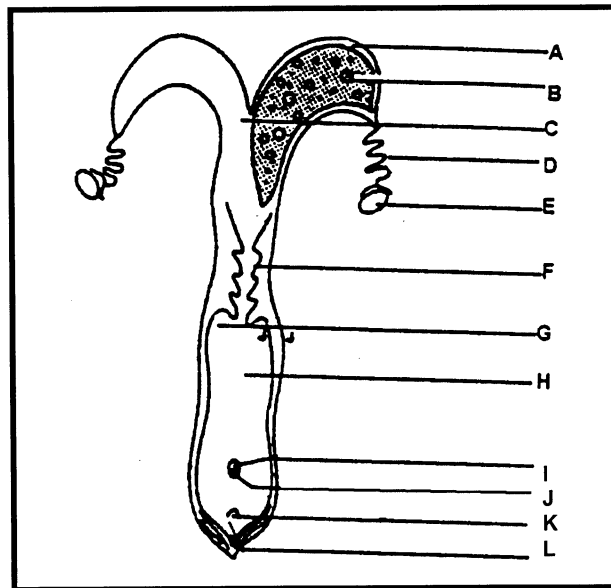
2.7.2 Functions

(8)

[45]

QUESTION 3

3.1 Study the diagram which represents the partially opened reproductive tract of a cow and answer the questions that follow.



3.1.1 Identify the parts labelled A to L.

(12)

3.1.2 Indicate the number of the part where the following occurs:

- Deposition of semen during artificial insemination
- Site for fertilization
- Site for expulsion of the calf in the placenta during parturition
- Ovulation

(4)

3.2 Oestrus cycle is the regularly recurring period which is found in sexually ripe or adult cows.

3.2.1 Name the visible signs of a cow in oestrus.

(8)

3.2.2 Name EIGHT advantages of artificial insemination.

(8)

3.3 List the causes of physiological or functional infertility in cows.

(6)

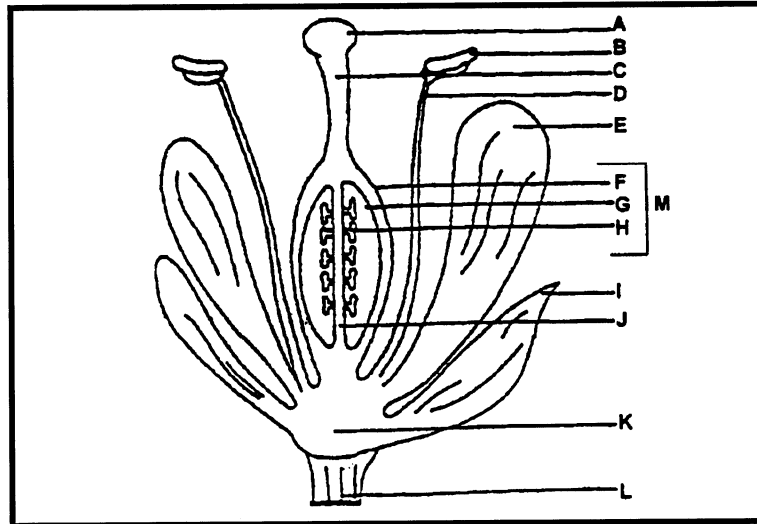
3.4 State SEVEN disadvantages of inbreeding.

(7)

[45]

VRAAG 4

4.1 Bestudeer die diagram en beantwoord die vrae wat volg.



4.1.1 Voorsien byskrifte vir die dele van A tot L. (12)

4.1.2 Noem die funksies van die volgende dele:

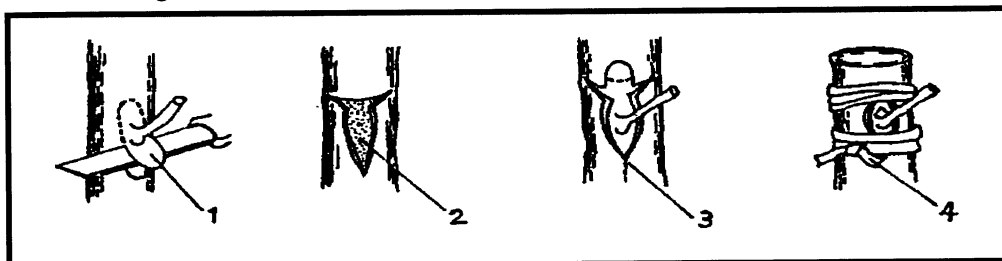
- a) L (4)
- b) K (4)

4.2 Beantwoord die volgende vrae oor kruis- en selfbestuiwing.

- 4.2.1 Definieer die konsep **selfbestuiwing**. (2)
- 4.2.2 Onder watter omstandighede of toestande kom selfbestuiwing voor? (4)
- 4.2.3 Hoe verskil selfbestuiwing van kruisbestuiwing? (2)
- 4.2.4 Noem en beskryf DRIE agente van kruisbestuiwing. (6)

4.3 Onderskei tussen eensaadlobbige en tweesaadlobbige plante. (8)

4.4 Bestudeer die volgende illustrasies en beantwoord die vrae wat volg.



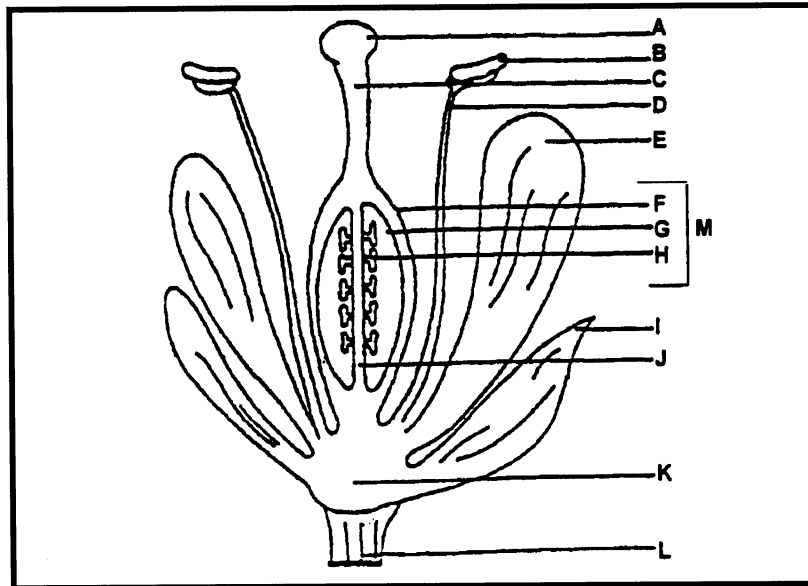
- 4.4.1 Identifiseer die proses wat in die diagramme uitgebeeld word. (1)
- 4.4.2 Wat is die doel van die proses? (2)
- 4.4.3 Identifiseer dele 1 tot 4. (4)

(45)

b.o.

QUESTION 4

4.1 Study the diagram below and answer the questions that follow.



4.1.1 Label parts A to L. (12)

4.1.2 Name the functions of the following parts:

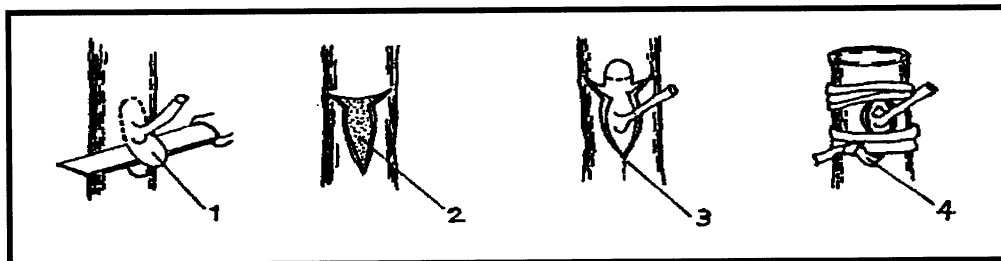
- a) L (4)
b) K

4.2 Answer the following questions on self-pollination and cross-pollination.

- 4.2.1 Define **self-pollination**. (2)
4.2.2 Under which circumstances or conditions does self-pollination occur? (4)
4.2.3 How does self-pollination differ from cross-pollination? (2)
4.2.4 List and describe the THREE agents of cross-pollination. (6)

4.3 Differentiate between the monocotyledonous and dicotyledonous plants. (8)

4.4 Study the following illustrations and answer the questions that follow.



- 4.4.1 Identify the process illustrated by the diagrams above. (1)
4.4.2 What is the purpose of the process? (2)
4.4.3 Identify parts 1 to 4. (4)

[45]

VRAAG 5

5.1 Beantwoord die volgende vrae oor groenbemesting.

5.1.1 Wat word bedoel met die konsep **groenbemesting**? (2)

5.1.2 Noem 'n geskikte gewas vir groenbemesting en ook die tyd wanneer dit ingeploeg moet word. (2)

5.2 Kies uit die onderstaande lys die kunsmis wat in elk van die volgende gevalle gebruik moet word:

- | |
|---|
| <ol style="list-style-type: none"> 1. Ureum 2. K.A.N 3. Dolomitiese landboukalk 4. Superfosfaat 5. 2:3:2 (22) 6. Kaliumsulfaat 7. Roufosfaat |
|---|

5.2.1 'n Kalium kunsmis vir gebruik op 'n grond met 'n hoë natriuminhoud

5.2.2 'n Suurgrond met 'n magnesiumtekort

5.2.3 'n Suur sanderige grond met min stikstof

5.2.4 'n Suurgrond met 'n fosfaatekort

5.2.5 'n Fosfaatkunsmis wat bestaan uit monokalsiumfosfaat en gips

5.2.6 'n Stikstofkunsmis wat deur middel van blaarbespuiting toegedien word

5.2.7 'n Algemene behoefte aan N, P en K

5.2.8 'n Stikstofkunsmis wat deur middel van besproeiingswater toegedien word (8)

5.3 Vergelyk skoonbewerking met stoppelbewerking in tabelvorm deur na die volgende aspekte te verwys:

	Aspek	Skoonbewerking	Stoppelbewerking
5.3.1	Deurlugting		
5.3.2	Kompaksie		
5.3.3	Waterinfiltrasie		
5.3.4	Voedingstof status		
5.3.5	Struktuur (grond)		

(10)

5.4 Noem SES doelwitte van dreinerings. (6)

5.5 Noem SEWE omstandighede waaronder sprinkelbesproeiing die beste resultate sal lewer. (7)

5.6 Noem en bespreek kortliks die VYF belangrike veldtipes in Suidelike Afrika. (10)

[45]

QUESTION 5

5.1 Answer the following questions on green manuring.

5.1.1 What is meant by **green manuring**? (2)

5.1.2 Name a crop suitable for green manuring and the time when it should be ploughed. (2)

5.2 From the list below, choose the fertilizer to be used in each of the following cases:

1. Urea
2. LAN
3. Dolomitic agricultural lime
4. Superphosphate
5. 2:3:2 (22)
6. Potassium sulphate
7. Raw phosphate

5.2.1 A Potassium fertilizer needed on a soil with a high sodium content

5.2.2 An acid soil with magnesium deficiency

5.2.3 An acid, sandy soil, poor in nitrogen

5.2.4 An acid soil with phosphate deficiency

5.2.5 A phosphate fertilizer consisting of monocalcium phosphate and gypsum

5.2.6 Nitrogen fertilizer to be applied by means of leaf spraying

5.2.7 A general need for N, P and K

5.2.8 Nitrogen fertilizer applied through irrigation water (8)

5.3 Compare bare cultivation with mulch cultivation in tabular form by referring to the following aspects:

	Aspect	Bare cultivation	Mulch cultivation
5.3.1	Aeration		
5.3.2	Compaction		
5.3.3	Water infiltration		
5.3.4	Nutrient status		
5.3.5	Structure (soil)		

(10)

5.4 List SIX objectives of drainage. (6)

5.5 Name SEVEN circumstances under which spray irrigation method will provide best results. (7)

5.6 State and briefly discuss the FIVE main types of veld in Southern Africa. (10)

[45]

VRAAG 6

- 6.1 Daar is verskillende tipes krediet beskikbaar vir landboukundige doeleindes.
- 6.1.1 Noem DRIE tipes daarvan en gee 'n voorbeeld van elk. (6)
- 6.1.2 Noem VYF probleme verbonde aan kapitaal. (5)
- 6.2 Die bemerking van landboukundige produkte is onderhewig aan bepaalde probleme. Noem SES van hierdie probleme. (6)
- 6.3 Noem VYF voordele van vrye bemerking. (5)
- 6.4 Noem SES faktore wat bydra tot verhoogde gronderosie in Suid-Afrika. (6)
- 6.5 Noem die besproeiingsmetode wat in elk van die volgende situasies geskik sal wees:
- 6.5.1 Verbouing van rygewasse met 'n beperkte hoeveelheid water
- 6.5.2 Op plekke waar 'n gelyke verspreiding van water nodig is
- 6.5.3 Waar saliniteit en waterversadiging 'n probleem is
- 6.5.4 Op grond waar die infiltrasie nie te hoog is nie
- 6.5.5 Waar die stroom water baie sterk is (5)
- 6.6 Noem TWEE apparate wat gebruik word in besproeiingskedulering. (2)
- 6.7 Die klimaat bepaal of 'n streek geskik is vir gewasproduksie. Verduidelik die belangrikheid van die klimaat deur te verwys na die faktore wat gewasproduksie bepaal. (10)

[45]

TOTAAL VIR AFDELING B: [225]

TOTAAL: 300

EINDE

QUESTION 6

- 6.1 There are different types of credit available for agricultural purposes.
- 6.1.1 State THREE of these and give an example in each case. (6)
- 6.1.2 List FIVE problems associated with capital. (5)
- 6.2 The marketing of agricultural products is subject to particular problems. List SIX of these problems. (6)
- 6.3 State FIVE advantages of free marketing. (5)
- 6.4 List SIX factors that lead to increased soil erosion in South Africa. (6)
- 6.5 Provide the irrigation method suitable for each situation mentioned below:
- 6.5.1 Cultivation of row crops with a restricted amount of water
- 6.5.2 On areas where even distribution of water is required
- 6.5.3 Where salinity and water logging are dangers
- 6.5.4 On soil where water infiltration is low
- 6.5.5 The stream of water is strong (5)
- 6.6 Name TWO apparatus used for scheduling irrigation. (2)
- 6.7 Climate determines if a region is suitable for crop production. Explain the importance of climate by referring to the factors that influence crop production.

(10)
[45]

TOTAL FOR SECTION B: [225]

TOTAL: 300

END