



G 68 G
S. 559



REPUBLIC OF SOUTH AFRICA
GOVERNMENT GAZETTE
STAATSKOERANT
VAN DIE REPUBLIEK VAN SUID-AFRIKA

REGULATION GAZETTE No. 1441

Registered at the Post Office as a Newspaper

PRICE 10c PRYS
OVERSEAS 15c OORSEE
POST FREE — POSVRY

REGULASIEKOEERANT No. 1441

As 'n Nuusblad by die Poskantoor Geregistreer

Vol. 71]

PRETORIA, 7 MAY 1971
7 MEI

[No. 3090

PROCLAMATIONS

*by the State President of the Republic
of South Africa*

No. R. 92, 1971

SEA FISHERIES ACT, 1940

Under section 4 of the Sea Fisheries Act, 1940 (Act 10 of 1940), I hereby fix the maximum number of whales that may be caught and treated during the 1971 whaling season by land stations situated on the Indian Ocean and Atlantic Ocean coasts at—

Indian Ocean (Durban)—Baleen Whales: 236,8 calculated in Blue Whale Units. Sperm Whales: 2 847 in number;

Atlantic Ocean (Saldanha Bay)—Baleen Whales: 162,7 calculated in Blue Whale Units. Sperm Whales: 798 in number.

For the purposes of this Proclamation—

(i) "1971 whaling season" shall mean the whaling season described in Government Notice R. 273 of 26 February 1971; and

(ii) "Blue Whale Unit" shall mean two (2) fin whales or six (6) sei whales.

Given under my Hand and the Seal of the Republic of South Africa at Cape Town on this Nineteenth day of April, One thousand Nine hundred and Seventy-one.

J. J. FOUCHÉ, State President.

By Order of the State President-in-Council:

S. L. MULLER.

A—63437

PROKLAMASIES

*van die Staatspresident van die Republiek
van Suid-Afrika*

No. R. 92, 1971

WET OP SEEVISSERYE, 1940

Kragtens artikel 4 van die Wet op Seevisserye, 1940 (Wet 10 van 1940), stel ek hierby die maksimum getal walvisse wat gedurende die 1971-walvisseisoen deur landstasies geleë aan die Indiese Oseaan-kus en die Atlantiese Oseaan-kus gevang en handel mag word, vas op—

Indiese Oseaan (Durban)—Baleinwalvisse 236,8 bereken in Blouwalviseenhede, Potvisse: 2 847 in getal;

Atlantiese Oseaan (Saldanhabaai)—Baleinwalvisse: 162,7 bereken in Blouwalviseenhede. Potvisse: 798 in getal.

Vir die toepassing van hierdie Proklamasie beteken—

(i) "1971-walvisseisoen" die walvisseisoen omskryf in Goewermenskennisgewing R. 273 van 26 Februarie 1971; en

(ii) "Blouwalviseenheid" twee (2) vinwalvisse of ses (6) seiwalvisse.

Gegee onder my Hand en die Seël van die Republiek van Suid-Afrika te Kaapstad, op hede die Negentiende dag van April Eenduisend Negehoenderd Een-en-sewentig.

J. J. FOUCHÉ, Staatspresident.

Op las van die Staatspresident-in-rade:

S. L. MULLER.

1—3090

No. R. 94, 1971

BANTU AUTHORITIES SERVICES BOARD

Under and by virtue of the powers vested in me by section 17 of the Bantu Authorities Act, 1951 (Act 68 of 1951), read with section 25 of the Bantu Administration Act, 1927 (Act 38 of 1927), I hereby repeal Proclamation R. 68 of 1970.

Given under my Hand and the Seal of the Republic of South Africa at Cape Town on this Eighth day of April, One thousand Nine hundred and Seventy-one.

J. J. FOUCHE, State President.

By Order of the State President-in-Council:

M. C. BOTHA.

(File 1/2/2)

No. R. 95, 1971

PROHIBITION OF THE EXPORT OF CATTLE, SHEEP, GOATS AND PIGS

Under the powers vested in me by section 87 of the Marketing Act, 1968 (No. 59 of 1968), I hereby—

(a) prohibit the export from the Republic of cattle, sheep, goats and pigs, except under authority of a permit issued by the Secretary for Agricultural Economics and Marketing or otherwise than in accordance with the conditions specified therein;

(b) repeal Proclamation R. 83 of 1966.

Given under my Hand and the Seal of the Republic of South Africa at Cape Town on this Thirtieth day of April, One thousand Nine hundred and Seventy-one.

J. J. FOUCHE, State President.

By Order of the State President-in-Council:

D. C. H. UYS.

GOVERNMENT NOTICES**DEPARTMENT OF AGRICULTURAL ECONOMICS AND MARKETING**

No. R. 743

7 May 1971

OILSEEDS CONTROL SCHEME**LEVY AND SPECIAL LEVY ON OILSEEDS**

In terms of section 79 (a) of the Marketing Act, 1968 (No. 59 of 1968), I, Dirk Cornelis Hermanus Uys, Minister of Agriculture, hereby make known that the Oilseeds Control Board, referred to in section 3 of the Oilseeds Control Scheme, published by Proclamation R. 55 of 1968, as amended, has in terms of sections 16 and 17 of that Scheme, with my approval and with effect from the date of publication hereof, imposed the levy and special levy, set out in the Schedule hereto, in substitution of the levies and special levies published by Government Notices R. 682 of 4 May 1962, R. 759 of 13 May 1966, and R. 25 of 8 January 1971, which are hereby repealed.

D. C. H. UYS, Minister of Agriculture.

No. R. 94, 1971

RAAD VIR BANTOE-OWERHEIDSDIENSTE

Kragtens die bevoegdheid my verleen by artikel 17 van die Wet op Bantoe-owerhede, 1951 (Wet 68 van 1951), gelees met artikel 25 van die Bantoe-administrasie Wet, 1927 (Wet 38 van 1927), herroep ek Proklamasie R. 68 van 1970 hierby.

Gegee onder my Hand en die Seël van die Republiek van Suid-Afrika te Kaapstad, op hede die Agste dag van April Eenduisend Negehoenderd Een-en-sewentig.

J. J. FOUCHE, Staatspresident.

Op las van die Staatspresident-in-rade:

M. C. BOTHA.

(Lêer 1/2/2)

No. R. 95, 1971

VERBOD OP DIE UITVOER VAN BEESTE, SKAPE, BOKKE EN VARKE

Kragtens die bevoegdheid my verleen by artikel 87 van die Bemerkingswet, 1968 (No. 59 van 1968)—

(a) verbied ek hierby die uitvoer uit die Republiek van beeste, skape, bokke en varke, behalwe op gesag van 'n permit uitgereik deur die Sekretaris van Landbou-ekonomie en -bemarking of anders as ooreenkomstig die voorwaardes daarin uiteengesit;

(b) herroep ek hierby Proklamasie R. 83 van 1966.

Gegee onder my Hand en die Seël van die Republiek van Suid-Afrika te Kaapstad, op hede die Dertigste dag van April Eenduisend Negehoenderd Een-en-sewentig.

J. J. FOUCHE, Staatspresident.

Op las van die Staatspresident-in-rade:

D. C. H. UYS.

GOEWERMENSKENNISGEWINGS**DEPARTEMENT VAN LANDBOU-EKONOMIE EN -BEMARKING**

No. R. 743

7 Mei 1971

OLIESADEBEHEERSKEMA**HEFFING EN SPESIALE HEFFING OP OLIESADE**

Ingevolge artikel 79 (a) van die Bemerkingswet, 1968 (No. 59 van 1968), maak ek, Dirk Cornelis Hermanus Uys, Minister van Landbou, hierby bekend dat die Oliesadebeheerraad, genoem in artikel 3 van die Oliesadebeheerskema, afgekondig by Proklamasie R. 55 van 1968, soos gewysig, kragtens artikels 16 en 17 van daardie Skema, met my goedkeuring en met ingang van datum van publikasie hiervan, die heffing en spesiale heffing in die Bylae hiervan uiteengesit, opgelê het ter vervanging van die heffings en spesiale heffings afgekondig by Goewermenskennisgewings R. 682 van 4 Mei 1962, R. 759 van 13 Mei 1966, en R. 25 van 8 Januarie 1971, wat hierby herroep word.

D. C. H. UYS, Minister van Landbou.

SCHEDULE

1. In this notice, unless inconsistent with the context, any word or expression to which a meaning has been assigned in the Oilseeds Control Scheme, published by Proclamation R. 55 of 1968, as amended, shall have a corresponding meaning.

2. The following levy and special levy are hereby imposed on groundnuts and sunflower seed sold through the Board:

	Levy (per metric ton)	Special levy (per metric ton)
	R	R
(a) Shelled groundnuts.....	1,00	2,00
(b) Unshelled groundnuts.....	0,70	1,40
(c) Sunflower seed.....	0,75	1,50

3. A levy of 50c per metric ton is hereby imposed on all soya beans [excluding soya bean seed which has been certified in terms of a seed certification scheme under the Seeds Act, 1961 (No. 28 of 1961), and basis seed intended for multiplication in terms of such schemes], sold by or on behalf of a producer thereof.

No. R. 747

7 May 1971

REGULATIONS FOR REGULATING THE REQUIREMENTS IN CONNECTION WITH THE EXPORT OF AVOCADOS FROM THE REPUBLIC OF SOUTH AFRICA

The State President has, under the powers vested in him by section 8 of the Fruit Export Act, 1957 (No. 27 of 1957), made the regulations set out in the Schedule hereto for regulating the requirements in connection with the export of avocados from the Republic.

SCHEDULE

Definitions

1. In these regulations unless inconsistent with the context, a word or expression to which a meaning has been assigned in the Act, shall have a corresponding meaning, and—

“avocado” means the fruit of the plant *Persea americana* Miller;

“Chief of Inspection Services” means the Chief of the Division of Inspection Services of the Department;

“consignment”, in relation to avocados, means a quantity of avocados delivered at any one time under cover of the same consignment note, delivery note or receipt note or from the same vehicle, or if any such quantity is subdivided into different cultivars, each quantity of each of the different cultivars;

“count” means the number of avocados packed in a container;

“decay” means a state of decomposition or fungus development, partly or completely affecting the quality of the avocado;

“Department” means the Department of Agricultural Economics and Marketing;

“fully grown” means a stage of maturity of an avocado to a degree ensuring the proper completion of the ripening process;

“injury” means any wound or puncture which has penetrated the skin of an avocado exposing the flesh, excluding such wounds or punctures which have healed completely or have become calloused;

“malformed” means the shape of an avocado of any cultivar not typical of that cultivar;

BYLAE

1. In hierdie kennisgewing, tensy uit die samehang anders blyk, het 'n woord of uitdrukking waaraan in die Oliesadebeheerskema, afgekondig by Proklamasie R. 55 van 1968, soos gewysig, 'n betekenis geheg is, 'n ooreenstemmende betekenis.

2. Die volgende heffing en spesiale heffing word hierby op grondboontjies en sonneblomsaad wat deur bemiddeling van die Raad verkoop word, opgelê:

	Heffing (per metrieke ton)	Spesiale heffing (per metrieke ton)
	R	R
(a) Gedopte grondboontjies.....	1,00	2,00
(b) Ongedopte grondboontjies.....	0,70	1,40
(c) Sonneblomsaad.....	0,75	1,50

3. 'n Heffing van 50c per metrieke ton word hierby opgelê op alle sojabone [uitgesonderd sojabonesaad wat ingevolge 'n saadsertifiseringskema ingevolge die Wet op Saad, 1961 (No. 28 van 1961) gesertifiseer word en basis-saad vir vermeerdering onder sodanige skema], wat deur of ten behoeve van 'n produsent daarvan verkoop word.

No. R. 747

7 Mei 1971

REGULASIES TER REËLING VAN DIE VEREISTES IN VERBAND MET DIE UITVOER VAN AVOKADO'S UIT DIE REPUBLIEK VAN SUID-AFRIKA

Die Staatspresident het, kragtens die bevoegdheid hom verleen by artikel 8 van die Wet op Uitvoer van Vrugte, 1957 (No. 27 van 1957), die regulasies in die Bylae hiervan uiteengesit, gemaak ter reëling van die vereistes in verband met die uitvoer van avokado's uit die Republiek.

BYLAE

Woordskrywings

1. In hierdie regulasies, tensy uit die samehang anders blyk, het 'n woord of uitdrukking waaraan in die Wet 'n betekenis geheg is, 'n ooreenstemmende betekenis, en beteken—

“avokado”, die vrug van die plant *Persea americana* Miller;

“bederf”, 'n toestand waar verrotting of swamontwikkeling deels of in die geheel die kwaliteit van die avokado beïnvloed;

“besending”, met betrekking tot avokado's, 'n hoeveelheid avokado's wat op 'n bepaalde tydstip afgelewer word onder dekking van dieselfde afleweringsbrief, vragbrief of ontvangsbewys, of van dieselfde voertuig, of indien so 'n hoeveelheid ingedeel is in verskillende cultivars, elke hoeveelheid van elk van die verskillende cultivars;

“besering”, enige wond of prik wat die skil van 'n avokado penetreer en die vleis blootstel, behalwe sulke wonde of prikke wat volkome genees of vereelt geraak het;

“Departement”, die Departement van Landbou-ekonomie en -bemarking;

“die Wet”, die Wet op Uitvoer van Vrugte, 1957 (No. 27 van 1957);

“gesond”, vry van insekbeskadiging, insekbesmetting of uitwendige of inwendige gebreke wat die kwaliteit van die avokado mag benadeel;

“Hoof van Inspeksiedienste”, die Hoof van die Afdeling Inspeksiedienste van die Departement;

“misvormd”, die fatsoen van 'n avokado van enige cultivar wat nie kenmerkend van daardie cultivar is nie;

"sound" means free from insect damage, insect infestation or external or internal disorders which may effect the quality of the avocado;

"sunburn" means a condition where the appearance of an avocado is affected by the sun to a greater extent than to give it a greenish-yellow colour aggregating 10 per cent of the fruit surface;

"the Act" means the Fruit Export Act, 1957 (No. 27 of 1957).

PART I GENERAL

Notice

2. (1) Any person intending to export a consignment of avocados shall give written notice of his intention to the Chief of Inspection Services, Private Bag 258, Pretoria, or to any inspector at least four days prior to the date of export.

(2) Such notice shall state—

- (a) the number and type of containers in the consignment;
- (b) the name of the exporter or his agent;
- (c) the port of export from which the export shall take place;
- (d) particulars concerning the marking and destination thereof; and
- (e) the date of export.

Submission for Inspection

3. Avocados intended for export shall be submitted for inspection at least 24 hours before such avocados are to be exported.

Inspection

4. (1) Subject to the provisions of subregulation (2), avocados shall not be exported unless they have been inspected by an inspector and approved for export in terms of these regulations.

(2) Avocados which have been inspected and approved for export may at any time thereafter be re-inspected by an inspector and after such re-inspection such avocados shall not be exported notwithstanding the previous approval granted in respect thereof by virtue of the provisions of subregulation (1), unless such approval has been confirmed by the inspector in terms of these regulations.

(3) An inspector may in any consignment of avocados open as many containers and examine the contents thereof and remove samples of such contents for the purpose of further examination or analysis as he deems necessary: Provided that—

- (a) an inspector shall for the purposes of regulation 9, inspect all the contents of a container opened by him;
- (b) no consignment or count group, as the case may be, shall be rejected unless at least 5 per cent of the containers in such consignment or count group, has been opened for inspection.

(4) An inspector's finding in relation to the containers opened by him by virtue of the provisions of subregulation (3), and the contents thereof, shall apply as a finding in respect of the whole consignment or count group thereof, as the case may be, from which such containers were drawn.

"sonbrand", 'n toestand waar die voorkoms van 'n avokado deur die son tot 'n groter mate aangetas is as om dit 'n groenerige-geel kleur wat gesamentlik 10 persent van die vrugoppervlakte beslaan, te gee;

"telling", die aantal avokado's wat in 'n houer verpak is;

"volgroeid", 'n stadium van rypheid van 'n avokado tot 'n mate wat die behoorlike voltooiing van die rypwordings-proses verseker.

DEEL I

ALGEMEEN

Kennisgewing

2. (1) Iemand wat van voorneme is om 'n besending avokado's uit te voer, moet skriftelik aan die Hoof van Inspeksiedienste, Privaatsak 258, Pretoria, of aan 'n inspekteur, kennis gee van sodanige voorneme minstens vier dae voor die datum van uitvoer.

(2) Sodanige kennisgewing moet verstrek—

- (a) die aantal en tipe houters in die besending;
- (b) die naam van die uitvoerder of sy agent;
- (c) die uitvoerhawe waarvandaan die uitvoer sal plaasvind;
- (d) besonderhede aangaande die merk en bestemming daarvan; en
- (e) die datum van uitvoer.

Aanbieding vir Inspeksie

3. Avokado's wat vir uitvoer bestem is, moet minstens 24 uur voordat sodanige avokado's uitgevoer word, vir inspeksie aangebied word.

Inspeksie

4. (1) Behoudens die bepalings van subregulasie (2) mag avokado's nie uitgevoer word nie tensy dit deur 'n inspekteur geïnspekteer en kragtens hierdie regulasies vir uitvoer goedgekeur is.

(2) Avokado's wat geïnspekteer en vir uitvoer goedgekeur is, kan te eniger tyd daarna deur 'n inspekteur herinspekteer word en ná sodanige herinspeksie mag daardie avokado's niteenstaande die vorige goedkeuring ten opsigte daarvan uit hoofde van die bepalings van subregulasie (1) verleen, nie uitgevoer word nie tensy sodanige goedkeuring deur die inspekteur ingevolge hierdie regulasies bekragtig is.

(3) 'n Inspekteur kan in 'n besending avokado's soveel houters oopmaak en die inhoud daarvan ondersoek en monsters van sodanige inhoud neem vir die doel van verdere ondersoek of ontleding as wat hy nodig mag ag: Met dien verstande dat—

- (a) 'n inspekteur vir die doeleindes van regulasie 9, die hele inhoud van elke individuele houer deur hom oopgemaak, moet inspekteer;
- (b) geen besending of tellinggroep, na gelang van die geval, afgekeur mag word tensy 5 persent van die houters in sodanige besending of tellinggroep vir inspeksie oopgemaak is nie.

(4) 'n Inspekteur se bevinding met betrekking tot die houters deur hom oopgemaak uit hoofde van die bepalings van subregulasie (3) en die inhoud daarvan, geld as 'n bevinding ten opsigte van die hele besending of tellinggroep daarvan, na gelang van die geval, waaruit sodanige houters getrek is.

(5) If an inspector is satisfied after his inspection or re-inspection that the requirements of these regulations have been complied with in respect of any consignment of avocados or count group thereof, he shall—

(a) in the case of a first inspection, approve for export such consignment or count group, as the case may be, either by marking or causing to be marked on each container or label affixed thereto, the words "Approved by Government Inspector", or by issuing a certificate which indicates such approval; and

(b) in the case of a re-inspection, confirm the previous approval granted in respect of such consignment or count group, as the case may be, by issuing a certificate which indicates such confirmation.

Inspection Fee

5. An inspection fee of 1.5 cent per container in a consignment of avocados shall be paid to the Department by the exporter of avocados when such avocados are submitted for inspection.

Appeal

6. (1) Any person who feels aggrieved as a result of any decision or action taken by an inspector may appeal against such decision or action by submitting a notice of appeal to an inspector within 12 hours after he has been notified of that decision or action and depositing within the said period with such inspector or at any office of the Division of Inspection Services of the Department, a deposit of R21: Provided that a separate deposit shall be lodged in respect of each separate consignment and provided further that if the notice of appeal and deposit are not submitted and deposited within the prescribed period of 12 hours, the appellant shall lose his right of appeal in terms of this regulation.

(2) An inspector may apply to avocados in respect of which an appeal has been lodged, or to the containers thereof, any mark which he may consider necessary for identification purposes and such avocados shall not without his consent, be removed from the place where they were inspected or where they are stored.

(3) The Secretary of the Department or an officer of the Department nominated by him, shall designate a person or persons who shall decide such an appeal, and such person or persons shall decide such appeal within 48 hours (excluding Sundays and public holidays) after it was lodged, and the decision of the person or persons so designated shall be final.

(4) The person or persons so designated shall give the appellant or his agent at least two hours' notice of the time and place determined for the hearing of the appeal, and may after the avocados have been produced and identified and all interested parties have been heard, instruct all persons (including the appellant and his agent and the inspector), to leave the place where the appeal is being considered.

(5) (a) If an appeal is dismissed or if all the avocados to which it relates, are not produced at the time and place determined by the said person or persons, the amount deposited in respect thereof shall be forfeited.

(5) Indien 'n inspekteur na sy inspeksie of herinspeksie tevrede is dat daar ten opsigte van die besending avokado's of tellinggroep daarvan aan die vereistes van hierdie regulasies voldoen is, moet hy—

(a) in die geval van 'n eerste inspeksie, sodanige besending of tellinggroep, na gelang van die geval, vir uitvoer goedkeur deur of die woorde "Goedgekeur deur Staatsinspekteur" op elke houer of op 'n etiket daaraan geheg, te merk, of te laat merk, of 'n sertifikaat wat sodanige goedkeuring aantoon, uit te reik; en

(b) in die geval van 'n herinspeksie, die vorige goedkeuring wat ten opsigte van sodanige besending of tellinggroep, na gelang van die geval, verleen is, bekragtig deur 'n sertifikaat wat sodanige bekragtiging aantoon, uit te reik.

Inspeksiegeld

5. 'n Inspeksiegeld van 1,5 sent per houer in 'n besending avokado's moet aan die Departement, deur die uitvoerder van avokado's, wanneer sodanige avokado's vir inspeksie aangebied word, betaal word.

Appel

6. (1) Iemand wat hom deur 'n beslissing of optrede van 'n inspekteur veronreg ag, kan appel aanteken teen sodanige beslissing of optrede deur binne 12 uur nadat hy van daardie beslissing of optrede in kennis gestel is, 'n kennisgewing van appel by sodanige inspekteur in te dien, en binne genoemde tydperk by die inspekteur, of by enige kantoor van die Afdeling Inspeksiedienste, van die Departement, 'n deposito van R21 te deponeer: Met dien verstande dat 'n afsonderlike deposito gestort moet word ten opsigte van elke afsonderlike besending en met dien verstande verder dat indien die kennisgewing van appel en die deposito nie binne die voorgeskrewe tydperk van 12 uur ingedien en gedeponeer word nie, die appellant sy reg van appel ingevolge hierdie regulasie verbeur.

(2) 'n Inspekteur kan aan avokado's ten opsigte waarvan 'n appel aangeteken is, of aan die houters daarvan, 'n merk aanbring wat hy vir uitkenningsoeleindes mag nodig ag, en sodanige avokado's mag nie sonder sy toestemming van die plek waar dit geïnspekteer of opgeberg is, verwyder word nie.

(3) Die Sekretaris van die Departement of 'n beampte van sy Departement deur hom benoem, wys 'n persoon of persone aan deur wie oor so 'n appel beslis moet word, en sodanige persoon of persone moet daarvoor beslis binne 48 uur (uitgesonderd Sondae en publieke vakansiedae) na indiening daarvan, en die beslissing van die aldus aangewese persoon of persone is afdoende.

(4) Die aldus aangewese persoon of persone moet die appellant of sy agent minstens twee uur kennis gee van die tyd en plek bepaal vir die verhoor van die appel, en mag nadat die betrokke avokado's vertoon en uitgeken is en alle belanghebbendes aangehoor is, alle persone (met inbegrip van die appellant en sy agent en die inspekteur) gelas om die plek waar die appel oorweeg word, te verlaat.

(5) (a) Indien 'n appel van die hand gewys word of as al die avokado's waarop dit betrekking het nie vertoon word nie op die tyd en plek bepaal deur die genoemde persoon of persone, word die bedrag wat ten opsigte daarvan gedeponeer is, verbeur.

(b) If an appeal is upheld in respect of—

(i) an entire consignment, the amount deposited in respect thereof shall be refunded to the appellant; or

(ii) one or more of, but not all the count groups in a consignment, a portion of the amount deposited in respect of the consignment, calculated according to the undermentioned formula, shall be refunded to the appellant:

$$\frac{21}{1} \times \frac{e}{f} = g, \text{ where } e = \text{the total number of count groups in the consignment in respect of which the appeal was upheld;}$$

$f = \text{the total number of count groups in the consignment; and}$

$g = \text{the amount to be refunded to the appellant in respect of the consignment.}$

(6) If in terms of this regulation an appeal is lodged in respect of one or more count groups in a consignment but not in respect of all the count groups in the consignment, the count group or number of count groups in respect of which an appeal is so lodged shall, for the purpose of the prosecution of such appeal be deemed to be a consignment.

Exemptions

7. Notwithstanding anything to the contrary, the requirements of the Act and these regulations shall not apply—

(a) to avocados intended for export to the Kingdom of Lesotho, the Kingdom of Swaziland, the Republic of Botswana and the territory of South-West Africa;

(b) to avocados in respect of which the Chief of Inspection Services has approved, in writing, that subject to conditions determined by him, they be exported as an experiment and in respect of which such conditions have been complied with; or

(c) to avocados shipped as provisions for consumption aboard a ship or other means of transport to foreign countries.

PART II

GRADING, PACKING AND MARKING

Grading

8. (1) There shall be one grade of avocados intended for export, namely Choice Grade.

(2) Subject to the allowable deviations prescribed in regulation 9, Choice Grade avocados shall comply with the requirements set out in subregulations (3) and (4).

(3) The avocados shall—

(a) be clean and free from visible spray residues;

(b) be fully grown, firm and show no signs of softening or shrivelling;

(c) not be malformed;

(d) be free from heat damage, sunburn or cold damage;

(e) be sound, free from injuries, blemishes and discoloration;

(f) be free from decay and bruises; and

(g) have stems which are firmly attached.

(4) The stems—

(a) shall be at least 4 mm and not more than 8 mm long;

(b) may be treated with a suitable fungicide; and

(c) may be treated with a suitable preparation against drying out.

(b) Indien 'n appèl gehandhaaf word ten opsigte van—

(i) 'n hele besending, word die bedrag wat ten opsigte daarvan gedeponeer is, aan die appellant terugbetaal; of

(ii) een of meer van, maar nie al die tellinggroepe in 'n besending nie, word 'n gedeelte van die bedrag wat ten opsigte van die besending gedeponeer is, bereken volgens die onderstaande formule, aan die appellant terugbetaal:

$$\frac{21}{1} \times \frac{e}{f} = g, \text{ waar } e = \text{die totale aantal tellinggroepe in die besending ten opsigte waarvan appèl gehandhaaf is;}$$

$f = \text{die totale aantal tellinggroepe in die besending; en}$

$g = \text{die bedrag wat aan die appellant terugbetaal moet word ten opsigte van die besending.}$

(6) Indien ingevolge hierdie regulasie appèl aangeteken is ten opsigte van een of meer tellinggroepe in 'n besending maar nie ten opsigte van al die tellinggroepe in die besending nie, word die tellinggroep of aantal tellinggroepe ten opsigte waarvan aldus appèl aangeteken is vir die doeleindes van die voortsetting van sodanige appèl geag 'n besending te wees.

Vrystellings

7. Nieteenstaande andersluidende wetsbepalings, is die voorskrifte van die Wet en hierdie regulasies nie van toepassing nie—

(a) op avokado's wat vir uitvoer bestem is na die Koninkryk van Lesotho, die Koninkryk van Swaziland, die Republiek van Botswana en die gebied Suidwes-Afrika;

(b) op avokado's ten opsigte waarvan die Hoof van Inspeksiedienste skriftelik goedgekeur het dat dit by wyse van proefneming uitvoer word onderworpe aan voorwaardes deur hom bepaal en ten opsigte waarvan sodanige voorwaardes nagekom is; of

(c) op avokado's wat ingeneem word as voorrade vir verbruik op 'n skip of ander vervoermiddel na die buiteland.

DEEL II

GRADERING, VERPAKKING EN MERK

Gradering

8. (1) Daar is een graad avokado's vir uitvoer bestem naamlik Keurgraad.

(2) Behoudens die toelaatbare afwykings in regulasie 9 voorgeskryf, moet Keurgraad avokado's aan die vereistes in subregulasies (3) en (4) uiteengesit, voldoen.

(3) Die avokado's moet—

(a) skoon en vry van sigbare spuitreste wees;

(b) volgroei en ferm wees en geen tekens van sagwording of verkrimping toon nie;

(c) nie misvormd wees nie;

(d) vry van hittebeskadiging, sonbrand of koue-beskadiging wees;

(e) gesond, vry van beserings, letsels en verkleuring wees;

(f) vry van bederf en kneusplekke wees; en

(g) stingels hê wat stewig vas is.

(4) Die stingels—

(a) moet minstens 4 mm en hoogstens 8 mm lank wees;

(b) mag met 'n geskikte swamdoder behandel wees; en

(c) mag met 'n geskikte middel teen uitdroging behandel wees.

Deviations

9. The maximum deviation from the requirements prescribed under regulation 8, that may be allowed, shall be as follows:

<i>Nature of deviation</i>	<i>Maximum percentage of deviation by number of fruit allowed</i>
(a) Decay.....	1
(b) Injuries.....	3
(c) All defects excluding decay and injuries—	
(i) of a serious intensity.....	5
(ii) of a light intensity.....	20
(iii) of a serious intensity and a light intensity collectively, provided such deviations are individually within the limits specified in subparagraphs (i) and (ii).....	15

Containers

10. (1) Containers which contain avocados intended for export shall—

- (a) be suitable, clean, strong, unbroken and new;
- (b) be free from protruding nails;
- (c) be manufactured from either wood or other suitable material which in the case of wood at least conforms to S.A.B.S. standards for Second Grade; and
- (d) have the following outside dimensions: 460 mm in length 300 mm in width and depth optional.

(2) All containers intended for export by sea, shall have cleats over the ends of the lids.

Packing

11. (1) Avocados in the same container shall be of the same cultivar and shall more or less correspond in ripeness, shape and appearance.

(2) Each avocado shall be wrapped separately in suitable paper, cellophane or other suitable material: Provided that newspaper shall not be used for this purpose.

(3) Avocados shall be firmly packed and the fruit protected all round with suitable material.

(4) Avocados shall be packed—

- (a) to a suitable pattern in single layers; and
- (b) to the full capacity of the container with the minimum amount of padding material commensurate to the protection of the fruit.

(5) The maximum count per container shall be as follows:

<i>Cultivar</i>	<i>Maximum count per container</i>
Hass.....	28
Fuerte.....	21
Edranol.....	21
Ryan.....	21
Carlton.....	21
Nabal.....	15
Collinson.....	15
Other cultivars.....	21

Marking of Containers

12. (1) Containers containing avocados intended for export shall clearly and legibly be marked in printed letters with the following particulars:

(a) The name and address or brand of either the producer, the owner or the exporter in letters of at least 3 mm in height;

(b) the grade, cultivar and count group of the avocados in letters of at least 10 mm in height; and

(c) the shipping mark in letters of at least 10 mm in height.

Afwykinge

9. Die maksimum afwyking van die vereistes voorgeskryf kragtens regulasies 8 wat toegelaat mag word, is soos volg:

<i>Aard van afwyking</i>	<i>Maksimum persentasie afwyking volgens getal vrugte toegelaat</i>
(a) Bederf.....	1
(b) Beserings.....	3
(c) Alle gebreke behalwe bederf en beserings—	
(i) van 'n ernstige intensiteit;.....	5
(ii) van 'n ligte intensiteit;.....	20
(iii) van 'n ernstige intensiteit en 'n ligte intensiteit gesamentlik mits sodanige afwykings individueel binne die perke in subparagrafe (i) en (ii) gespesifiseer is...	15

Houers

10. (1) Houers wat avokado's bestem vir uitvoer bevat moet—

- (a) geskik, skoon, sterk, heel en nuut wees;
- (b) vry wees van spykers wat uitsteek;
- (c) van hout of ander geskikte materiaal vervaardig wees wat, in die geval van hout, minstens aan S.A.B.S.-standaarde vir Tweede Graad voldoen; en
- (d) die volgende buitemate hê: 460 mm lank, 300 mm breed en diepte opsioneel.

(2) Alle houers bestem vir uitvoer per see moet klampies oor die ente van die deksel hê.

Verpakking

11. (1) Avokado's in dieselfde houer moet van dieselfde cultivar wees en min of meer ooreenstem in rytheid, vorm en voorkoms.

(2) Elke avokado moet afsonderlik in geskikte papier, sellofaan of ander geskikte materiaal toegedraai word: Met dien verstande dat koerantpapier nie gebruik mag word nie.

(3) Avokado's moet stewig verpak en rondom met geskikte materiaal beskerm word.

(4) Avokado's moet—

- (a) volgens 'n geskikte patroon verpak word; en
- (b) tot die volle inhoudsvermoë van die houer verpak word met die minimum hoeveelheid materiaal wat die vrug genoegsaam sal beskerm.

(5) Die maksimum telling per houer is soos volg:

<i>Cultivar</i>	<i>Maksimum telling per houer</i>
Hass.....	28
Fuerte.....	21
Edranol.....	21
Ryan.....	21
Carlton.....	21
Nabal.....	15
Collinson.....	15
Ander cultivars.....	21

Merk van Houers

12. (1) Houers waarin avokado's vir uitvoer bestem verpak is, moet met die volgende gegewens in duidelike en leesbare drukletters gemerk word:

(a) Die naam en adres of brandmerk van of die produsent, of die eienaar, of die uitvoerder met letters minstens 3 mm hoog;

(b) die graad, cultivar en tellinggroep van die avokado's met letters minstens 10 mm hoog; en

(c) die verskepingsmerk met letters minstens 10 mm hoog.

(2) No wording or marks which may possibly, directly or by implication, qualify the quality or grade designation shall be marked on a container containing avocados.

(3) If the country to which a quantity of avocados is exported, prescribes requirements relating to the marking of containers which differ from the aforesaid requirements the containers containing such avocados may, notwithstanding the provisions of this regulation, be marked in a manner so prescribed and approved by the Chief of Inspection Services.

No. R. 748

7 May 1971

REGULATIONS RELATING TO THE GRADING, PACKING, AND INSPECTION OF FRUIT, EXCLUDING CITRUS FRUIT AND CERTAIN DECIDUOUS FRUIT, INTENDED FOR EXPORT FOR PURPOSE OF SALE, AND THE MARKING OF THE CONTAINERS THEREOF.—AMENDMENT

The State President has, under the powers vested in him by section 8 of the Fruit Export Act, 1957 (No. 27 of 1957), further amended the regulations published by Government Notice R. 1372 of 10 September, 1965, as amended, as set out in the Schedule hereto.

SCHEDULE

The Schedule to Government Notice R. 1372 of 10 September 1965, as amended, is hereby further amended as follows:

1. Regulation 1 is hereby amended by the substitution for the definition of "fruit" of the following definition:

"fruit" means fresh fruit of the kinds grenadillas, litchis, mangoes, melons or other unspecified fruit, as the case may be, intended for export for the purpose of sale, excluding apricots, apples, avocados, grapes, pears, peaches, pineapples, nectarines, plums, prunes and citrus fruit."

2. Regulation 2 is hereby amended by the deletion of subregulation (3).

3. Regulation 4 is hereby amended by the deletion of the word "avocados" in subregulation (3) (b) (i).

4. Regulation 5 is hereby amended by the deletion of subregulation (3).

No. R. 757

7 May 1971

**PRICES FOR MAIZE PRODUCTS.—
REVOCATION**

In terms of section 79 (b) of the Marketing Act, 1968 (No. 59 of 1968), I, Dirk Cornelis Hermanus Uys, Minister of Agriculture, hereby make known that the Maize Board, referred to in section 2A of the Maize and Kaffircorn Scheme, published by Proclamation R. 113 of 1961, as amended, has in terms of section 27 of that Scheme, with my approval and with effect from the date of publication hereof, repealed Government Notice R. 683 of 1 May 1970, as amended.

D. C. H. UYS, Minister of Agriculture.

(2) Geen bewoording of merke wat die gehalte of graadbenaming regstreeks of by implikasie moontlik kan kwalifiseer mag op 'n houer wat avokado's bevat, gemerk word nie.

(3) Indien die land waarheen 'n hoeveelheid avokado's uitgevoer word, vereistes met betrekking tot die merk van houters voorskryf wat verskil van voormelde vereistes, mag die houters van sodanige avokado's, nieëtaande die bepalings van hierdie regulasie, gemerk word op 'n wyse aldus voorgeskryf en deur die Hoof van Inspeksiedienste goedgekeur.

No. R. 748

7 Mei 1971

REGULASIES MET BETREKKING TOT DIE GRADERING, VERPAKKING EN INSPEKSIE VAN VRUGTE, UITGENOME SITRUSVRUGTE EN SEKERE SAGTEVRUGTE, BESTEM OM VIR VERKOOP UITGEVOER TE WORD, EN DIE MERK VAN DIE HOUSERS DAARVAN.—WYSIGING

Die Staatspresident het, kragtens die bevoegdheid hom verleen by artikel 8 van die Wet op die Uitvoer van Vrugte, 1957 (No. 27 van 1957), die regulasies afgekondig by Goewermentskennisgewing R. 1372 van 10 September 1965, soos gewysig, verder gewysig soos in die Bylae hiervan uiteengesit.

BYLAE

Die Bylae van Goewermentskennisgewing R. 1372 van 10 September 1965, soos gewysig word hierby soos volg verder gewysig:

1. Regulasie 1 word hierby gewysig deur die omskrywing van "vrugte" deur die volgende omskrywing te vervang:

"vrugte", vars vrugte van die soorte grenadillas, lietsjies, mango's spanspekke of ander ongespesifiseerde vrugte, na gelang van die geval, bestem om vir verkoop uitgevoer te word, uitgenome appelkose, appels, avokado's, druiwe, pere, perskes, pynappels, kaalperskes, pruime, pruimedante en sitrusvrugte."

2. Regulasie 2 word hierby gewysig deur subregulasie (3) te skrap.

3. Regulasie 4 word hierby gewysig deur die woord "avokado's" in subregulasie (3) (b) (i) te skrap.

4. Regulasie 5 word hierby gewysig deur subregulasie (3) te skrap.

No. R. 757

7 Mei 1971

**PRYSE VAN MIELIEPRODUKTE.—
HERROEPING**

Kragtens artikel 79 (b) van die Bemarkingswet, 1968 (No. 59 van 1968), maak ek, Dirk Cornelis Hermanus Uys, Minister van Landbou, hierby bekend dat die Mielieraad, genoem in artikel 2A van die Mielie- en Kafferkring-skema, afgekondig by Proklamasie R. 113 van 1961, soos gewysig, kragtens artikel 27 van daardie Skema, met my goedkeuring en met ingang van die datum van publikasie hiervan, Goewermentskennisgewing R. 683 van 1 Mei 1970, soos gewysig, herroep het.

D. C. H. UYS, Minister van Landbou.

DEPARTMENT OF HEALTH

No. R. 734

7 May 1971

SOUTH AFRICAN PHARMACY BOARD

RULES AND MINIMUM CURRICULUM FOR THE DIPLOMA IN PHARMACY

The Minister of Health has, in terms of section 94 (4) of the Medical, Dental and Pharmacy Act, 1928 (Act 13 of 1928), as amended, approved the amendment of the rules and minimum curriculum for the Diploma in Pharmacy, made by the South African Pharmacy Board under section 94 (2) of the Act and published under Government Notice R. 2135 of 4 December 1970, as follows:

1. In rule 6 number the existing paragraph to read paragraph (1) and add the following new paragraph:

“(2) The scope of the examinations shall be in accordance with the syllabuses set out in Appendix A of these rules.”

2. After rule 24 add the following Appendix:

“APPENDIX A

BOTANY

A. Theory

Biology, its meaning and scope, and its two great subdivisions, botany and zoology; its value as a cultural and as a pharmaceutical subject. Meaning and scope of the more important subdivisions of biology; taxonomy, morphology, anatomy, physiology, genetics, evolution.

The plant kingdom and its main subdivisions and their features; bacteria, algae, fungi, lichens, bryophytes, pteridophytes, gymnosperms and angiosperms as examples of the diversity of forms of plant life and of evolutionary history and tendencies.

The plant as a living organism; form, function of the roots, stem, leaves, flowers, fruit of a typical green herbaceous land plant and of a woody perennial showing secondary thickening. The influence of the habitat (soil and aerial) on plant organs. Nature of the modifications of organs for special functions. The cell and cell division. The tissues of typical angiosperm—their structure, arrangement and functions in brief. A typical flower—its structure and the functions of the various parts; the fruit and seed-structure, dispersal, germination of seed.

Elements of plant physiology—water-relations, photosynthesis, nutrition, growth, respiration, digestion, tropisms in relation to gravity, light, water, storage of reserves. Parasitism, saprophytism, epiphytism.

A brief comparative study of the form, structure, life-history and reproduction of *Bacillus subtilis*, Tobacco Mosaic Virus *Chlamydomonas*, *Spirogyra*, *Diatome*, *Fucus*, *Rhizopus nigricans*, *Saccharomyces*, *Claviceps*, *Penicillium*, *Agaricus* (*Psalliota*), *Funaria*, *Dryopteris*, *Pinus*, a typical Monocotyledon, a typical Dicotyledon.

Principles of taxonomy as illustrated by a brief study of the representative of the following families: Liliaceae, Gramineae, Ranunculaceae, Leguminosae, Solanaceae, Compositae, Labiatae, Scrophulariaceae.

B. Practical

The examination, dissection, macroscopic and microscopic examination, description and drawing of plant material drawn from the list given above; demonstrations of ecological and physiological features to be arranged. The examination should aim at determining the powers of observation of the candidate, his capacity for describing and drawing faithfully what he has seen, and his capacity for interpreting botanical phenomena.

DEPARTEMENT VAN GESONDHEID

No. R. 734

7 Mei 1971

SUID-AFRIKAANSE APTEKERSKOMMISSIE

REÛLS EN MINIMUM LEERGANG VIR DIE DIPLOMA IN FARMASIE

Die Minister van Gesondheid het kragtens artikel 94 (4) van die Wet op Geneeshere, Tandartse en Aptekers, 1928 (Wet 13 van 1928), soos gewysig, sy goedkeuring geheg aan die wysiging van die reëls en minimum leergang vir die Diploma in Farmasie, wat deur die Suid-Afrikaanse Aptekerskommissie kragtens artikel 94 (2) van die Wet gemaak is en afgekondig is by Goewermentskennisgewing R. 2135 van 4 Desember 1970, soos volg:

1. In reël 6 nommer die bestaande paragraaf sodat dit paragraaf (1) lui en voeg die volgende nuwe paragraaf by:

“(2) Die bestek van die eksamens moet in ooreenstemming wees met die leerplanne wat in Aanhangsel A van hierdie reëls uiteengesit is”.

2. Voeg die volgende Aanhangsel na reël 24 by:

“AANHANGSEL A

CHEMIE I

Afdeling 1.—Algemene en Fisiese Chemie

- 1.1 Atoomstruktuur en die Periodieke Tabel.
- 1.2 Algemene eienskappe van die elemente.
- 1.3 Bindingsvermoë.
- 1.4 Stoïgiometrie.
- 1.5 Ekwivalente massas en die bepaling daarvan.
- 1.6 Die gastoestand.
- 1.7 Die vloeibare en vaste toestande.
- 1.8 Oplossings en metodes om konsentrasies uit te druk.
- 1.9 Kolloïede.
- 1.10 Saambindende eienskappe.
- 1.11 Elektrochemie.
- 1.12 Sure en basisse.
- 1.13 Chemiese ewewig.
- 1.14 Termochemie

Afdeling 2.—Anorganiese en Analitiese Chemie

- 2.1 Indeling van chemiese reaksies en reagentse.
- 2.2 Balansering van vergelykings.
- 2.3 Die sistematiese beskrywende en vergelykende chemie van uitgesoekte elemente.
- 2.4 Teorie van volumetriese analise.
- 2.5 Teorie van kwalitatiewe analise.

Afdeling 3.—Organiese Chemie

- 3.1 Inleiding. Organiese formuletypes.
- 3.2 Struktuur- en stereo-isomerie.
- 3.3 Formele en triviale benamings.
- 3.4.1 *Alifatiese verbindings*.—’n Oorsig van basiese reaksieweë en die formele chemie van alkane, alkene, alkyne, haloalkane, polihaloogenderivate van alkane, alkohole, aldehyede, ketone, eters, amiene, karboksiesure, suurchloriede, suuranhidriede, suuramiede, esters, nitriële.
- 3.4.2 *Aromatisiteit in benseoïede sisteme*.—Met verwysing na die bereiding en reaksies van benseen, toluen, chloorbenseen, fenol, bensaldehyd, bensoësuur, benseen-sulfoonsuur, nitrobenseen, anilien.

Afdeling 4.—Praktiese Chemie

- 4.1 Kwalitatiewe analise van uitgesoekte katione en anione.
- 4.2 *Volumetriese analise*.—Standaardiserings-, neutralisasie-, en presipitasietitrasies en redokstitrasies.
- 4.3 *Organiese analise*
- 4.3.1 Kwalitatiewe bepaling van stikstof, swael en halogeen in organiese verbindings.
- 4.3.2 Kenmerkende reaksies van uitgesoekte funksionele groepe.

CHEMISTRY I

Section 1.—General and Physical Chemistry

- 1.1 Atomic structure and the Periodic Table.
- 1.2 General properties of the elements
- 1.3 Combining power.
- 1.4 Stoichiometry.
- 1.5 Equivalent masses and their determination.
- 1.6 The gaseous state.
- 1.7 The liquid and solid states.
- 1.8 Solutions and methods of expressing concentration.
- 1.9 Colloids.
- 1.10 Colligative properties.
- 1.11 Electrochemistry.
- 1.12 Acids and bases.
- 1.13 Chemical equilibrium.
- 1.14 Thermochemistry.

Section 2.—Inorganic and Analytical Chemistry

- 2.1 Classification of chemical reactions and reagents.
- 2.2 Balancing of equations.
- 2.3 The systematic descriptive and comparative chemistry of selected elements.
- 2.4 Theory of volumetric analysis.
- 2.5 Theory of qualitative analysis.

Section 3.—Organic Chemistry

- 3.1 Introduction. Types of organic formulae.
- 3.2 Structural and stereoisomerism.
- 3.3 Formal and trivial nomenclature.
- 3.4.1 *Aliphatic compounds*.—A review of basic reaction routes and the formal chemistry of alkanes, alkenes, alkynes, haloalkanes, Polyhalogen derivatives of alkanes, alcohols, aldehydes, ketones, ethers, amines, carboxylic acids, acid chlorides, acid anhydrides, acid amides, esters, nitriles.
- 3.4.2 *Aromatically in benzenoid systems*.—With reference to the preparation and reactions of benzene, toluene, chlorobenzene, phenol, benzaldehyde, benzoic acid, benzenesulphonic acid, nitrobenzene, aniline.

Section 4.—Practical Chemistry.

- 4.1 Qualitative analysis of selected cations and anions
- 4.2 *Volumetric analysis*: Standardisation, neutralisation, redox and precipitation titrations.
- 4.3 *Organic analysis*:
- 4.3.1 Qualitative determination of nitrogen, sulphur and halogen in organic compounds.
- 4.3.2 Characteristic reactions of selected functional groups.

CHEMISTRY II

Section 1.—Physical Chemistry

- 1.1 Gases, liquids and solids.
- 1.2 Chemical bonding.
- 1.3. Solutions and phase equilibria.
- 1.4 Chemical kinetics.
- 1.5 Ionic equilibria.
- 1.6 Electrochemistry.
- 1.7 Nuclear and radiochemistry.

Section 2.—Analytical Chemistry

- 2.1 The principles of volumetric analysis.
- 2.2 Chromatographic techniques.
- 2.3 An introduction to instrumental techniques in analysis.

CHEMIE II

Afdeling I.—Fisiese Chemie

- 1.1 Gasse, vloeistowwe en vaste stowwe.
- 1.2 Chemiese binding.
- 1.3 Oplossings en fase-ewewigte.
- 1.4 Chemiese kinetika.
- 1.5 Ioniese ewewigte.
- 1.6 Elektrochemie.
- 1.7 Kern- en radiochemie.

Afdeling 2.—Analitiese Chemie

- 2.1 Die beginsels van volumetriese analise.
- 2.2 Chromatografiese tegnieke.
- 2.3 'n Inleiding tot instrumentele tegnieke van analise.

Afdeling 3.—Anorganiese Chemie

- 3.1 Die sistematiese en vergelykende chemie van uitgesoekte elemente.
- 3.2 Komplekse.

Afdeling 4.—Organiese Chemie

- 4.1 Metodes van suiwing en bepaling van fisiese konstantes.
- 4.2 Die bepaling van molekulêre formules van uitgesoekte verbindinge.
- 4.3 'n Meer gevorderde bespreking van stereo-isomerie.
- 4.4 Prototropie en uitgesoekte molekulêre omskakelings.
- 4.5 Bespreking van die chemie van uitgesoekte klasse van verbindinge uit die alifatiese, karbosikliese, aromatiese en hetroosikliese reekse met beknopte illustrasies van die toepassing van instrumentele metodes soos infrarooi en massaspektrometrie vir opklaring van struktuur.

Afdeling 5.—Praktiese Chemie

- 5.1 Kwalitatiewe analise van die elemente.
- 5.2 Volumetriese analise: Standardiserings-, neutralisasie-, presipitasie-, redoks-, kompleksometriese- en adsorpsietitrasies.
- 5.3 Instrumentele analise.
- 5.4 Bereiding en suiwing van organiese verbindinge op semimikroskaal.

DIERKUNDE

A. Teorie

1. Klein soogdier (bv. rot, konyn, marmot of kat)—uitwendige kenmerke, vel en aangehegte strukture. Spysverteringsstelsel—hoofdele van die spysverteringskanaal en aangehegte strukture. Ensieme en hormone—oorsig van hul funksies by vertering.

Peristalsis.

Mond—slym, ptialien. Maag—pepsien, HCl, rennien.

Pankreas—tripsinogeen, steapsien, amilopsien.

Dunderm—erepsien, enterokinase, lipase, Lewer—galpigmente en -soute.

Rektum—absorpsie van water, uitwerping van onverterde voedsel, uitskeiding vanuit die bloedvate van die wande.

Bloedvatstelsel—hart, belangrikste bloedvate.

Aard van arterieë, venes, poortare, kapillêre.

Funksies van bloedvervoer, beskerming (fagositose, stolling, agglutinasie).

Handhawing van konstante temperatuur.

Respiratoriese stelsel.

Senustelsel—rugmurg en senuwees: Brein en kop-senuwees.

Simpatiese stelsel—refleksboog. Funksies van dele in die algemeen.

Section 3.—Inorganic Chemistry

3.1 The systematic and comparative chemistry of selected elements.

3.2 Complexes.

Section 4.—Organic Chemistry

4.1 Methods of purification and determination of physical constants.

4.2 the determination of molecular formulae of selected compounds.

4.3 A more advanced discussion of stereoisomerism.

4.4 Protropy and selected molecular rearrangements.

4.5 Discussion of the chemistry of selected classes of compounds drawn from the aliphatic, carbocyclic, aromatic and heterocyclic series with brief illustrations of the application of instrumental methods such as infrared and mass spectrometry to the elucidation of structure.

Section 5.—Practical Chemistry

5.1 Qualitative analysis of the elements.

5.2 Volumetric analysis: Standardisation, neutralisation, precipitation, redox, complexometric and adsorption titrations.

5.3 Instrumental analysis.

5.4 Preparation and purification of organic compounds on semimicro scale.

FORENSIC PHARMACY

Candidates will be examined on their knowledge of the following legislation, in so far as it has a bearing on the practice of pharmacy:

1. Medical, Dental and Pharmacy Act (No. 13 of 1928), as amended, particularly in regard to the following:

Chapter I: Sections 2, 3, 8 and 9.

Chapter II: Sections 14-18, inclusive, 24, 24A, 27A and 33.

Chapter III: Section 37.

Chapter IV: The whole, except section 44.

Chapter V: The whole.

Chapter VI: The whole.

Chapter VII: Sections 73, 75, 76, 76 bis, 77 to 82 (except 80 bis), inclusive, 84, 87-90, inclusive, 95 and 96.

Second, Fourth, Fifth and Sixth Schedules.

Candidates will be required to have a knowledge of the English and Afrikaans names of poisons of the Fourth and Fifth Schedules and of the poisonous substances mentioned in section 82.

Regulations under the Medical, Dental and Pharmacy Act Regulations promulgated for the carrying out of the provisions of Chapters 5 and 6 and in particular:

(a) Regulations regarding the importation, sale and use of opium and other habit-forming drugs, including Annexure A.

(b) Recognised formularies.

(c) Labelling of potentially harmful drugs.

(d) List of poisonous substances.

(e) Distribution of certain poisons on behalf of the Government.

(f) Labelling and sale of poisons, including Lists A, B, C and D.

(g) Preparations exempted from Chapter 4.

Skeletstelsel—werwelkolom, skedel, ledemateskelet.

Name van bene—funksies—aanhegting van spiere, ondersteuning, beskerming.

Urogenitale stelsel—niere, geslagskliere, buise en aanverwante kliere.

Plasenta.

Endokriene stelsel—belangrikste kliere en hul funksies in die algemeen.

2. Mikroskopiese anatomie van soogdier—struktuur en fisiologie.

Dierselle—struktuur en vermenigvuldiging. Mitose, Meiose.

Epiteelweefsel—tragea, esofagus, maag, ingewande, vel, lewer, pankreas, nier.

Bindweefsel—los, digte (elastiese, kollagene, en retikulêre); vet-, pigment-, limf- en longweefsel; been, kraakbeen en bloed (met inbegrip van stolling).

Spierweefsel—gestrepte, hart- en gladde.

Senuweefsel—ganglia en sinapse, neuroglia.

Sensoriese organe en weefsels—smaakknoppies, eindknoppies, liggaampies van Paccini, eindplate, spierspoele, vry senu-uiteindes, reukepiteit, oog, oor.

Geslagsorgane—testis, ovarium, gametogenese, geslagsbepaling.

3. Klassifikasie in hooftrekke—basiese beginsels van klassifikasie; groepering van diere in spesies, geslagte, families, klasse, stamme.

4. Algemene studie van die volgende invertebrata:

Protozoa—*Amoeba*, *Entamoeba*, *Trichomonas*, *Trypanosoma*, *Plasmodium*, *Babesia*.

Nemathelminthes—*Trichocephalus* (*Trichuris*), *gyloides*, *haakwurm*, *Enterobius*, *Ascaris*.

Platyhelminthes—*Schistosoma*, *Fasciola*, *Taenia*, *Echinococcus*.

Arthropoda—kreef of kakkerlak of sprinkaan (algemene morfologie). Weeluis, muskiet, vlooi, tsetsevlug, huisvlieg, luis en kewer (alleenlik eksterne bou, monddede en lewensloop).

Arachnida—bosluise en myte (eksterne bou, lewensloop en gashere).

5. Parasitisme.

6. Oorerwing—Mendelse oorerwing soos geïllustreer deur die oorerwing van eenvoudige en geslagsgebonde kenmerke.

7. Embriologie van die padda.

B.—Prakties

Die volledige disseksie van die stelsels (uitgesonderd die spierstelsel) van 'n klein soogdier, kreef of kakkerlak of sprinkaan.

Uitkenning van die bene van die skelet, en van skyfies wat die makroskopiese struktuur toon van diere of dele van diere wat in die teoretiese leerplan genoem word.

FARMAKOLOGIE

Teorie

Kennis van die onderstaande word van die kandidaat verwag:

1. Die geskiedenis en ontwikkeling van Farmakognosie.

2. Die klassifikasie-metodes wat toegepas word by die studie van natuurlike produkte.

3. Die studie van natuurlike produkte met verwysing na die biologiese en geografiese bronne, kweek, versameling en voorbereiding vir die mark, handelsvariëteite, vervalsing, opberging, evaluering, bestanddele en hul werking en gebruike. Hierdie aspekte moet behandel word waar dit van toepassing is en soos bepaal deur die huidige belangrikheid daarvan vir die farmaseutiese en mediese wetenskappe.

Rules under the Medical, Dental and Pharmacy Act and in particular:

(a) Rules regarding conduct of which the Board may take cognizance.

(b) Registration of unqualified assistants.

(c) Furnishing of information to Registrar concerning pharmacies with which a registered chemist and druggist is connected.

(d) Payment of annual fees.

Therapeutic Substances Regulations:

In so far as they affect the practice of pharmacy and in particular:

Part I: Regulations 1-4 *bis*, inclusive.

Part II: Regulation 5.

Part III: Regulations 20, 21 and 22.

Part VII: Regulations 68-89 *bis*, inclusive.

Part VIII: Regulations 90-92, inclusive.

Part X: Regulations 94-46, inclusive.

General knowledge of items falling under the provisions of the Schedules.

2. Liquor Act and Regulations: Sections 5, 130, 131, 140 and 175 and regulations regarding sections 130 and 131.

3. Public Health Act: In so far as it affects the practice of pharmacy and in particular sections 65 and 139.

4. The Foods, Drugs and Disinfectants Act and Regulations: In so far as they affect the practice of pharmacy.

5. The Fertilizers, Farm Feeds and Remedies Act and Regulations: In so far as they affect the practice of pharmacy.

6. Drugs Control Act and Regulations: In so far as they affect the practice of pharmacy and in particular sections 1, 2, 14, 18, 19, 20, 28, and 32. Regulations 1, 2, 3, 6 and 10.

Note.—The above knowledge will extend to any amendments to the specified sections or schedules and to any rules or regulations thereanent or amendments thereof published on or before 30 April of the current year.

HEALTH EDUCATION

Aim.—To provide the chemist and druggist with basic background knowledge and to prepare him to provide, in his practice and within the framework of his profession, information and advice to the public on matters of importance in the field of public health.

SECTION I

A Study of the Community

(A) Sociological background.

(B) Particular circumstances within the community requiring health education:

(a) Introduction:

(i) Basic physiological processes and their relationship to disease.

(ii) Health education as a factor in the prevention of disease.

(iii) Basic functions of the health educator.

(iv) Habit-formation; the rôle of incentive bonuses.

(b) The family.

(c) The general community.

4. Chirurgiese wonddekkings en suture.

5. Die belangrikste inheemse giftige plante.

Prakties

Kandidate moet tot onderstaande in staat wees:

1. Die ondersoek en beskrywing van die makroskopiese eienskappe van ru-artsenymiddels.

2. Die mikroskopiese ondersoek en beskrywing van ru-artsenymiddels, op sigself verontreinig en/of mengsels.

3. Die uitvoering van fitochemiese voorproewe op plante en uitvoering van tegnieke wat gebruik word by die analise van natuurlike produkte.

4. Die uitvoering van offisiële identifikasietoetse op natuurlike produkte en suiwer stowwe van natuurlike oorsprong.

5. Die ondersoek en beskrywing van materiaal met betrekking tot die vesels wat daarin aanwesig is en die verspreiding daarvan.

FARMAKOLOGIE

Teorie

1. *Die omvang van Farmakologie.*

2. *Oordrag van geneesmiddels en farmakodinamika*

(a) Absorpsie van middels in die organisme en faktore wat sodanige absorpsie beïnvloed.

(b) Verspreiding van middels in die organisme en faktore wat sodanige verspreiding beïnvloed:

(i) Passiewe vervoer van middels.

(ii) Aktiewe vervoer van middels.

(c) Metabolisme van geneesmiddels en faktore wat sodanige metabolisme beïnvloed.

(d) Uitskeiding van geneesmiddels en faktore wat sodanige uitskeiding beïnvloed.

3. *Geneesmiddel-reseptorinteraksies.*

(a) Interaksie van een of meer middels met een reseptorsisteem:

(i) Chemiese struktuur en werking.

(ii) Dosisreaksiekurwes.

(iii) Kompetitiewe interaksie.

(iv) Affiniteit en intrinsieke aktiwiteit.

(b) Interaksie van een of meer middels met verskillende reseptorsisteme:

(i) Nie-kompetitiewe interaksies.

(ii) Chemiese antagonisme.

(iii) Funksionele interaksies.

(iv) Verbindings met veelvoudige werkings.

(v) Spesifieke en nie-spesifieke geneesmiddelwerking.

(vi) pH en werking van geneesmiddels.

(c) Die verband tussen stimulus en effek:

(i) Alles-of-niks-reaksie.

(ii) Drumpelverskynsels.

(iii) Reseptoreserwe.

4. *Inleiding tot geneesmiddelontwerp.*

5. *Middels met 'n werking op die senustelsel.*

(a) Middels met 'n werking op die perifere senustelsel:

(i) Die alfa- en beta-simpatomimetiese en die alfa- en beta-simpatolitiese middels.

(ii) Indirekte simpatomimetiese en simpatolitiese middels.

(iii) Parasimpatomimetiese en parasimpatolitiese middels.

(iv) Ganglion-stimulerende en -blokkerende middels.

SECTION II

The Principles of Health Education and Teaching

- (a) The nature and meaning of health education.
- (b) Current aims of education and their relation to health education.
- (c) The process of learning; different forms of learning; factors influencing the process of learning.
- (d) The general principles of tuition; application of methods of tuition to health education.
- (e) The principles of communication; application of methods of tuition to health education.
- (f) Techniques of health education.
- (g) Sources of health education information material.

SECTION III

Health Problems of Importance in South Africa

- (a) Environmental factors.
- (b) Health aspects of water.
- (c) Personal hygiene and fitness.
- (d) Mothercraft, baby care and feeding, family planning.
- (e) Health aspects of food and nutrition.
- (f) Factors which cause disease.
- (g) The spread and prevention of infectious and other communicable diseases.
- (h) Epidemic and other notifiable diseases.
- (i) Common diseases of children.
- (j) Other general diseases of importance.
- (k) Insects and insect control.
- (l) Mental health and the dangers of the abuse of medicines and particularly of dependence-producing drugs abuse of alcohol and tobacco.
- (m) Prevention of poisoning.
- (n) The pharmacist as member of a health team.
- (o) Relevant aspects of health legislation.

PHARMACEUTICS I

Theory

1. General

- (i) Introduction and orientation of the student to the modern practice of pharmacy, and the scope of pharmaceuticals in the pharmacy curriculum.
- (ii) Classification of medicinal preparations and general principles of the modern scientific approach in the design of dosage forms.
- (iii) Pharmacopoeias and formularies, and their use; drug nomenclature.
- (iv) Systems of measurement used in pharmacy and methods of calculation used in dispensing.
- (v) Weighing and measuring; pharmaceutical balances and their sensitivity and capacity. The correct choice of volumetric measures.

2. Physical Pharmacy

Principles of those fields of physical chemistry which are of importance in pharmaceutical manipulations and in the design of medicinal dosage forms, and which involve a study of the following with special reference to their pharmaceutical applications:

- (i) Change of state. Solid-liquid-gas equilibria and transformations and factors affecting them. The phase rule. Efflorescence and deliquescence.
- (ii) Polymorphism of drugs.
- (iii) Solutions and solubility. Colligative properties of solutions.

- (v) Kurariforme middels.
- (vi) Nie-spesifieke muskulotrofiese middels.
- (b) Middels met 'n werking op die sentrale sensustelsel:
 - (i) Stimulanse van die sentrale sensustelsel en dopaminergiese middels.
 - (ii) Depressiva van die sentrale sensustelsel en dopaminolitiese middels.
 - (iii) Middels wat gedrag beïnvloed.
 - (iv) Analgetica en antipyretica.
 - (v) Middels wat die hoessentrum onderdruk.
6. *Histaminergiese middels en antihistaminica.*
7. *Geneesmiddels en allergie.*
8. *Geneesmiddels en die behandeling van brongopatie en rinopatie.*
9. *Plaaslike anestetika.*
10. *Geneesmiddels en die spysverteringskanaal.*
 - (i) Middels met 'n werking in die mond, keel en esofagus.
 - (ii) Emetica en anti-emetica.
 - (iii) Teësure, absorbeermiddels en carminativa.
 - (iv) Lakseermiddels.
11. *Geneesmiddels en die kardiovaskulêre stelsel*
 - (i) Hartglikosiede.
 - (ii) Middels wat die hartspier onderdruk.
 - (iii) Dilateermiddels vir koronêre bloedvate.
 - (iv) Middels wat hipertensie teëwerk.
 - (v) Middels wat die bloedcholesterolspieël verlaag.
12. *Middels wat die water- en soutbalans beïnvloed*
 - (i) Suur-basisbalans en intraveneuse vloeistofterapie.
 - (ii) Diuretika en antidiuretika.
 - (iii) Die ione (kalium, kalsium, magnesium, fluoried, jodied, ens.)
13. *Geneesmiddels en die bloedvormende stelsel*
 - (i) Middels wat effektief teen bloedarmoede is.
 - (ii) Stollingsteëmiddels- en stollingsmiddels.
14. *Die hormone*
 - (i) Hormone van die hipofise.
 - (ii) Estrogene, progestogene en androgene, insluitende orale geboortebeperkende middels.
 - (iii) Anaboliese steroïede.
 - (iv) Hormone van die bynierkorteks.
 - (v) Adrenalien.
 - (vi) Tiroïedhormone en antitiroïdemiddels.
 - (vii) Insulien en orale antidiabetica.
15. *Vitamiene en antivitamiene.*
16. *Ensieme en terapeutiese stowwe.*
17. *Immunisasie.*
18. *Chemoterapeutiese middels*
 - (i) Middels in gebruik teen bakteriële infeksies.
 - (ii) Middels in gebruik teen fungusinfeksies.
 - (iii) Middels in gebruik teen protooïese infeksies.
 - (iv) Middels in gebruik teen infeksies wat deur flagellate en botte veroorsaak word.
 - (v) Middels in gebruik teen infeksies wat deur Nematoda en Cestoda veroorsaak word.
 - (vi) Chemoterapie van kanker.
19. *Gasse, dampe en lugbesoedeling.*
20. *Insekdoders en knaagdierdoders.*
21. *Ontsmettingsmiddels, bakterisiede en bakteriostatikums.*
22. *Onkruidodders.*

(iv) The colloidal state. Coarse suspensions and colloidal dispersions: their properties, methods of preparation and stabilisation. Stokes' law and its applications.

(v) Surface and interfacial phenomena:—adsorption, surface and interfacial tension, surface-active agents. Emulsions and emulsifying agents.

(v) The flow properties of fluids and plastics systems—viscosity, rheology and gel formation.

(vii) The applications of ionisation and hydrogen ion concentration in pharmacy; theory and applications of ion exchange.

Practical

1. General

(i) Familiarisation with the apparatus used in a pharmaceutical laboratory and with the general layout, requirements and conduct of a dispensing department in a modern pharmacy.

(ii) The correct use of weighing and measuring equipment.

(iii) The correct manner of storing drugs.

2. The interpretation of prescriptions in both official languages and the dispensing of a selected range of medicinal dosage forms.

3. The preparation of a selected range of official compounded formulae of the British Pharmacopoeia and British Pharmaceutical Codex.

PHARMACEUTICS II

Theory

1. Pharmaceutical Operations and Principles of Manufacture.

The following unit processes are examined with particular emphasis on the maintenance of high standards in the pharmaceutical manufacturing industry with respect to product quality and uniformity:

(i) Extraction processes. Principles of drug extraction and their application to large-scale methods. Maceration, percolation, infusion and other methods of extraction of crude drugs of natural origin.

(ii) Processes involving heat transfer. A general consideration of the problems encountered in the supply and transfer of heat in manufacturing operations:

(a) *Evaporation*.—Basic theory and its application in the design and operation of typical large scale evaporators.

(b) *Drying*.—Principles involved and pharmaceutical considerations; a study of the various types of plant in common use, including freeze-driers.

(c) *Distillation*.—The distillation of miscible and immiscible liquid systems and the preparation of Purified Water. Destructive distillation.

(iii) Particle size reduction and mixing:

(a) Comminution of solid material and reduction of globule size in emulsions.

(b) Mixing.

(c) Particle size separation; measurement of particle and globule size.

(iv) Clarification of fluids:—filtration, sedimentation, centrifugation.

(v) The choice of materials for the construction of pharmaceutical plant.

2. A study of galenical products of the B.P. and B.P.C. and other official compounded formulae.

3. A study of the properties and uses of pharmaceutical adjuvants in formulation.

23. *Biochemiese individualiteit, farmakologiese individualiteit, farmakogenetika.*

Prakties

1. *Geneesmiddelloordrag.*

2. *Die gebruik van geïsoleerde orgaansisteme om die volgende te demonstreer:*

(a) Kompetitiewe antagonisme.

(b) Kompetitiewe dualisme.

(c) Nie-kompetitiewe antagonisme.

3. *Bepaling van affiniteite en intrinsieke aktiwiteit van verskeie geneesmiddels.*

4. *Die uitwerking van verskeie middels op die bloeddruk, hartsped en respirasie van genarkotiseerde diere.*

5. *Kwantitatiewe bepaling van die uitwerking wat stimulanse en depressiva van die sentrale sensustelsel op die lokomotoriese aktiwiteit van proefdiere het.*

6. *Capita selecta.*

Farmaseutiese Chemie

Kursus I:

A. *Medisinalie Chemie.*

B. *Farmaseutiese Analise.*

C. *Prakties.*

Kursus II:

D. *Medisinalie Chemie.*

E. *Farmaseutiese Analise.*

F. *Prakties.*

Farmaseutiese Chemie I

A. *Medisinalie Chemie*

1. *Anorganies.*—(a) 'n Studie van die bereiding, reaksies en onsuiverhede van anorganiese farmaseutiese verbindings met verwysing na die werking en gebruike van hierdie verbindings.

(b) Teorie en die mediese toepassing van radioaktiewe farmaseutiese verbindings en preparate.

(c) Röntgenografie en kontrasmiddels.

2. *Organies.*—(a) 'n Studie van farmaseutiese verbindings met spesiale verwysing na sintese, onsuiverhede, fisiese eienskappe wat die terapeutiese aktiwiteit beïnvloed, toksisiteit en die verband tussen struktuur en werking:

(i) Natuurlike verbindings met verwysing na die vorming van sintetiese geneesmiddels daaruit, met inbegrip van elementêre aspekte van die biosintese.

(ii) Uitgesoekte sintetiese geneesmiddels en geneesmiddelgroepe.

(b) Die metabolisme van uitgesoekte geneesmiddels en geneesmiddelgroepe.

B. *Farmaseutiese Analise*

1. *Kwalitatiewe reaksies en grenstoetse met die oog op die identifikasie en die bepaling van die suiwerheid van organiese en anorganiese farmaseutiese verbindings.*

2. *Toepassing van elementêre fisiese metodes op die bepaling van die identiteit, suiwerheid, gehalte en terapeutiese aktiwiteit van farmaseutiese verbindings en preparate.*

3. *Analise van vette en olies van farmaseutiese belang.*

4. *Kwantitatiewe bepaling van bestanddele van geneesmiddels.*

5. *Diverse analitiese metodes soos van toepassing op geneesmiddels en doseringsvorme daarvan.*

4. Basic Microbiology

(i) Introduction and historical development of the subject.

(ii) Bacteriology:

(a) Nomenclature, classification, morphology, reproduction, identification, isolation of specific types, and factors affecting the growth of bacteria.

(b) The composition and uses of culture media in the cultivation and examination of bacteria.

(c) Bacterial biochemistry and staining methods.

(d) Bacterial enumeration.

(e) Distribution and occurrence of bacteria in the environment.

(iii) Moulds and yeast: classification and differentiation, general characteristics, growth requirements, pathogenic types. Their usefulness in the biosynthesis of antibiotics etc.

(iv) Rickettsiae—general characteristics.

(v) Viruses—their classification, characteristics and properties, and methods of cultivation. Bacteriophages.

(vi) Mutation and variation in bacteria and viruses—consequences and ecological considerations.

Practical

1. The dispensing and compounding of those dosage forms and official preparations not undertaken during Pharmaceutics I.

2. *Pharmaceutical Technology*.—(i) The student will be expected to become acquainted with the use of the following types of equipment in pharmaceutical preparative work: Filtration apparatus; evaporating, distilling, condensing and drying equipment. Homogenisers, comminuting and particle size separation equipment; apparatus for measurement of particles in suspensions and globules in emulsions.

(ii) Investigation of the physico-chemical properties of pharmaceutical adjuvants, and of their uses as suspending, dispersing, emulsifying, solubilising, thickening and gelling agents.

(iii) The measurement and control of pH in pharmaceutical preparations.

(iv) Measurement of density of fluids.

3. *Microbiology*.—Application of the theory syllabus with emphasis on the cultivation and isolation of various types of micro-organisms, biochemical tests and staining methods, bacterial enumeration and microscopic studies.

PHARMACEUTICS III

Theory

1. Formulation of medicines

(i) The general approach to modern drug formulation, and choice of dosage form and route of administration. Pharmaceutical, chemical, pharmacological, microbiological and biopharmaceutical considerations in the design of formulae and choice of adjuvants.

(ii) A detailed study of the various dosage forms which are in current use with emphasis on formulation, methods of preparation and standardisation in the production of medicines of optimal therapeutic activity, elegance, stability and convenience of administration.

(iii) The stabilisation of pharmaceutical products; methods of eliminating or limiting microbial contamination, and its importance in various dosage forms. The evaluation of stability.

(iv) The importance of particle size in the formulation of medicaments and the processing of drugs.

(v) Presentation and packaging of pharmaceutical preparations, and package testing methods.

C. Prakties

Praktiese toepassing van al die analitiese metodes en beginsels waarvan die teorie onder Farmaseutiese Analise behandel is.

Farmaseutiese Chemie II

D. Medisinale Chemie

'n Studie van die volgende geneesmiddels en geneesmiddelgroepe met spesiale verwysing na die sintese, onsuiverhede, fisiese eienskappe wat die terapeutiese aktiwiteit beïnvloed, toksisiteit en die verband tussen struktuur en werking:

Katesjolamiene en verwante verbindings.

Kwaternêre ammoniumverbindinge.

Histamien, antihistamiene en fenotiasinderivate.

Barbiturate, hipnotika en xantienderivate.

Anestetika.

Analgetika met inbegrip van antipyretika.

Kortikoïede en geslagshormone.

Stikstofmosterdverbindinge en ander sitostatiesemiddels.

Antibiotika.

Sulfoonamiede, sulfone en orale antidiabetika.

Insulien.

Stollingsteënmiddel en vitamien K.

Knaagdierdoders, insekdoders, plantdoders.

Vitamiene.

E. Farmaseutiese Analise

Toepassing van die volgende metodes op die bepaling van die identiteit, suiwerheid en gehalte van farmaseutiese verbindings en preparate:

Spektrometrie.

Elektrometrie.

Potensiometrie en polarografie.

Chromatografie.

Katsoon-anioontitrasies.

X-straaldiffraksie.

Kompleksometrie.

F. Prakties

1. Toepassing van die metodes wat onder E behandel word op farmaseutiese doseringsvorme.

2. Uitoeffening van analitiese kontrole oor farmaseutiese preparate.

3. Die sintese, opsporing van onsuiverhede en algemene reaksies van uitgesoekte voorbeelde van farmaseutiese verbindings wat onder D behandel word.

FARMASEUTIKA I

Teorie

1. Algemeen

(i) Inleiding en oriëntering van die student ten opsigte van die moderne praktyk van farmasie; die bestek van Farmaseutika in die Farmasieeleergang.

(ii) Klassifikasie van medisinale preparate en algemene beginsels van die moderne wetenskaplike benadering by die ontwerp van doseringsvorme.

(iii) Farmakopees en formuleboeke en die gebruik daarvan; benamingsstelsel vir geneesmiddels.

(iv) Stelsels van meting wat in Farmasie gebruik word en berekeningsmetodes in gebruik by reseptering.

(v) Weging en afmeting; farmaseutiese balanse tesame met die sensitiwiteit en kapasiteit daarvan. Die korrekte keuse van volumetriese maatglasse.

2. *Applied pharmaceutical microbiology*

(i) *Sterilisation methods*.—(a) A critical appraisal of the various methods of sterilisation applicable to medicinal preparations, dressings and equipment used in the medical and pharmaceutical professions.

(b) The testing for sterility of these items.

(ii) *Aseptic technique*.—The design and operating conditions of a laboratory for the preparation or manufacture of sterile products requiring aseptic manipulation. Sources of contamination and their elimination.

(iii) *The formulation and preparation of sterile medicaments*.—(a) Products for perenteral administration, and their routes of injection. Pyrogens. Plasma substitutes and blood products.

(b) Ophthalmic preparations and other products which may be required in sterile form.

(iv) *Chemical disinfection*.—(a) The activity, mode of action, formulation and presentation of disinfectants and other antimicrobial substances which are used for the disinfection of, or limiting of microbial growth in, rooms and atmospheres, pharmaceutical materials apparatus or preparations, or which are applied topically to the skin or mucous membranes, but excluding those disinfectants such as chemotherapeutic agents which are used solely for the treatment of infections within the body.

(b) The evaluation of disinfectants.

(v) *Antibiotics*.—The occurrence, stability, methods of production and formulation of a selected number of antibiotics in common use, and their standardisation by biological methods where applicable.

(vi) *Immunology*.—(a) A general outline of the processes of infection and of the defence mechanisms of the body.

(b) A detailed study of the preparation, properties and uses of antigen and antibody products of various types, including diagnostic preparations, which are in current use.

3. *Biopharmaceutics*

(i) Pharmaceutical factors affecting drug absorption.

(ii) Utilisation of the distribution characteristics of drugs in the various tissues of the body, and of pharmacokinetic principles in the choice of routine of administration, dose and dosage form of medicaments.

(iii) Utilisation of biopharmaceutical principles and parameters in the formulation of dosage forms, especially prolonged action medicaments, and their evaluation.

Practical

1. The formulation of pharmaceutical products for maximum therapeutic activity and stability, and the stability testing of these products.

2. *Applied microbiology*.—(i) The formulation and preparation of parenteral, ophthalmic, and other medicaments in sterile form. Aseptic procedures.

(ii) The sterilisation of medicaments, dressings and pharmaceutical equipment by established methods, and the evaluation of sterilisation methods. Testing for sterility.

(iii) The evaluation of chemical disinfectants.

(iv) The preparation of vaccines.

3. *Drug evaluation*.—The practical application of biopharmaceutical methods of evaluation of formulated medicaments using *in vitro* and/or *in vivo* techniques, with special emphasis on unit oral dosage forms.

2. *Fisiese Farmasie*

Beginnels van dié afdelings van Fisiese Chemie wat van belang is by farmaseutiese bewerking en by die ontwerp van doseringsvorme, en wat 'n studie van die volgende, met spesiale verwysing na die farmaseutiese toepassings daarvan, behels:

(i) Toestandsverandering. Vaste Stof-vloeistof-gas: ewewigte en omsettings, en faktore wat daarop betrekking het. Die fasereël. Effloressensie en vervloeiing.

(ii) Polimorfisme van geneesmiddels.

(iii) Oplossings en oplosbaarheid. Kolligatiewe eienskappe van oplossings.

(iv) Die kolloïdale toestand. Growwe suspensies en kolloïdale dispersies: eienskappe, bereidingsmetodes en stabilisering. Stokes se wet en die toepassings daarvan.

(v) Oppervlak- en tussenvlakverskynsels: absorpsie, oppervlak- en tussenvlakspanning, oppervlakaktiewe stowwe. Emulsies en emulgeermiddels.

(vi) Die vloeie-eienskappe van vloeistowwe en plastiese sisteme viskositeit, reologie en jelvorming.

(vii) Die toepassings van ionisasie en waterstofioonkontrasie in Farmasie; teorie en toepassings van ionuitruiling.

Prakties

1. *Algemeen*

(i) Bekenstelling met die apparaat wat in 'n farmaseutiese laboratorium gebruik word en met die algemene uitleg, vereistes en beheer van die reseptuurafdeling in 'n moderne apteek.

(ii) Korrekte gebruik van weeg- en meetapparaat.

(iii) Korrekte wyse van opberging van geneesmiddels.

2. Interpretasie van voorskrifte in albei amptelike tale en die reseptering van 'n uitgesoekte reeks doseringsvorme.

3. Die bereiding van 'n uitgesoekte reeks offisiële saamgestelde formules van die Britse Farmakopee en die Britse Farmaseutiese Kodeks.

FARMASEUTIKA II

Teorie

1. *Farmaseutiese Prosesse en Beginnels van Vervaardiging*.

Tydens die studie van onderstaande eenheidsprosesse word daar besondere klem gelê op die handhawing van 'n hoë standaard ten opsigte van die kwaliteit en eenvormigheid van produkte van die farmaseutiese vervaardigingsnywerheid:

(i) Ekstraksieprosesse. Beginnels van ekstraksie van artsennymiddels en die toepassing daarvan op grootskaalse metodes. Maserasie, perkolasie, infusie en ander metodes van ekstraksie van ru-artsennymiddels van natuurlike oorsprong.

(ii) Prosesse waarby hitte-oordrag betrokke is. 'n Algemene oorsig van die probleme wat teëgekome word by hittetoevoer en -oordrag by vervaardigingsprosedures:

(a) *Verdamping*.—Basiese teorie en die toepassing daarvan op die ontwerp en bediening van tipiese grootskaalse verdampers.

(b) *Droging*.—Toepaslike beginsels en farmaseutiese oorwegings; 'n studie van die verskillende tipes apparaat algemeen in gebruik, insluitende vriesdroërs.

(c) *Distillasie*.—Die distillasie van mengbare en onmengbare vloeistofstelsels en die bereiding van Gesuiwerde Water. Destruktiewe distillasie.

(iii) Verkleining van deeltjiegrootte en menging:

(a) Vergruising van soliede materiale en verkleining van druppelgrootte in emulsies.

(b) Menging.

Pharmaceutical chemistry**Course 1:**

- A. Medicinal Chemistry.
- B. Pharmaceutical Analysis.
- C. Practical.

Course 11:

- D. Medicinal Chemistry.
- E. Pharmaceutical Analysis.
- F. Practical.

Pharmaceutical Chemistry 1**A. Medicinal Chemistry**

1. *Inorganic*.—(a) A study of the preparation, reactions and impurities of inorganic pharmaceutical compounds with reference to the action and use of these compounds.

(b) The theory and medical application of radioactive pharmaceutical compounds and formulations.

(c) Röntgenography and contrast-media.

2. *Organic*.—(a) A study of pharmaceutical compounds with particular reference to the synthesis, impurities, physical properties affecting therapeutic activity, toxicity and the relationship between structure and action.

(i) Natural compounds with reference to the formation of synthetic medicinals therefrom, together with elementary aspects of biosynthesis.

(ii) Selected synthetic medicinals and medicinal classes.

(b) The metabolism of selected medicinals and medicinal classes.

B. Pharmaceutical Analysis

1. Qualitative reactions and limit tests with a view to the identification and determination of the purity of organic and inorganic pharmaceutical compounds.

2. Application of elementary physical methods to the determination of the identity, purity, quality and therapeutic activity of pharmaceutical compounds and formulations (preparations).

3. Analysis of fats and oils of pharmaceutical importance.

4. Quantitative determination of the components of medicinals.

5. Miscellaneous analytical methods of application to medicinals and their dosage forms.

C. Practical

Practical application of all the analytical methods and principles dealt with theoretically in Pharmaceutical Analysis.

Pharmaceutical Chemistry II**D. Medicinal Chemistry**

A study of the following medicinals and medicinal groups with special reference to the synthesis, impurities, physical properties affecting therapeutic activity, toxicity and the relationship between structure and action:

Catecholamines and related compounds.

Quaternary ammonium compounds.

Histamine, antihistamines and phenothiazine derivatives.

Barbiturates, hypnotics and xanthine derivatives.

Anaesthetics.

(c) Skeiding volgens deeltjiegrootte: meting van deeltjie- en druppelgrootte.

(iv) Verheldering van vloeistowwe—filtrasie, sedimentasie, sentrifugering.

(v) Die keuse van materiale vir die oprigting van 'n farmaseutiese aanleg.

2. 'n Studie van galeniese produkte van die B.P. en B.P.C. en ander offisiële saamgestelde formules.

3. 'n Studie van die eienskappe en gebruike van farmaseutiese hulpstowwe in formulering.

4. Basiese Mikrobiologie.

(i) Inleiding en geskiedkundige ontwikkeling van die vak.

(ii) Bakteriologie:

(a) Benamingstelsel, klassifikasie, morfologie, voortplanting, identifikasie, isolering van bepaalde tipes, faktore wat die groei van bakterieë beïnvloed.

(b) Die samestelling en gebruik van kweekbodems vir die kweek en ondersoek van bakterieë.

(c) Bakteriële biochemie en kleuringsmetodes.

(d) Bakterietelling.

(e) Verspreiding en voorkoms van bakterieë in die omgewing.

(iii) Skimmels en gisse: klassifikasie en differensiasie, algemene eienskappe, groeivereistes, patogene tipes. Nuttigheid daarvan by die biosintese van antibiotika ens.

(iv) Rickettsiae—algemene eienskappe.

(v) Virusse—klassifikasie, kenmerke en eienskappe, metodes van kweeking. Bakteriöfage.

(vi) Mutasie en variasie by bakterieë en virusse—gevolge daarvan en ekologiese oorwegings.

Prakties

1. Die reseptering en samestelling van dié doserings vorme en offisiële preparate wat nie gedurende Kursus I afgehandel is nie.

2. *Farmaseutiese Tegnologie*.—(i) Daar word van die student verwag om met die gebruik van die volgende soorte toerusting vir farmaseutiese voorbereidende werk vertrou te raak: Apparaat vir filtrasie, verdamping, distillasie, kondensasie en droging; homogeniseerders, vergruisers; apparaat vir skeiding volgens deeltjiegrootte en vir meting van deeltjies in suspensie en van druppels in emulsies.

(ii) Ondersoek van die fisies-chemiese eienskappe van farmaseutiese hulpstowwe en hul gebruike as middels vir suspensie, dispersie, emulgering, solubilisering, verdikking en jelvorming.

(iii) Die meting en kontrole van pH in farmaseutiese preparate.

(iv) Bepaling van digtheid van vloeistowwe.

3. *Mikrobiologie*.—Toepassing van die teorieleerplan met beklemtoning van die kweeking en isolering van verskeie tipes mikroörganismes, biochemiese toetse en kleuringsmetodes, bakterietelling en mikroskopiese studie.

FARMASEUTIKA III**Teorie****1. Formulering van Medisinale Prepare**

(i) Die algemene benadering van moderne genees middelformulering en keuse van doseringsvorm en toedieningsroete. Farmaseutiese, chemiese, farmakologiese, mikrobiologiese en biofarmaseutiese oorwegings by die ontwerp van formules en keuse van hulpstowwe.

Analgesics including antipyretics.
Corticoids and sex hormones.
Nitrogen mustards and other cytostatics.
Antibiotics.
Sulphonamides, sulphones and oral hypoglycaemics.
Insulin.
Anticoagulants and Vitamin K.
Rodenticides, insecticides and herbicides.
Vitamins.

E. *Pharmaceutical Analysis*

Application of the following methods to the determination of the identity, purity and quality of pharmaceutical compounds and formulations (preparations):

Spectrometry.
Electrometry.
Potentiometry and polarography.
Chromatography.
Cationic-anionic titrations.
X-ray diffraction.
Complexometry.

F. *Practical*

1. Application of the methods dealt with under E to pharmaceutical dosage forms.
2. Exercise of analytical control over pharmaceutical formulations (preparations).
3. The synthesis, detection of impurities and general reactions of selected examples of pharmaceutical compounds dealt with under D.

PHARMACOGNOSY

Theory

The candidate will be expected to have a knowledge of:

1. The history and development of Pharmacognosy.
2. The methods of classification of natural products.
3. The study of natural products with reference to biological and geographical origin, cultivation, collection and preparation for the market, commercial varieties, adulteration, storage, evaluation, constituents and their actions and uses. These aspects should be studied where applicable and as determined by their present pharmaceutical and medicinal importance.
4. Surgical dressings and sutures.
5. The more important indigenous poisonous plants.

Practical

The candidate must be prepared:

1. To examine and describe the macroscopical characters of crude drugs.
2. To examine microscopically crude drugs when presented alone, mixed or contaminated and to report upon them.
3. To screen plants phytochemically and to perform techniques used in natural product analysis.
4. To perform official identification tests on natural products and pure substances of natural origin.
5. To examine and report upon materials with respect to the fibres present, and to their distribution.

PHARMACOLOGY

Theory

1. *The scope of Pharmacology.*
 2. *Drug transference and pharmacodynamics.*
- (a) Drug absorption in the organism and factors influencing drug absorption.
- (b) Drug distribution in the organism and factors influencing drug distribution:
- (i) Passive transport of drugs.
 - (ii) Active transport of drugs.

(ii) 'n Studie in besonderhede van die verskillende doseringsvorme in algemene gebruik met beklemtoning van formulering, bereidingsmetodes en standaardisasie by die produksie van medisyne van optimale terapeutiese aktiwiteit, keurigheid, stabiliteit en toedieningsgerief.

(iii) Stabilisasie van farmaseutiese produkte; metodes om besmetting deur mikroörganismes uit te skakel of te beperk; die belang daarvan by verskillende doseringsvorme. Waardebepaling van stabiliteit.

(iv) Die belang van deeltjiegrootte by die formulering van medisinale preparate en die verwerking van geneesmiddels.

(v) Aanbieding en verpakking van farmaseutiese preparate en verpakkingstoetstegnieke.

2. *Toegepaste Farmaseutiese Mikrobiologie*

(i) *Sterilisasiemetodes.*—(a) 'n Kritiese waardering van die verskillende sterilisasiemetodes wat op medisinale preparate, wonddekkings en toerusting, wat in die mediese en farmaseutiese professies gebruik word, van toepassing is.

(b) Steriliteitstoetsing van bogenoemde.

(ii) *Aseptiese Tegniek.*—Die ontwerp en werktoestande van 'n laboratorium vir die bereiding of vervaardiging van steriele produkte wat asepties gehanteer moet word. Bronne van besmetting en die uitskakeling daarvan.

(iii) *Formulering en bereiding van steriele medisinale preparate.*—(a) Parenterale produkte en die toedieningsroetes daarvan. Pirogene. Plasmavervangmiddels en bloedprodukte.

(b) Oogkundige preparate en ander produkte wat in steriele vorm nodig is.

(iv) *Chemiese ontsmetting.*—(a) Die aktiwiteit, werkingswyse, formulering en aanbieding van ontsmettingsmiddels en ander antimikrobiële preparate wat gebruik word vir die ontsmetting van of beperking van mikrobiële groei in kamers en atmosfeer, farmaseutiese materiale, apparaat of preparate, of wat aan die vel of slymvliese aangewend word, maar met uitsluiting van ontsmettingsmiddels soos chemoterapeutiese middels wat uitsluitlik vir behandeling van infeksies binne die liggaam gebruik word.

(b) Die waardebeplanning van ontsmettingsmiddels.

(v) *Antibiotika.*—Die voorkoms, stabiliteit, produksiemetodes en formulering van 'n uitgesoekte aantal antibiotika wat algemeen in gebruik is en hul standaardisasie deur biologiese metodes waar toepaslik.

(vi) *Immunologie.*—(a) Algemene belyning van infeksieprosesse en van verdedigingsmeganismes van die liggaam.

(b) 'n Studie in besonderhede van die bereiding, eienskappe en gebruike van verskeie tipes antigeen- en antiligaamprodukte, insluitende diagnostiese preparate, wat algemeen gebruik word.

3. *Biofarmaseutika*

(i) Farmaseutiese faktore wat die absorpsie van geneesmiddels beïnvloed.

(ii) Benutting van die verspreidings eienskappe van geneesmiddels in die verskillende weefsels van die liggaam en van farmakokinetiese beginsels by die keuse van toedieningsroete, dosis en doseringsvorm van geneesmiddels.

(iii) Benutting van biofarmaseutiese beginsels en parameters by die formulering van doseringsvorme, veral van medisinale produkte wat verlengde uitwerking toon en die waardebeplanning daarvan.

(c) Drug metabolism and factors influencing drug metabolism.

(d) Drug excretion and factors influencing drug excretion.

3. Drug-receptor interactions.

(a) Interaction of one or more drugs with one receptor system:

- (i) Chemical structure and action.
- (ii) Dose-response curves.
- (iii) Competitive interaction.
- (iv) Affinity and intrinsic activity.

(b) Interaction of one or more drugs with different receptor systems:

- (i) Non-competitive interactions.
- (ii) Chemical antagonism.
- (iii) Functional interactions.
- (iv) Compounds with multiple actions.
- (v) Specific and non-specific drug action.
- (vi) The pH and drug action.

(c) The relation between stimulus and effect:

- (i) The all-or-none response.
- (ii) Threshold phenomena.
- (iii) Receptor reserve.

4. An introduction to drug design.

5. Drugs acting on the nervous system.

(a) Drugs acting on the peripheral nervous system:

- (i) The alpha and beta sympathomimetic and the alpha and beta sympatholytic drugs.
- (ii) Indirect sympathomimetics and sympatholytics.
- (iii) Parasympathomimetic and parasympatholytic drugs.
- (iv) Ganglionic stimulant and ganglionic blocking drugs.
- (v) Curariform drugs.
- (vi) Nonspecific musculotropic drugs.

(b) Drugs acting on the central nervous system:

- (i) Central nervous system stimulants and dopaminergic drugs.
- (ii) Central nervous system depressants and dopaminolytic drugs.
- (iii) Drugs affecting behaviour.
- (iv) Analgesics and antipyretics.
- (v) Drugs suppressing the cough centre.

6. Histaminergic and antihistamine drugs.

7. Drugs and allergy.

8. Drugs and the treatment of bronchopathy and rhinopathy.

9. Local anaesthetics.

10. Drugs and the gastro-intestinal tract.

- (i) Drugs acting in the mouth, throat and oesophagus.
- (ii) Emetics and anti-emetics.
- (iii) Antacids, absorbents and carminatives.
- (iv) Laxatives.

11. Drugs and the cardiovascular system.

- (i) Cardiac glycosides.
- (ii) Drugs depressing cardiac muscle.
- (iii) Coronary vasodilators.
- (iv) Antihypertensive drugs.
- (v) Blood cholesterol lowering agents.

12. Drugs affecting the water and salt balance.

- (i) Acid-base balance and intravenous fluid therapy.
- (ii) Diuretics and antidiuretics.
- (iii) The ions (Potassium, calcium, magnesium, fluoride, iodide, etc.).

13. Drugs and the hematopoietic system.

- (i) Drugs effective in anaemias.
- (ii) Anticoagulant and coagulant drugs.

Prakties

1. Formulering van farmaseutiese produkte vir maksimale terapeutiese aktiwiteit en stabiliteit en die stabiliteitstoetsing van hierdie produkte.

2. Toegepaste mikrobiologie.—(i) Formulering en bereiding van parenterale, oogkundige en ander medisinale preparate in steriele vorm. Aseptiese werkwyses.

(ii) Sterilisering van medisinale preparate, wonddekkings en farmaseutiese toerusting deur bewese metodes en die waarbepaling van sterilisasie-metodes. Steriliteitstoetsing.

(iii) Waardebepaling van chemiese ontsmettingsmiddels.

(iv) Bereiding van vaksines.

3. Waardebepaling van geneesmiddels.—Praktiese toepassing van biofarmaseutiese metodes van waardebe-paling van geformuleerde medisinale preparate terwyl van in vitro- en/of in vivo-tegnieke gebruik gemaak word, met spesiale klem op orale eenheidsdosering-vorme.

Farmasie-administrasie

1. Administrasie

1.1 Oorsig van Maatskappyreg en sy invloed op klein-handelaptekewese, inkomstebelastingwette, Ongevallewet, Winkelure-ordonnansies, Wet op Winkels en Kantore, Werkloosheidversekeringsfonds, kommersiële verspreidings handel.

1.2 Die tipes kleinhandelbesighede: eenmansaak, vennootskap, private maatskappy, openbare maatskappy, regspersoon.

1.3 Die dryf van 'n besigheid:

1.3.1 Lisensies.

1.3.2 Versekering.

1.3.3 Huurkoop-ooreenkomste, huur en verhuur: algemene aspekte.

1.3.4 Personeelvoorregte—kledingreëls, verlof, ens.

2. Bestuur

2.1 Beginsels van moderne bestuur:

2.1.1 Organisasie: organisasiekaarte, gesagslyne, kommunikasie, verantwoording en verantwoordelikheid, menslike verhoudings.

2.1.2 Beplanning: Doelstellings, begroting.

2.1.3 Leiding.

2.1.4 Beheer.

2.1.5 Personeel en personeelverhoudings.

3. Finansiële administrasie

3.1 Basiese boekhouding.

3.2 Die balansstaat—doel en belang.

3.3 Definisies en toepassings.

3.3.1 Leningskapitaal, bedryfskapitaal, aandeelkapitaal.

3.3.2 Bates en laste.

3.3.3 Krediteure en debiteure, insluitende debiteure-beheer.

3.3.4 Voorraad, voorraadpeil, voorraadbeheer.

3.4 Handelsrekenings (opstel van handelsrekening, balansstaat, ens.)

3.5 Interpretasie van handelsrekening.

3.5.1 Verkope.

3.5.2 Bruto- en nettowins, ens.

3.6 Begroting.

3.7 Aankope en voorraadbeheersisteen.

4. Verkryging van 'n aptekersbesigheid

5. Bemaking en afsettegniek in die distribusiehandel met besondere verwysing na kleinhandelaptekewese.

6. Die apteker in diens van die publiek

Algemene oorsig van sy morele en etiese verantwoordelikhede as professionele persoon.

14. *The hormones.*

- (i) Hormones of the pituitary gland.
- (ii) Estrogens, progestogens and androgens, including oral contraceptives.

(iii) Anabolic steroid.

(iv) Adrenocortical hormones.

(v) Adrenaline.

(vi) Thyroid hormones and antithyroid drugs.

(vii) Insulin and oral antidiabetic drugs.

15. *Vitamins and antivitamins.*16. *Enzymes and therapeutic substances.*17. *Immunisation.*18. *Chemotherapeutic agents.*

(i) Drugs used in bacterial infections.

(ii) Drugs used in fungal infections.

(iii) Drugs used in protozoan infections.

(iv) Drugs used in infections caused by flagellates and flukes.

(v) Drugs used in infections caused by nematodes and cestodes.

(vi) Chemotherapy of cancer.

19. *Gases, vapours and air pollution.*20. *Insecticides and rodenticides.*21. *Disinfectants, bactericides and bacteriostatics.*22. *Weed killers.*

23. Biochemical individuality, pharmacological individuality, pharmacogenetics.

*Practical*1. *Drug transference.*2. *The use of isolated organ systems to demonstrate.*

(a) Competitive antagonism.

(b) Competitive dualism.

(c) Non-competitive antagonism.

3. Determination of affinities and intrinsic activities of various drugs.

4. The effect of various drugs on blood pressure, heart rate and respiration of anaesthetized animals.

5. Quantitative determination of the effects on locomotor activity of test animals of stimulants and depressants of the central nervous system.

6. *Capita selecta.**Pharmacy Administration*1. *Administration*

1.1 Review of Company Law and its influence on retail pharmacy, tax laws, Workmen's Compensation Act, shop hours ordinances. Shops and Offices Act, Unemployment Insurance Fund and commercial distributive trade.

1.2 The types of retail businesses: Sole owner, partnership, private company, public company, body corporate.

1.3 Running a business:

1.3.1 Licences.

1.3.2 Insurance.

1.3.3 Hire purchase agreements, and leases and leasing General aspects.

1.3.4 Staff Privileges—dress regulations, leave, etc.

2. *Management*

2.1 Principles of modern management:

2.1.1 Organisation: Organisation charts, lines of authority, communication, accountability and responsibility, human relations.

7. *Die struktuur van apteekwese in Suid-Afrika*

7.1 Amptelike Farmasie—Aptekersvereniging van Suid-Afrika.

7.2 Kleinhandelapteekwese.

7.3 Groothandel- en Industriële Farmasie.

7.4 Inrigtingsapteekwese.

7.5 Akademiese Farmasie.

7.6 Wet op Mediese Skemas.

7.6.1 Kontraktuele reseptering.

*FISIKA**Teorie*1. *Meganika*

1.1 Eenhede van lengte, massa, tyd in die volgende stelsels: MKS, CGS en VPS.

1.2 Snelheid, spoed, versnelling en vergelykings van eenvormigversnelde beweging.

1.3 Momentum.

1.4 Bewegingswette van Newton; swaartekrag.

1.5 Krag, massa en gewig.

1.6 Samestelling en ontbinding van kragte.

1.7 Momente, swaartepunt.

1.8 Arbeid en energie: potensiële en kinetiese energie.

1.9 Arbeidsvermoë.

2. *Hidrostatika en eienskappe van materie*

2.1 Soortlike gewig en digtheid.

2.2 Standaardmetodes om soortlike gewig en digtheid te bepaal.

2.3 Kragte en vloeistowwe.

2.4 Atmosferiese druk en barometers.

2.5 Wet van Boyle.

2.6 Kinetiese teorie van gasse.

2.7 Elastisiteit en wet van Hooke.

2.8 Oppervlakspanning en kapillariteit.

2.9 Viskositeit.

2.10 Diffusiewet van Graham.

3. *Warmte*

3.1 Temperatuur en die meting daarvan met behulp van termometers; vaste punte; gradering van termometers; vloeistof-in-glas- en ander termometers.

3.2 Temperatuurskale: Fahrenheit, Celsius, absolute (Kelvin); algemene definisie van 'n temperatuurskaal.

3.3 Uitsetting van vaste stowwe, vloeistowwe en gasse; uitsettingskoëffisiënte van vaste stowwe, vloeistowwe en gasse.

3.4 Wet van Charles en die absolute temperatuurskaal

3.5 Drukkoëffisiënt van 'n gas; die konstantedruk gastermometer.

3.6 Konstantevolumegastermometer.

3.7 Kalorimetrie.

3.8 Waterekwivalent.

3.9 Soortlike warmte van vaste stowwe en vloeistowwe.

3.10 Verandering van toestand; smelting en verdamping.

3.11 Latente warmtes van smelting van ys en verdamping van stoom.

3.12 Effek van druk op smeltpunt.

3.13 Vriesmengsels.

3.14 Dampdruk; versadigde en onversadigde dampkookpunt.

- 2.1.2 Planning: Objectives, budgeting.
- 2.1.3 Leading.
- 2.1.4 Control.
- 2.1.5 Staff and staff relationships.

3. Financial Administration

- 3.1 Elementary bookkeeping.
- 3.2 The balance sheet—purpose and importance.
- 3.3 Definitions and applications:
 - 3.3.1 Loan capital, working capital, share capital.
 - 3.3.2 Liabilities and assets.
 - 3.3.3 Creditors and debtors, including debtor control.
 - 3.3.4 Stock, stock levels, stock control.
- 3.4 Trading statements (drawing up of trading statement, balance sheet, etc).
- 3.5 Interpretation of trading statement.
 - 3.5.1 Sales.
 - 3.5.2 Gross and net profit, etc.
- 3.6 Budgeting.
- 3.7 Buying and stock-control system.

4. Acquiring a Pharmaceutical Business

5. Marketing and Merchandising in distributive trade with special reference to retail pharmacy.

6. The Pharmacist as Servant of the Public

General review of his moral and ethical responsibilities as a professional man.

7. The Structure of Pharmacy in South Africa

- 7.1 Official pharmacy—Pharmaceutical Society of South Africa.
- 7.2 Retail pharmacy.
- 7.3 Wholesale and industrial pharmacy.
- 7.4 Institutional pharmacy.
- 7.5 Academic pharmacy.
- 7.6 Medical Schemes Act.
- 7.6.1 Contractual dispensing.

PHYSICS

Theory

1. Mechanics

- 1.1 Units of length, mass, time in the MKS, CGS and FPS systems.
- 1.2 Velocity, speed, acceleration and equations of uniformly accelerated motion.
- 1.3 Momentum.
- 1.4 Newton's Laws of Motion; force of gravity.
- 1.5 Force, mass and weight.
- 1.6 Composition and resolution of forces.
- 1.7 Moments, centre of gravity.
- 1.8 Work and energy; potential and kinetic energy.
- 1.9 Power.

2. Hydrostatics and Properties of Matter.

- 2.1 Specific gravity and density.
- 2.2 Standard methods of determining specific gravity and density.
- 2.3 Forces in fluids.
- 2.4 Atmospheric pressure and barometers.
- 2.5 Boyle's Law.
- 2.6 The Kinetic Theory of Gases.
- 2.7 Elasticity and Hooke's Law.
- 2.8 Surface tension and capillarity.
- 2.9 Viscosity.
- 2.10 Graham's Law of Diffusion.

- 3.15 Wet van Dalton vir gedeeltelike drukke.
- 3.16 Atmosferiese vogtigheid; doupunt; higrometers.
- 3.17 Stroming, geleiding en straling.
- 3.18 Meganiese warmte-ekwivalent.

4. Optika

- 4.1 Reglynige voortplanting van lig; teorieë aangaande die aard van lig; skaduwees en verduisterings. Verligting van 'n oppervlak; omgekeerde kwadraatwet.
- 4.2 Fotometrie; fotometers en ligmeters.
- 4.3 Ligweerkaatsing.
 - 4.3.1 Wette. Beelde gevorm deur vlakspieëls, deur ewewydige spieëls, deur hellende spieëls.
 - 4.3.2 Weerkaatsing van lig deur sferiese spieëls. Konkawe en konvekse sferiese spieëls; formules wat voorwerpafstand, beeldafstand en brandpuntafstand koppel; tekenreël. Vergroting. Beelde.
- 4.4 Ligbreking. Wette. Breking by plat oppervlakte. Golfteorie van Huygens. Brekingsindeks. Breking deur vlakke ewewydig aan mekaar, en prisma's. Totale weerkaatsing en kritiese hoek.
- 4.5 Breking deur dun lense. Beeldvorming deur bikonvekse en bikonkawe lense. Standaardformules soortgelyk aan dié vir bostaande sferiese spieëls. Sterkte van 'n lens. Twee dun lense in kontak met mekaar.
- 4.6 Die oog en optiese instrumente. Beginsels vir die verhelping van oogdefekte met behulp van lense.
- 4.7 Deviasie en dispersie. Spektra; suiwer, solêr, sommige eenvoudige standaardgasspektra. Spektrometers, Fraunhöferlyne. Chromatiese aberrasie; dispersievermoë; achromatiese prisma'samestellings.
- 4.8 Polarisasie van lig deur die Nicol-prisma, deur weerkaatsing, deur polaroïed. Polarimeters.

5. Magnetisme

- 5.1 Behandeling gebaseer op die MKS-stelsel van eenhede. Eenvoudige eienskappe van magnete; magnetiese velde; magnetiese stowwe; magnetiese induksie.
- 5.2 Aardmagnetisme.
- 5.3 Moderne teorie van magnetisme.
- 5.4 Diamagnetisme, paramagnetisme en ferromagnetisme; die gebiedsteorie van ferromagnetisme.

6. Elektrostatika

- 6.1 Elektrifikasie deur wrywing en induksie.
- 6.2 Geleiers en isolators.
- 6.3 Bladgoudelektroskoop.
- 6.4 Laai deur induksie.
- 6.5 Verspreiding van lading.
- 6.6 Elektriese masjiene.

7. Elektromagnetisme

- 7.1 Magnetiese effek van 'n elektriese stroom: ten gevolge van 'n reguit stroomdraende draad, ten gevolge van 'n sirkelspoel wat 'n stroom dra; ten gevolge van 'n solenoïed.
- 7.2 Elektromagnete; eenvoudige elektriese klokke.

8. Stroomelektrisiteit

- 8.1 Behandeling gebaseer op die MKS-eenheidstelsel.
- 8.2 Elektriese groothede, stroomsterkte, elektromotoriese krag, potensiaalverskil, en weerstand. Wet van Ohm.
 - 8.3 Weerstande in serie en parallel.
 - 8.4 Soortlike weerstand.
 - 8.5 Verandering van weerstand met temperatuur.
 - 8.6 Omtakke.
 - 8.7 Selle in serie en parallel geskakel.
 - 8.8 Meting van stroomsterkte, elektromotoriese krag, potensiaalverskille; draaispoelgalvanometer; ammeters; voltmeters; die potensiometer; die Wheatstone-brug.

3. Heat

3.1 Temperature and its measurements by thermometers; fixed points; graduation of thermometers; liquid in glass and other thermometers.

3.2 Scales of temperature; Fahrenheit, Celsius, absolute (Kelvin) general definition of a temperature scale.

3.3 Expansion of solids, liquids and gases; coefficients of expansion of solids, liquids and gases.

3.4 Charles' Law and the absolute scale of temperature.

3.5 Pressure coefficient of a gas; the constant pressure gas thermometer.

3.6 Constant volume gas thermometer.

3.7 Calorimetry.

3.8 Water equivalent.

3.9 Specific heats of solids and liquids.

3.10 Change of state; melting and vaporisation.

3.11 Latent heats of fusion of ice and of vaporisation of steam.

3.12 Effect of pressure on melting point.

3.13 Freezing mixtures.

3.14 Vapour pressure; saturated and unsaturated vapours; boiling point.

3.15 Atmospheric humidity; dew point; hygrometers.

3.16 Dalton's Law of Partial Pressures.

3.17 Convection, conduction and radiation.

3.18 Mechanical equivalent of heat.

4. Optics

4.1 Rectilinear propagation of light; theories on nature of light; shadows and eclipses. Illumination of a surface; inverse square law.

4.2 Photometry; photometers and light meters.

4.3 Reflection of light:

4.3.1 Laws. Images formed by plane mirrors, by parallel mirrors, by inclined mirrors.

4.3.2 Reflection of light by spherical mirrors. Concave and convex spherical mirrors; formulae connecting object distance, image distance and focal length; sign convention Magnification. Images.

4.4 Refraction of light. Laws. Refraction at plane surfaces. Huygens' wave-theory. Refractive index. Refraction through parallel-sided plates, and prisms. Total reflection and critical angle.

4.5 Refraction through thin lenses. Formation of images by biconvex and biconcave lenses. Standard formulae as for spherical mirrors above. Power of a lens. Two thin lenses in contact.

4.6 The eye and optical instruments. Principles of correction of errors of vision by lenses.

4.7 Deviation and dispersion. Spectra; pure, solar, some simple standard gas spectra. Spectrometers, Fraunhofer lines. Chromatic aberration; dispersive power; achromatic prism combinations.

4.8 Polarisation of light by Nicol's prism, by reflection, by polaroid. Polarimeters.

5. Magnetism

5.1 Treatment based on MKS system of units. Simple properties of magnets; magnetic fields; magnetic substances; magnetic induction.

5.2 Terrestrial magnetism.

5.3 The modern theory of magnetism.

5.4 Diamagnetism, paramagnetism and ferromagnetism; the domain theory of ferromagnetism.

8.9 Warmte-effekte van 'n elektriese stroom.

8.10 Elektriese eenhede.

8.11 Elektromagnetiese induksie. Wet van Faraday; Wet van Lenz; wedersydse induksie; selfinduksie. Eenvoudige dinamo (wisselstroom en gelykstroom); eenvoudige transformator; eenvoudige gelykstroommotor.

8.12 Chemiese effekte van 'n elektriese stroom. Elektrolyse. Teorie van elektrolyse dissociasie. Faraday se wette vir elektrolyse. Elektrochemiese ekwivalente. Polarisasie van elektrodes.

8.13. Primêre, sekondêre en konsentrasieselle.

8.14 Elektroniese fisika; geleiding van elektrisiteit deur gasse; katode- en anodestrale; die katodestraalbuis; die fotoëlektriese sel; fluoressensie.

8.15 Radioaktiwiteit; alfa-, beta- en gammastrale.

8.16 X-strale.

Prakties**1. Algemene fisika**

1.1 Gebruik van die balans.

1.2 Vernier-skuifpasser.

1.3 Skroefmikrometer.

1.4 Digtheid.

1.5 Soortlike gewig.

1.6 Beginsel van Archimedes.

1.7 Fortinbarometer.

1.8 Wet van Boyle.

1.9 Hare se apparaat.

1.10 Enkelvoudige slinger.

2. Warmte

2.1 Lineêre uitsetting van metale.

2.2 Kubieke uitsetting van vloeistowwe.

2.3 Barometerkorreksie.

2.4 Termometerkorreksie en vaste punte.

2.5 Soortlike warmte.

2.6 Latente warmte.

2.7 Konstantevolumelugtermometer.

3. Lig

3.1 Wette van weerkaatsing en breking.

3.2 Sferiese spieëls.

3.3 Lenze.

4. Elektrisiteit

4.1 Wet van Ohm.

4.2 Wheatstonebrug.

4.3 Poskantoorbrug.

4.4 Soortlike weerstand.

4.5 Potensiometer; interne weerstand van 'n sel.

4.6 Elektrochemiese ekwivalent van koper.

4.7 Elektriese verwarming.

FISIOLOGIE**Teorie****1. Mikroskopiese bou van selle en weefsels**

(a) Sitologie van dierlike en menslike selle.

(b) Selfunksies, beheer oor sellulêre prosesse en sel deling, beheer oor proteïensintese, funksies van gene.

(c) Histologie van die weefsels en belangrike organe van die liggaam.

2. Die funksionele organisering van die liggaam en die beheer oor die inwendige omgewing.

(a) Organisering van die liggaam in selle, weefsels organe en sisteme.

(b) Die teorie van reguleringsisteme en homeostase.

3. Liggaamsvloeistowwe en uitskeiding

(a) Ekstrasellulêre en intrasellulêre vloeistowwe, men braantransport en osmotiese ewewigte.

(b) Kapillêre dinamika en vloeistofwisseling.

6. *Electrostatics*

- 6.1 Electrification by friction and induction.
- 6.2 Conductors and insulators.
- 6.3 Gold-leaf electroscope.
- 6.4 Charging by induction.
- 6.5 Distribution of charge.
- 6.6 Electrical machines.

7. *Electromagnetism*

7.1 Magnetic effect of an electric current: due to a straight current-carrying wire; due to a circular coil carrying a current; due to a solenoid.

7.2 Electromagnetics; simple electric bell.

8. *Current electricity*

- 8.1 Treatment based on MKS system of units.
- 8.2 Quantity of electricity, current, electromotive force, potential difference, and resistance. Ohm's Law.
- 8.3 Resistances in series and in parallel.
- 8.4 Resistivity (or specific resistance).
- 8.5 Variation of resistance with temperature.
- 8.6 Shunts.
- 8.7 Cells connected in series and in parallel.
- 8.8 Measurement of current, electromotive force, potential differences; moving-coil galvanometer; ammeters; voltmeters; the potentiometer; the Wheatstone bridge.
- 8.9 Heating effects of an electric current.
- 8.10 Electrical units.
- 8.11 Electro-magnetic induction. Faraday's Law: Lenz's Law; mutual induction; self-induction, Simple dynamo (A.C. and D.C.); simple transformer; simple D.C. motor.
- 8.12 Chemical effects of an electric current. Electrolysis. Theory of electrolytic dissociation. Faraday's Laws of electrolysis. Electrochemical equivalents. Polarisation of electrodes.
- 8.13 Primary, secondary and concentration cells.
- 8.14 Electronic physics: Conduction of electricity through gases; cathode and anode rays: the cathode ray tube; the photo-electric cell; fluorescence.
- 8.15 Radio-activity; alpha, beta and gamma rays.
- 8.16 X-rays.

Practical

1. *General physics*

- 1.1 Use of the balance.
- 1.2 Vernier sliding callipers.
- 1.3 Micrometer screw gauge.
- 1.4 Density.
- 1.5 Specific gravity.
- 1.6 Archimedes' Principle.
- 1.7 Fortin barometer.
- 1.8 Boyle's Law.
- 1.9 Hare's apparatus.
- 1.10 Simple pendulum.

2. *Heat*

- 2.1 Linear expansion of metals.
- 2.2 Cubical expansion of fluids.
- 2.3 Barometer correction.
- 2.4 Thermometer correction and fixed points.
- 2.5 Specific heat.
- 2.6 Latent heat.
- 2.7 Constant volume air thermometer.

(c) Die limfvatsisteem, interstisiële vloeistofwisseling en edeem.

(d) Spesiale vloeistofsisteme van die liggaam: serebro-spinale vloeistof, okulêre, pleurale en ander.

(e) Vorming van urine deur die niere en uitskeiding van urine, abnormale urinebestanddele.

(f) Beheer oor die samestelling en volume van liggaamstowwe.

(g) Beheer oor die suur-basis-ewewig van die liggaam.

4. *Bloed en immuniteit*

(a) Struktuur, ontwikkeling en lewensgeskiedenis van rooi bloedselle. Anemie en polisitemie.

(b) Liggaamsweerstand teen infeksie: die retikulo-endoteliale sisteem, leukosiete, immuniteit, allergie en inflammasie.

(c) Die bloedgroepe, transfusie, weefsel- en orgaanorplanting, bloedstolling en hemostase.

5. *Die kardiovaskulêre sisteem*

(a) Die hart: Fisiologie van hartspleier, eksitasie en geleiding, ritmisiteit, elektrokardiogram, pompwerking van die hart, afwykings van normale funksie.

(b) Bloedsirkulasie, arteriële druk en vloeë, hipertensie, kardiaal omsit, veneuse druk, skok, spesiale sirkulasiegebiede soos koronêre en longsirkulasie.

(c) Beheer oor die hart- en bloedvatfunksies, invloed van oefening.

6. *Respirasie*

(a) Meganiese beginsels van respirasie, longventilasie, kunsmatige asemhaling.

(b) Beginsels van gaswisseling, vervoer van suurstof en koolsuurgas deur die bloed en liggaamsvloeistowwe.

(c) Die beheer oor asemhaling en afwykings van normale respirasiefunksies.

(d) Lugvaart-, ruimtevaart-, diepseeduik- en industriële fisiologie.

7. *Spysvertering en metabolisme*

(a) Bewegings van die spysverteringskanaal, sekresie en beheer daarvoor.

(b) Vertering en absorpsie van voedingstowwe.

(c) Metabolisme van koolhidrate, vette en proteïene.

(d) Dieetsamestelling, voeding, beheer oor voeding.

(e) Energiewisseling en -transformering.

(f) Beheer oor liggaamstemperatuur.

(g) Steurings van die spysvertering en metabolisme.

8. *Endokrinologie en reproduksie*

(a) Endokriene regulering, die hipofise, neurosekresies.

(b) Bynierkorkeshormone, tiroïedfunksie en timus.

(c) Insulien, glukagon, diabetes mellitus.

(d) Paratiroïedfunksie, kalsiummetabolisme, been- en tandfisiologie.

(e) Voortplanting en die endokriene regulering daarvan.

9. *Die sensustelsel en spierfisiologie*

(a) Beginsels van bio-elektrisiteit, membraan- en aksiepotensiale.

(b) Spierfisiologie.

(c) Sinapsfunksies, neorosisteme.

(d) Algemene organisasie van die sensustelsel.

(e) Somestetiese sensasies en interpretasie van gewaarwordings deur die sensustelsel.

(f) Fisiologiese beginsels van gedagteprosesse en die beheer oor motoriese funksies.

(g) Refleksfisiologie, funksies van die rugmurg, breinstam, basale ganglia en serebellum.

(h) Die outonome sensustelsel.

(i) Outomasie, ritmisiteit, outonome balans, slaap en psigosomatiese toestande.

(j) Die sintuie: gesig, gehoor, smaak en reuk.

3. *Light*

- 3.1 Laws of reflection and refraction.
- 3.2 Spherical mirrors.
- 3.3 Lenses.

4. *Electricity*

- 4.1 Ohm's Law.
- 4.2 Wheatstone bridge.
- 4.3 Post office bridge.
- 4.4 Resistivity.
- 4.5 Potentiometer; internal resistance of a cell.
- 4.6 Electrochemical equivalent of copper.
- 4.7 Electric heating.

PHYSIOLOGY

*Theory*1. *Microscopical structure of cells and tissues*

- (a) Cytology of animal and human cells.
- (b) Cell functions, control of cellular processes and cell fission, control of protein synthesis, functions of genes.
- (c) Histology of the tissues and important organs of the body.

2. *The functional organisation of the body and control of the internal environment*

- (a) Organisation of the body in cells, tissues, organs and systems.
- (b) The theory of regulating systems and homeostasis.

3. *Body fluids and excretion*

- (a) Extracellular and intracellular fluids, membrane transport and osmotic equilibria.
- (b) Capillary dynamics and fluid exchange.
- (c) The lymphatic system, interstitial fluid exchange and oedema.
- (d) Special fluid systems of the body: cerebrospinal fluid, ocular fluids, pleural fluid, etc.
- (e) Formation of urine by the kidneys and excretion of urine, abnormal urinary constituents.
- (f) Control of the composition and volume of body fluids.
- (g) Control of the acid-base equilibrium of the body.

4. *Blood and immunity*

- (a) Structure, development and life history of red blood cells. Anaemia and polycythaemia.
- (b) Resistance of the body against infection—the reticuloendothelial system, leucocytes, immunity, allergy and inflammation.
- (c) The blood groups, transfusion, transplant of tissues and organs, coagulation of blood and haemostasis.

5. *The cardiovascular system*

- (a) The heart: physiology of cardiac muscle, excitation and conduction, rhythmicity, electrocardiogram, pumping action of the heart, deviations from normal function.
- (b) Circulation of blood, arterial pressure and arterial flow, hypertension, cardiac output, venous pressure, shock, special circulation areas such as coronary circulation and pulmonary circulation.
- (c) Control of the functions of the heart and vessels, influence of exercise.

*Prakties*1. *Histologie*2. *Hematologie*

- (a) Bloedseltellings: rooi bloedselle en wit bloedselle.
- (b) Hemoglobienbepalings.
- (c) Hematokrietwaarde.
- (d) Berekening van indekse.
- (e) Bepalings wat verband hou met bloedgroepe, hemolise, breekbaarheid, stolling, besinking.
- (f) Biochemiese bepaling van bloedbestanddele.

3. *Kardiale en vaskulêre fisiologie*

- (a) Hemodinamika, bloeddruk en hartsnelheid onder verskillende toestande.
- (b) Eksperimentele fisiologie van die padda- en/of soogdierhart.

4. *Spier- en senuweefisiologie*

- (a) *Skeletspier en/of senuwee*.—Uitwerking van prikkels, summisie, tetanus, temperatuur, belading, vermoeienis, snelheid van impulsgeleiding, refleksie.
- (b) Kontraksie van gladde spier.

5. *Urine-ontledings*

Normale en abnormale urinebestanddele.

6. *Spysvertering en metabolisme*

Ensiebepalings, capita selecta.

Geregtelike Farmasie

Kandidate se kennis sal getoets word met betrekking tot die volgende wetgewing vir sover dit betrekking op die praktyk van apteekwese het.

1. Wet op Geneeshere, Tandartse en Aptekers (No. 13 van 1928), soos gewysig, veral met betrekking tot die volgende:

Hoofstuk I: Artikels 2, 3, 8 en 9.

Hoofstuk II: Artikels 14 tot en met 18, 24, 24A, 27A en 33.

Hoofstuk III: Artikel 37.

Hoofstuk IV: Die hele Hoofstuk, uitgesonderd artikel 44.

Hoofstuk V: Die hele Hoofstuk.

Hoofstuk VI: Die hele Hoofstuk.

Hoofstuk VII: Artikels 73, 75, 76, 76 bis, 77 tot en met 82 uitgesonderd artikel 80 bis, 84, 87 tot en met 90, 95 en 96.

Die Tweede, Vierde, Vyfde en Sesde Bylaes.

Kandidate moet ook kennis hê van die Engelse en Afrikaanse name van vergifte wat in die Vierde en Vyfde Bylaes voorkom, en van die giftige stowwe wat in artikel 82 genoem word.

Regulasies kragtens die Wet op Geneeshere, Tandartse en Aptekers uitgevaardig.

Regulasies uitgevaardig vir die uitvoering van voorwaardes van Hoofstukke 5 en 6 en in die besonder:

- (a) Regulasies betreffende die invoer, verkoop en gebruik van opium en ander gewoontevormende medisyne insluitende Aanhangel A.
- (b) Erkende formuleboeke.
- (c) Etikettering van moontlike nadelige medisyne.
- (d) Lys van giftige stowwe.
- (e) Uitreiking van sekere vergifte namens die Regering.
- (f) Etikettering en verkoop van vergifte, insluitende lyste A, B, C, en D.
- (g) Prepare vrygestel van die bepalinge van Hoofstuk 4.

Reëls uitgevaardig kragtens die Wet op Geneeshere Tandartse en Aptekers en in die besonder:

- (a) Reëls in verband met gedrag waarvan die Kommissie kennis kan neem.

6. Respiration

(a) Mechanical principles of respiration, pulmonary ventilation, artificial respiration.

(b) Principles of gaseous exchange, transport of oxygen and carbon dioxide by the blood and body fluids.

(c) Control of respiration and deviations from normal respiration.

(d) Physiology of aviation, space travel and deep-sea diving and industrial physiology.

7. Digestion and metabolism

(a) Movements of the gastro-intestinal tract, secretion and control thereof.

(b) Digestion and absorption of nutrients.

(c) Metabolism of carbohydrates, fats and proteins.

(d) Composition of diet, nutrition and its control.

(e) Exchange and transformation of energy.

(f) Control of body temperature.

(g) Disorders of digestion and of metabolism.

8. Endocrinology and reproduction

(a) Endocrine regulation, the pituitary gland, neurosecretions.

(b) Hormones of the adrenal cortex, functions of thyroid and thymus.

(c) Insulin, glucagon, diabetes mellitus.

(d) Function of parathyroids, calcium metabolism, physiology of bone and teeth.

(e) Reproduction and its endocrine control.

9. The nervous system and physiology of muscle

(a) Principles of bio-electricity, membrane and action potentials.

(b) Physiology of muscle.

(c) Functions of synapses, neurosystems.

(d) General organization of the nervous system.

(e) Somesthetic sensations and interpretation of perceptions by the nervous system.

(f) Physiological principles of mind processes and the control of motor functions.

(g) Physiology of reflexes, functions of spinal cord, brainstem, basal ganglia and cerebellum.

(h) The autonomic nervous system.

(i) Automation, rhythmicity, autonomic balance, sleep and psychosomatic conditions.

(j) The senses: vision, hearing, taste and smell.

Practical**1. Histology****2. Haematology**

(a) Blood cell counts: red blood cells and white blood cells.

(b) Haemoglobin determinations.

(c) Haematocrit value.

(d) Calculation of indices.

(e) Determinations related to blood groups, haemolysis, fragility, coagulation, sedimentation.

(f) Biochemical determination of constituents of blood.

3. Cardiac and vascular physiology

(a) Haemodynamics, blood pressure and heart rate under various conditions.

(b) Experimental physiology of the heart of the frog and/or mammalian heart.

4. Physiology of muscle and nerves

(a) *Skeletal muscle and/or nerve tetanus*.—Effects of stimuli, summation, temperature, loading, fatigue, conduction, velocity of impulses, reflexes, tetanus.

(b) Contraction of smooth muscle.

(b) Registrasie van ongekwalifiseerde assistente.

(c) Verskaffing van inligting aan die Registrateur in verband met apteke waarby 'n geregistreerde apteker betrokke is.

(d) Betaling van jaargelde.

Regulasies betreffende Terapeutiese Stowwe: Vir sover dit betrekking op die praktyk van apteekwese het, en in die besonder:

Deel I: Regulasies 1 tot en met 4 *bis*.

Deel II: Regulasie 5.

Deel III: Regulasies 20, 21 en 22.

Deel IV: Regulasies 68 tot en met 89 *bis*.

Deel VIII: Regulasies 90 tot en met 92.

Deel X: Regulasies 94 tot en met 96.

Algemene kennis van items wat onder die bepalings van die Bylaes val.

2. Die Drankwet en regulasies: Artikels 5, 130, 131, 140 en 175 en regulasies met betrekking tot artikels 130 en 131.

3. Volksgezondheidswet: Vir sover dit betrekking op die praktyk van die Apteekwese het en in die besonder artikels 65 en 139.

4. Die Wet op Voedingsmiddels, Medisyne en Ontsmettingsmiddels: Vir sover dit betrekking op die praktyk van die Apteekwese het.

5. Wet op Misstowwe, Veevoedsel en Middels en regulasies: Vir sover dit betrekking op die praktyk van die Apteekwese het.

6. Wet op die Beheer van Medisyne en regulasies: Vir sover dit betrekking op die praktyk van die Apteekwese het en in die besonder artikels 1, 2, 14, 18, 19, 20, 28 en 32.

Regulasies 1, 2, 3, 6 en 10.

Opmerking.—Bogenoemde kennis is van toepassing op enige wysigings van die bepaalde artikels of bylaes en op enige reëls of regulasies wat daarop betrekking het of wysigings daarvan wat voor of op 30 April van die lopende jaar gepubliseer word.

Gesondheidsvoorligting

Doel.—Om die apteker voor te berei en van die basiese agtergrondkennis te voorsien om, in die beoefening en binne die omvang van sy beroep aan die publiek inligting en voorligting te verstrek ten opsigte van belangrike aangeleenthede op die gebied van die openbare gesondheid.

AFDELING I**Studie van die Gemeenskap**

(A) Sosiologiese agtergrond.

(B) Bepaalde omstandighede in die gemeenskap wat gesondheidsvoorligting vereis:

(a) Inleiding:

(i) Basiese fisiologiese prosesse en die verband tussen hulle en siekte.

(ii) Gesondheidsvoorligting as faktor in die voorkoming van siekte.

(iii) Basiese funksies van die gesondheidsvoorligter.

(iv) Vorming van gewoontes; rol van aanspooringsbonus.

(b) Die huisgesin.

(c) Die algemene gemeenskap.

5. *Urine analysis*

Normal and abnormal urinary constituents.

6. *Digestion and metabolism.*

Determination of enzymes, capita selecta.

ZOOLOGY

A. *Theory*

1. Small mammal (e.g. rat, rabbit, guinea pig or cat)—external features, skin and derivatives. Digestive system—main parts of the alimentary canal and its derivatives.

Enzymes and hormones—an outline of their functions in digestion.

Peristalsis.

Mouth—muous, ptyalin.

Stomach—pepsin, HCl, rennin.

Pancreas—trypsinogen, steapsin, amylpsin. Small intestine—erepsin, enterokinase, lipase. Liver—bile pigments and salts.

Rectum—absorption of water, ejection of undigested food, excretion from vascular supply of walls.

Vascular system—heart, principal blood vessels.

Nature of arteries, veins, portal veins, capillaries. Functions of blood transport, protection (phagocytosis, clotting, agglutination). Maintenance of constant temperature. Respiratory system.

Nervous system—spinal cord and nerves: Brain and cranial nerves.

Sympathetic system—reflex arc. Function of parts in general.

Skeletal system—vertebral column, skull, appendicular skeleton.

Name of bones—functions—attachment of muscles, support, protection.

Urogenital system—kidney, gonads, ducts and associated glands.

Placenta.

Endocrine system—principal glands and their functions in general.

2. Microscopic anatomy of mammal—structure and physiology.

Animal cells—structure and multiplication. Mitosis.

Meiosis.

Epithelial tissue—trachea, oesophagus, stomach, intestine, skin, liver, pancreas, kidney.

Connective tissue—loose, dense (elastic, collagenous and reticular); adipose, pigment, lymph and lung, tissue, bone, cartilage and blood (including clotting).

Muscular tissue—striated, cardiac and smooth.

Nervous tissue—ganglia and synapses, neuroglia.

Sensory organs and tissues—taste buds, and bulks, Pacinian corpuscles, and plates, muscle spindles, free nerve endings, olfactory epithelium, eye, ear.

Sex organs—testis, ovary, gametogenesis, sex determination.

3. Outline of classification—basic principles of classification; aggregation of animals into species, genera, families, classes, phyla.

4. General study of the following invertebrates:

Protozoa—*Amoeba*, *Entamoeba*, *Trichomonas*, *Trypanosoma*, *Plasmodium*.

Babesia.

Platyhelminthes—*Schistosoma*, *Fasciola*, *Taenia*, *Echinococcus*.

AFDELING II

Beginnels van Gesondheidsopvoeding en Onderrig

(a) Die aard en betekenis van gesondheidsopvoeding.
(b) Hedendaagse doelstellings van onderrig en die verband tussen hulle en gesondheidsopvoeding.

(c) Die leerproses; verskillende leervorme; faktore wat die leerproses beïnvloed.

(d) Algemene beginsels van onderrig; toepassing van onderrigmetodes by gesondheidsopvoeding.

(e) Beginnels van kommunikasie; toepassing van onderrigmetodes by gesondheidsvoorligting.

(f) Tegnieke van gesondheidsvoorligting.

(g) Bronne van inligtingsmateriaal betreffende gesondheidsopvoeding.

AFDELING III

Gesondheidsprobleme van Belang in Suid-Afrika

(a) Omgewingsfaktore.
(b) Gesondheidsaspekte van water.
(c) Persoonlike higiëne en fiksheid.
(d) Moederkunde, babasorg en -opvoeding, gesinsbeplanning.

(e) Gesondheidsaspekte van voedsel en voeding.

(f) Faktore wat siekte teweegbring.

(g) Verspreiding en voorkoming van aansteeklike en ander oordraagbare siektes.

(h) Epidemiese en ander siektes wat aangegee moet word.

(i) Algemene kindersiektes.

(j) Ander algemene siektes van belang.

(k) Insekte en insektebestryding.

(l) Geestelike welsyn en gevare van misbruik van medisyne en veral van dwelmmiddels, misbruik van alkohol en van tabak.

(m) Voorkoming van vergiftiging.

(n) Die apteker as lid van 'n gesondheidspan.

(o) Tersaaklike aspekte van gesondheidswetgewing.

PLANTKUNDE

A. *Teorie*

Biologie, die betekenis en omvang en die twee groot onderafdelings daarvan, naamlik plantkunde en dierkunde; die waarde daarvan as kulturele en farmaseutiese vak; die betekenis en omvang van die belangrikste onderafdelings van biologie; taksonomie, morfologie, anatomie, fisiologie, genetica, evolusie.

Die planteryk en die hoofonderafdelings daarvan met hul kenmerke; bakterieë, alge, swamme, korsmosse, briofiete, pteridofiete, gimnosperme en angiosperme as voorbeelde van die verskeidenheid van plantlewesvorme en van evolusionêre geskiedenis en neigings.

Die plant as lewende organisme; vorm en funksie van die wortels, stingel, blare, vrugte van 'n tipiese groen kruidagtige landplant en van 'n houtagtige meerjarige plant wat sekondêre diktegroei vertoon. Die invloed van die habitat (grond en lug) op plantorgane. Die aard van die modifikasies van organe vir spesiale funksies. Die sel en seldeling. Die weefsels van tipiese angiosperme—kortlikke hul bou, rangskikking en funksies. 'n Tipiese blom—bou en die funksies van die verskillende dele; die bou van die vrug en saad, verspreiding en ontkieming van saad.

Beginnels van plantfisiologie—waterverhoudings, fotosintese, voeding, groei, respirasie, vertering, tropismes met betrekking tot swaartekrag, lig, water, opberging van reserwes. Parasitisme, saprofietisme, epifietisme.

Nemathelminthes—*Trichocephalus (Trichuris)*, *Strongyloides*, hookworm, *Enterobius*, *Ascaris*.

Arthropoda—crayfish or cockroach or locust (general morphology).

Bug, mosquito, flea, tsetse fly, housefly, louse and beetle (external structure, mouth parts and life history only).

Arachnida—Ticks and mites (the external structure, life history and hosts).

5. Parasitism.

6. Heredity—Mendelian heredity as illustrated by the inheritance of simple and sex-linked characters.

7. Embryology of the frog.

B. Practical

The complete dissection of the systems (other than muscular) of a small mammal, crayfish or cockroach or locust.

Identification of the bones of the skeleton, and of slides showing the macroscopic structure of animals or parts of animals mentioned in the theory syllabus."

No. R. 735 7 May 1971

THE SOUTH AFRICAN NURSING COUNCIL REVOCATION OF GOVERNMENT NOTICES R. 1998, R. 1999 AND R. 2000 OF 27 DECEMBER 1963

The Minister of Health, in terms of section 11 (1) of the Nursing Act, 1957 (Act 69 of 1957), has approved of the resolution of the South African Nursing Council that the following Government Notices be revoked:

(a) Government Notice R. 1998 of 27 December 1963—regulations regarding the maximum fees which registered nurses may charge;

(b) Government Notice R. 1999 of 27 December 1963—regulations regarding the maximum fees which enrolled auxiliary nurses may charge;

(c) Government Notice R. 2000 of 27 December 1963—regulations regarding the maximum fees which registered midwives may charge.

No. R. 739 7 May 1971

THE MEDICAL, DENTAL AND PHARMACY ACT, No. 13 OF 1928.—THERAPEUTIC SUBSTANCES REGULATIONS

The Minister of Health has, in terms of sections 83 and 94 (1) of the Medical, Dental and Pharmacy Act, 1928 (Act 13 of 1928), and after consultation with the South African Medical and Dental Council and the South African Pharmacy Board approved that the regulations regarding therapeutic substances published under Government Notice R. 740 of 13 May 1966, be amended as follows:

(1) The deletion of proviso (a) to regulation 61 and the deletion of the letter "(b)" before the remaining proviso to that regulation.

(2) The deletion of paragraph (g) of regulation 64 and the renumbering of paragraphs (h), (i), (j) and (k) thereof to read (g), (h), (i) and (j), respectively.

(3) The deletion from proviso (i) to regulation 64 of the word "antibiotics".

(4) The deletion of the Seventh Schedule.

'n Kort vergelykende studie van die vorm, bou, lewensgekieenis en voortplanting van *Bacillus subtilis*, Tabakmosaïekvirus, *Chlamydomonas*, *Spiriboyra*, Diatome, *Fucus*, *Rhizopus nigricans*, *Saccharomyces*, *Claviceps*, *Penicillium*, *Agaricus (psalliota)*, *Funaria*, *Dryopteris*, *Pinus*, 'n tipiese monokotiel, 'n tipiese dikotiel. Beginsels van taksonomie soos geïllustreer deur 'n kort studie van 'n verteenwoordigende voorbeeld van elk van die volgende families: Liliaceae, Gramineae, Ranunculaceae, Leguminosae, Solanaceae, Compositae, Labiatae, Scrophulariaceae.

B. Prakties

Die ondersoek, disseksie, makroskopiese en mikroskopiese ondersoek, beskrywing en teken van plantmateriaal uit bostaande lys verkry; demonstrasies van ekologiese en fisiologiese kenmerke moet gereël word. Die eksamen moet veral die bepaling van die waarnemingsvermoë van die kandidaat beoog, asook sy vermoë om wat hy gesien het noukeurig te beskryf en getrou te teken, en sy vermoë om plantkundige verskynsels te interpretere."

No. R. 735 7 Mei 1971
DIE SUID-AFRIKAANSE VERPLEEGSTERSRAAD

INTREKKING VAN GOEWERMENSKENNIS- GEWINGS R. 1998, R. 1999 EN R. 2000 VAN 27 DESEMBER 1963

Die Minister van Gesondheid het, kragtens artikel 11 (1) van die Wet op Verpleging, 1957 (Wet 69 van 1957), sy goedkeuring geheg aan die besluit van die Suid-Afrikaanse Verpleegstersraad dat die volgende Goewermenskennisgewings ingetrek word:

(a) Goewermenskennisgewing R. 1998 van 27 Desember 1963—regulasies betreffende die hoogste vergoeding wat geregistreerde verpleegsters mag vra;

(b) Goewermenskennisgewing R. 1999 van 27 Desember 1963—regulasies betreffende die hoogste vergoeding wat ingeskrewe hulpverpleegsters mag vra;

(c) Goewermenskennisgewing R. 2000 van 27 Desember 1963—regulasies betreffende die hoogste vergoeding wat geregistreerde vroedvroue mag vra.

No. R. 739 7 Mei 1971

DIE WET OP GENEESHERE, TANDARTSE EN APTEKERS, No. 13 VAN 1928.—REGULASIES BETREFFENDE TERAPEUTIESE STOWWE

Die Minister van Gesondheid het kragtens artikels 83 en 94 (1) van die Wet op Geneeshere, Tandartse en Aptekers, 1928 (Wet 13 van 1928) en na oorlegpleging met die Suid-Afrikaanse Geneeskundige en Tandheelkundige Raad en die Suid-Afrikaanse Aptekerskommissie, goedgekeur dat die regulasies betreffende terapeutiese stowwe wat by Goewermenskennisgewing R. 740 van 13 Mei 1966 gepubliseer is soos volg gewysig word:

(1) Die skapping van voorbehoudsbepaling (a) van regulasie 61 en die skapping van die letter "(b)" voor die oorblywende voorbehoudsbepaling van daardie regulasie.

(2) Die skapping van paragraaf (g) van regulasie 64 en die hernoëmering van paragrafe (h), (i), (j) en (k) daarvan sodat hulle onderskeidelik (g), (h), (i) en (j) lui.

(3) Die skapping uit voorbehoudsbepaling (i) van regulasie 64 van die woord "antibiotikums".

(4) Die skapping van die Sewende Bylae.

DEPARTMENT OF LABOUR

No. R. 736

7 May 1971

INDUSTRIAL CONCILIATION ACT, 1956

BEDDING MANUFACTURING INDUSTRY.—
TRANSCVAAL.—AMENDMENT OF PROVIDENT
FUND, SICK BENEFIT SOCIETY AND MORTALITY
BENEFIT ASSOCIATION AGREEMENT

I, Marais Viljoen, Minister of Labour, hereby—

(a) in terms of section 48 (1) (a) of the Industrial Conciliation Act, 1956, declare that all the provisions of the Agreement (hereinafter referred to as the Amending Agreement) which appears in the Schedule hereto and which relates to the Bedding Manufacturing Industry, shall be binding from 1 June 1971, and for the period ending 25 May 1974, upon the employers' organisation and the trade unions which entered into the Amending Agreement and upon the employers and employees who are members of the said organisation or unions; and

(b) in terms of section 48 (1) (b) of the said Act, declare that the provisions of the Amending Agreement shall be binding from 1 June 1971 and for the period ending 25 May 1974, upon all employers and employees other than those referred to in paragraph (a) of this notice, who are engaged or employed in the said Industry in the Province of the Transvaal.

M. VILJOEN, Minister of Labour.

SCHEDULE

THE INDUSTRIAL COUNCIL FOR THE BEDDING
MANUFACTURING INDUSTRY, TRANSCVAAL

AGREEMENT

in accordance with the provisions of the Industrial Conciliation Act, No. 28 of 1956, as amended, made and entered into by and between the

Bedding Manufacturers' Association of the Transvaal

(hereinafter referred to as the "employers" or the "employers' organisation"), of the one part, and the

National Association of Furniture and Allied Workers of
South Africa

and the

National Union of Furniture and Allied Workers of
South Africa

(hereinafter referred to as the "employees" or the "trade union" or the "trade unions"), of the other part,

being parties to the Industrial Council for the Bedding Manufacturing Industry, Transvaal, to amend the Agreement of the said Council published under Government Notice R. 806 of 16 May 1969, as follows:

1. Delete the words "clause 9 (2)" where it appears in sub-clause (2) of clause VII of Part A and insert therefor "clause 9 (i) (c) and (d)".
2. By the deletion of clause 9 of Part B and the substitution of the following clause therefor:

"9. SUBSCRIPTIONS

The following subscriptions shall be payable by members in the respective categories referred to hereunder:

(1) Subscriptions by compulsory members shall be diverted as follows from the contributions provided for in clause VII (1) (a) of Part A of this Agreement and prescribed in the relevant columns of Appendix B thereto:

(a) Members whose ordinary weekly wage is R15,40 per week or more and learners in studio couch upholstery in the third or fourth six-months period of learnership, R1,48 per week made up of R1 from the contributions of the member and 48 cents from the contributions of the employer.

DEPARTEMENT VAN ARBEID

No. R. 736

7 Mei 1971

WET OP NYWERHEIDSVERSOENING, 1956

BEDDEGOEDNYWERHEID, TRANSCVAAL.—
WYSIGING VAN VOORSORGFONDS-, SIEKTE-
BYSTANDSVERENIGING- EN STERFTE-
BYSTANDSVERENIGINGOOREENKOMS

Ek, Marais Viljoen, Minister van Arbeid, verklaar hierby—

(a) kragtens artikel 48 (1) (a) van die Wet op Nywerheidsversoening, 1956, dat al die bepalings van die Ooreenkoms (hieronder die Wysigingsooreenkoms genoem) wat in die Bylae hiervan verskyn en op die Beddegoednywerheid betrekking het, vanaf 1 Junie 1971 en vir die tydperk wat op 25 Mei 1974 eindig, bindend is vir die werkgewersorganisasie en die vakverenigings wat die Wysigingsooreenkoms aangegaan het en vir die werkgewers en werknemers wat lede van genoemde organisasie of verenigings is; en

(b) kragtens artikel 48 (1) (b) van genoemde Wet dat die bepalings van die Wysigingsooreenkoms vanaf 1 Junie 1971 en vir die tydperk wat op 25 Mei 1974 eindig, bindend is vir alle ander werkgewers en werknemers as dié genoem in paragraaf (a) van hierdie kennisgewing, wat betrokke is by of in diens is in genoemde Nywerheid in die provinsie Transvaal.

M. VILJOEN, Minister van Arbeid.

BYLAE

DIE NYWERHEIDSRAAD VIR DIE BEDDEGOED-
NYWERHEID, TRANSCVAAL

OOREENKOMS

ingevolge die Wet op Nywerheidsversoening, Wet 28 van 1956, soos gewysig, gesluit deur en tussen die

Bedding Manufacturers' Association of the Transvaal

(hierna die "werkgewers" of die "werkgewersorganisasie" genoem), aan die een kant, en die

National Association of Furniture and Allied Workers of
South Africa

en die

National Union of Furniture and Allied Workers of
South Africa

(hierna die "werknemers" of die "vakvereniging" of die "vakverenigings" genoem), aan die ander kant,

wat die partye is by die Nywerheidsraad vir die Beddegoednywerheid, Transvaal, om die Ooreenkoms van genoemde Raad, gepubliseer by Goewermentskennisgewing R. 806 van 16 Mei 1969, soos volg te wysig:

1. Skrap die woorde "klousule 9 (2)" waar dit in klousule VII (2) van Deel A voorkom en vervang dit deur "klousule 9 (1) (c) en (d)".
2. Deur die skraping van klousule 9 van Deel B en die vervanging daarvan deur:

"9. LEDEGELDE

Ondergemelde ledegelde is betaalbaar deur lede in die onderskeie klasse hieronder vermeld:

(1) Ledegelde van verpligte lede word soos volg betaal uit die bydraes wat in klousule VII (1) (a) van Deel A van hierdie Ooreenkoms vasgestel en in die betrokke kolom van Aanhangsel B hiervan voorgeskryf word:

(a) Lede wie se gewone weeklone R15,40 per week of meer is en leerlinge in ateljeerusbankstofferwerk in hulle derde of vierde ses maande leertyd, R1,48 per week bestaande uit R1 van die bydraes deur die lid en 48 sent van die bydraes deur die werkgewer.

(b) Members whose ordinary weekly wage is R10,40 per week or more but less than R15,40 per week and learners in studio couch upholstery in the first or second six-months period of learnership, 65 cents per week made up of 45 cents from the contributions of the member and 20 cents from the contributions by the employer.

(c) Members who are first, second or third year minor learners, 65 cents per week made up of 45 cents from the contributions of the member and 20 cents from the contributions by the employer.

(d) Members who are minor learners in their fourth period of learnership, R1,48 per week made up of R1 from the contributions by the member and 48 cents from the contributions by the employer.

(2) Subscriptions by other than compulsory members shall be R1,48 per week payable monthly in advance to the Secretary of the Society."

3. Delete clause 11 of Part B and substitute the following therefor:

"11. SICK PAY

(1) A member, in respect of whom deductions from wages are prescribed in Appendix B to this Agreement, who through illness, is compelled to absent himself from work, shall subject to the provisions of clauses 10 and 12 of this part of the Agreement, be entitled to sick pay during any period of 12 consecutive calendar months, as laid down in the following table, during the first 15 ordinary working days of such absence:

Number of ordinary working days absent through illness	Number of days for which sick pay is paid	Amount of Sick Pay to be paid	
		Based on Contribution of R1,48 per week per Clause 9 (1) (a) and (d)	Based on Contribution of 65c per week per Clause 9 (1) (b) and (c)
1	0	—	—
2	0	—	—
3	1	2,80	1,80
4	2	5,60	3,60
5	3	8,40	5,40
6	5	14,00	9,00
7	7	19,60	12,60
8	8	22,40	14,40
9	9	25,20	16,20
10	10	28,00	18,00
11	11	30,80	19,80
12	12	33,60	21,60
13	13	36,40	23,40
14	14	39,20	25,20
15	15	42,00	27,00

(2) Should a member's period of absence through illness in respect of whom a contribution of R1,48 per week is prescribed in subclause (1) (a) and (d) of clause 9 of this part of the Agreement, exceed 15 working days; he shall be paid sick pay at the rate of R2 per day for each working day of absence through illness not exceeding a further 25 working days.

(3) Should a member's period of absence through illness in respect of whom a contribution of 65 cents per week is prescribed in subclause (1) (b) and (c) of clause 9 of this part of the Agreement, exceed 15 working days; he shall be paid sick pay at the rate of R1,20 per day for each working day of absence through illness not exceeding a further 25 working days.

Saturday and Sunday shall not, for purposes of sick pay calculations, be considered to be working days."

4. By the deletion in clause 5 (a) of Part C of the Agreement of the words "six cents" where they appear and the substitution of the words "eight cents" therefor.

5. By the deletion of subclause (1) of clause 6 of Part C of the Agreement and the substitution of the following subclause therefor:

"(1) Upon the death of a member and subject to the provisions of clause 7 of this part of the Agreement the mortality benefit payable to a dependant shall be—

(i) in the case of a deceased member who had not attained the age of 65 and had been a member for up to 12 months: R150;

(ii) in the case of a deceased member who had not attained the age of 65 and had been a member for more than 12 months but not more than five years: R250;

(iii) in the case of a deceased member who had not attained the age of 65 and had been a member for longer than five years: R500;

(b) Lede wie se gewone weekloon R10,40 per week of meer is maar minder as R15,40 per week en leerlinge in ateljeerushank-stoffeerwerk in hulle eerste of tweede ses maande leertyd, 65 sent per week bestaande uit 45 sent van die bydraes deur die lid en 20 sent van die bydraes deur die werkgewer.

(c) Lede wat minderjarige leerlinge in hulle eerste, tweede of derde leerjaar is, 65 sent per week bestaande uit 45 sent van die bydraes deur die lid en 20 sent van die bydraes deur die werkgewer.

(d) Lede wat minderjarige leerlinge in hulle vierde leertyd is, R1,48 per week bestaande uit R1 van die bydraes deur die lid en 48 sent van die bydraes deur die werkgewer.

(2) Ledegelde deur lede, uitgesonderd verpligte lede, is R1,48 per week maandeliks vooruit betaalbaar aan die Sekretaris van die Vereniging".

3. Skrap klousule 11 van Deel B en vervang dit deur:

"11 SIEKTEBETALING

(1) 'n Lid, ten opsigte van wie aftrekkings van lone in Aanhangsel B van hierdie Ooreenkoms voorgeskryf word, wat weens siekte verplig is om van die werk weg te bly is, behoudens klousules 10 en 12 van hierdie deel van die Ooreenkoms, geregtig op siektebetaling gedurende enige periode van 12 agtereenvolgende kalendermaande soos uiteengesit in onderstaande tabel, gedurende die eerste 15 gewone werksdae van sodanige afwesigheid:

Getal gewone werksdae afwesig weens siekte	Getal dae waarvoor siektebetaling betaal word	Bedrag van siektebetaling wat betaal moet word	
		Gebaseer op bydrae van R1,48 per week per klousule 9 (1) (a) en (d)	Gebaseer op bydrae van 65c per week per klousule 9 (1) (b) en (c)
1	0	—	—
2	0	—	—
3	1	2,80	1,80
4	2	5,60	3,60
5	3	8,40	5,40
6	5	14,00	9,00
7	7	19,60	12,60
8	8	22,40	14,40
9	9	25,20	16,20
10	10	28,00	18,00
11	11	30,80	19,80
12	12	33,60	21,60
13	13	36,40	23,40
14	14	39,20	25,20
15	15	42,00	27,00

(2) As 'n lid se afwesigheid weens siekte vir wie 'n bydrae van R1,48 per week in klousule 9 (1) (a) en (d) van hierdie deel van die Ooreenkoms voorgeskryf word langer as 15 werksdae duur, moet hy siektebetaling betaal word teen R2 per dag vir elke werksdag wat hy afwesig is weens siekte wat hoogstens 'n verdere 25 werksdae duur.

(3) As 'n lid se afwesigheid weens siekte vir wie 'n bydrae van 65 sent per week in klousule 9 (1) (b) en (c) van die deel van die Ooreenkoms voorgeskryf word, langer as 15 werksdae duur, moet hy siektebetaling betaal word teen R1,20 per dag vir elke werksdag wat hy afwesig is weens siekte wat hoogstens 'n verdere 25 werksdae duur nie.

Vir die berekening van siektebetaling moet Saterdag en Sondag nie as werksdae geag word nie."

(4) Deur die skapping in klousule 5 (a) van Deel C van die Ooreenkoms van die bedrag "ses sent" waar dit voorkom en die vervanging daarvan deur die bedrag "agt sent".

(5) Deur die skapping van klousule 6 (1) van Deel C van die Ooreenkoms en die vervanging daarvan deur:

"(1) By die afsterwe van 'n lid en behoudens klousule 7 van hierdie deel van die Ooreenkoms is die sterftetebestand wat aan 'n afhanklike betaalbaar is, soos volg:

(i) In die geval van 'n afgestorwe lid wat nie die leeftyd van 65 jaar bereik het nie en wat tot 12 maande lid was: R150;

(ii) in die geval van 'n afgestorwe lid wat nie die leeftyd van 65 jaar bereik het nie en wat langer as 12 maande lid was maar nie langer as vyf jaar nie: R250;

(iii) in die geval van 'n afgestorwe lid wat nie die leeftyd van 65 jaar bereik het nie en wat langer as vyf jaar lid was: R500;

(iv) dependant upon such surplus as may accrue to the Association annually the Mortality Committee shall, upon the death of a member who has attained the age of 65 decide upon the mortality benefit to be paid to the dependant of such member which amount shall not exceed R500".

6. By the deletion of Appendix B, and the substitution of the following Appendix B therefor:

"APPENDIX B

Schedule of total deductions and contributions to the Provident Fund for the Bedding Manufacturing Industry, Transvaal, the Transvaal Bedding Workers' Sick Benefit Society and the Transvaal Bedding Workers' Mortality Benefit Association, based on the employees ordinary wage:

	A Deductions from wages	B Employer's contri- butions	C Total weekly remittance
	R	R	R
Weekly ordinary wage of R22,75 and more (excluding learners)...	1,53	1,88	3,41
Weekly ordinary wage between R15,40 and R22,72, inclusive, and learners in studio couch upholstery during third and fourth six months of learnership.....	1,34	1,25	2,59
Weekly ordinary wage of between R10,40 and R15,39, inclusive, and learners in studio couch upholstery during the first and second six months of learnership	0,71	0,67	1,38
Minor learners during first, second and third periods of learnership	0,45	0,20	0,65
Minor learners during fourth period of learnership.....	1,00	0,48	1,48"

This Amending Agreement signed on behalf of the parties at Johannesburg on this 9th day of December 1970.

S. LEVIN, Chairman of the Council.
J. F. KLOPPER, Vice-Chairman of the Council.
N. K. STOCKEN, Secretary of the Council.

No. R. 749

7 May 1971

APPRENTICESHIP ACT, 1944, AS AMENDED

NATIONAL APPRENTICESHIP COMMITTEE FOR THE DIAMOND CUTTING INDUSTRY.—AMENDMENT OF CONDITIONS OF APPRENTICESHIP

I, Marais Viljoen, Minister of Labour, hereby in terms of section 16 (4) *ter* of the above-mentioned Act., declare that the provisions of Government Notice R. 60 of 15 January 1971, shall come into operation as from the date of publication of this notice, subject to the following corrections:

(a) *In the Afrikaans text:*

(i) Replace the courses of training for the trade "Diamantslypwerk" with the following:

"AMBAG.—DIAMANTSNYWERK

Eerste Jaar

1. Veiligheidsmaatreëls wat op die ambag van toepassing is.

2. Hantering van alle gereedskap en masjiene wat in die ambag gebruik word, asook hulle onderdele.

3. (i) Rangskikking van snyersbank en gereedskap vir maklike gebruik.

(ii) Smeer van laers en sorg vir gereedskap.

(iii) Sorg vir bak en snypoeier.

(iv) met inagneming van sodanige surplus wat die Vereniging jaarliks kan toeval, moet die Sterftekomitee by die afsterwe van 'n lid wat die leeftyd van 65 jaar bereik het, besluit oor watter bedrag aan sterftevoordele aan die afhanklike van sodanige lid betaal moet word, 'n bedrag wat nie R500 mag oorskry nie".

6. Deur die skapping van Aanhangsel B en die vervanging daarvan deur:

"AANHANGSEL B

Tabel van totale aftrekkings en bydraes aan die Voorsorgfonds vir die Beddegoednywerheid, Transvaal, die Siektebystandsvereniging vir Beddegoedwerkers in Transvaal en die Sterftebystandsvereniging vir Beddegoedwerkers in Transvaal:

	A Aftrekkings van lone	B Werkge- wersby- draes	C Totale weeklikse geldsending
	R	R	R
Gewone weekloon van R22,73 e. meer (uitgesonderd leerlinge)...	1,53	1,88	3,41
Gewone weekloon tussen R15,40 en R22,72 per week albei bedrae ingesluit, en leerlinge in ateljeerusbankstofferwerk gedurende derde en vierde ses maande leertyd.....	1,34	1,25	2,59
Gewone weekloon van tussen R10,40 en R15,39 per week, albei bedrae ingesluit en leerlinge in ateljeerusbankstofferwerk gedurende eerste en tweede ses maande leertyd.....	0,71	0,67	1,38
Minderjarige leerlinge gedurende eerste, tweede en derde leertye...	0,45	0,20	0,65
Minderjarige leerlinge gedurende vierde leertyd.....	1,00	0,48	1,48"

Hierdie Wysigingsooreenkoms namens die partye op hede die 9de dag van Desember 1970 in Johannesburg onderteken.

S. LEVIN, Voorster van die Raad.
J. F. KLOPPER, Ondervoorsitter van die Raad.
N. K. STOCKEN, Sekretaris van die Raad.

No. R. 749

7 Mei 1971

WET OP VAKLEERLINGE, 1944, SOOS GEWYSIG

NASIONALE VAKLEERLINGSKAPKOMITEE VIR DIE DIAMANTSLYPNYWERHEID.—WYSIGING VAN LEERVOORWAARDES

Ek, Marais Viljoen, Minister van Arbeid, verklaar hierby kragtens artikel 16 (4) *ter* van bogemelde Wet, dat die bepalings van Goewermentskennisgewing R. 60 van 15 Januarie 1971, behoudens die volgende verbeterings, in werking tree met ingang van die datum van publikasie van hierdie kennisgewing:

(a) *In die Afrikaanse teks:*

(i) Vervang die opleidingskursusse vir die ambag "Diamantslypwerk" deur die volgende:

"AMBAG.—DIAMANTSNYWERK

Eerste Jaar

1. Veiligheidsmaatreëls wat op die ambag van toepassing is.

2. Hantering van alle gereedskap en masjiene wat in die ambag gebruik word, asook hulle onderdele.

3. (i) Rangskikking van snyersbank en gereedskap vir maklike gebruik.

(ii) Smeer van laers en sorg vir gereedskap.

(iii) Sorg vir bak en snypoeier.

4. Die manier ondersoek, en voordeel daarvan bepaal, waarop die diamant gesny behoort te word, met nadruk op—

- (a) veiligheid;
- (b) gewig;
- (c) suiwerheid.

5. Diamante in 'doppe' vassit, met nadruk op—

- (i) korrekte grootte van en tipe 'dop';
- (ii) akkurate plasing van steen in 'dop';
- (iii) korrekte temperatuur vir die 'sement'.

6. Sentrering van diamant in kloukop van die masjien, met nadruk op die korrekte eerste 'set' van die steen in die 'dop'.

7. Die gevare verbonde aan snywerk en gordeling en die voorsorg wat getref moet word. Nadruk moet gelê word op—

- (i) grootte en tipe 'skerp' (groefsnydiamant);
- (ii) toestand van en sorg vir snystok;
- (iii) laerspeling en regstelling daarvan;

(iv) afwyking van kloukop soveel moontlik beperk deur diamant sorgvuldig in die 'dop' te set.

8. Ruwe snywerk en gordeling, met nadruk op rondheid en gladde gordels.

9. Tot die korrekte dikte sny, met nadruk op vermyding van oorsny.

10. 'n Register van diamante byhou volgens die vereistes van die Wet en algemeen sorg vir sindelikhed en goeie orde.

Tweede Jaar

11. Hersiening van werk gedurende eerste jaar gedoen.

12. Volhou met goeie gehalte werk te lewer, met nadruk op besparing van gewig en die ekonomiese gebruik van 'skerp'.

13. Herkenning van verskillende tipes en grein van diamante, en vertrou raak met alle tegniese terme wat in die Nywerheid gebesig word.

14. Sny van heelstene ('heles' of 'bolle').

Derde Jaar

15. Produktiwiteit sonder om kwaliteit op te offer, in besonder—

- (i) om oorsny te vermy;
- (ii) om te vermy dat gordels té prominent word, wat tot 'baard' kan lei in die poleerproses wat daarop volg.

Vierde Jaar

16. Produksie vermeerder en handhaaf sonder om kwaliteit in ander afdelings van die werk op te offer.

17. Selfstandigheid, en vermoë leer aanvoel wanneer besluit moet word om leiding te vra oor die hantering van 'n spesifieke diamant wat ongewone moeilikhede kan oplewer, of wat 'ruwe blokwerk' nodig kan hê voordat dit gesny word.

Vyfde Jaar

18. Hersiening en onafhanklike werk.

Bykomende Opleiding

19. (i) 'n Minimum van 40 dae werklike poleerwerk deur middel van kruiswerk onder die toesig van 'n bevoegde persoon. Sodanige opleiding moet gegee word op 'n tyd wat deur die werkgewer vasgestel word maar moet gedurende die eerste twee en 'n half jaar vakleerling-skap gegee word.

(ii) Praktiese opleiding en sierwerk waar dit doenlik is.”; and

(ii) replace the word “vier” where it occurs in item 22 of the courses of training for the trade “Diamantsaagwerk” with the words “twee en 'n half”.

4. Die manier ondersoek, en voordeel daarvan bepaal, waarop die diamant gesny behoort te word, met nadruk op—

- (a) veiligheid;
- (b) gewig;
- (c) suiwerheid.

5. Diamante in 'doppe' vassit, met nadruk op—

- (i) korrekte grootte van en tipe 'dop';
- (ii) akkurate plasing van steen in 'dop';
- (iii) korrekte temperatuur vir die 'sement'.

6. Sentrering van diamant in kloukop van die masjien, met nadruk op die korrekte eerste 'set' van die steen in die 'dop'.

7. Die gevare verbonde aan snywerk en gordeling en die voorsorg wat getref moet word. Nadruk moet gelê word op—

- (i) grootte en tipe 'skerp' (groefsnydiamant);
- (ii) toestand van en sorg vir snystok;
- (iii) laerspeling en regstelling daarvan;

(iv) afwyking van kloukop soveel moontlik beperk deur diamant sorgvuldig in die 'dop' te set.

8. Ruwe snywerk en gordeling, met nadruk op rondheid en gladde gordels.

9. Tot die korrekte dikte sny, met nadruk op vermyding van oorsny.

10. 'n Register van diamante byhou volgens die vereistes van die Wet en algemeen sorg vir sindelikhed en goeie orde.

Tweede Jaar

11. Hersiening van werk gedurende eerste jaar gedoen.

12. Volhou met goeie gehalte werk te lewer, met nadruk op besparing van gewig en die ekonomiese gebruik van 'skerp'.

13. Herkenning van verskillende tipes en grein van diamante, en vertrou raak met alle tegniese terme wat in die Nywerheid gebesig word.

14. Sny van heelstene ('heles' of 'bolle').

Derde Jaar

15. Produktiwiteit sonder om kwaliteit op te offer, in besonder—

- (i) om oorsny te vermy;
- (ii) om te vermy dat gordels té prominent word, wat tot 'baard' kan lei in die poleerproses wat daarop volg.

Vierde Jaar

16. Produksie vermeerder en handhaaf sonder om kwaliteit in ander afdelings van die werk op te offer.

17. Selfstandigheid, en vermoë leer aanvoel wanneer besluit moet word om leiding te vra oor die hantering van 'n spesifieke diamant wat ongewone moeilikhede kan oplewer, of wat 'ruwe blokwerk' nodig kan hê voordat dit gesny word.

Vyfde Jaar

18. Hersiening en onafhanklike werk.

Bykomende Opleiding

19 (i) 'n Minimum van 40 dae werklike poleerwerk deur middel van kruiswerk onder die toesig van 'n bevoegde persoon. Sodanige opleiding moet gegee word op 'n tyd wat deur die werkgewer vasgestel word maar moet gedurende die eerste twee en 'n half jaar vakleerling-skap gegee word.

(ii) Praktiese opleiding en sierwerk waar dit doenlik is.”; en

(ii) vervang die woord “vier” waar dit in item 22 van die opleidingskursusse vir die ambag “Diamantsaagwerk” voorkom deur die woorde “twee en 'n half”;

(b) In the English text:

(i) Delete the word "not" where it occurs for the first time in item 12 of the courses of training for the trade "Diamond Crossworking";

(ii) replace the word "Conditions" where it occurs in item 7 (ii) of the courses of training for the trade "Diamond Cutting" with the word "Condition"; and

(iii) replace the word "four" where it occurs in item 22 of the courses of training for the trade "Diamond Sawing" with the words "two and a half".

M. VILJOEN, Minister of Labour.

DEPARTMENT OF POSTS AND TELEGRAPHS

No. R. 738

7 May 1971

AMENDMENT OF TELEPHONE REGULATIONS

The State President has been pleased, under section 2 (4) of Act 44 of 1958, to approve of the following amendment of the Telephone Regulations:

Regulation 40

Under "(iii) Cape Peninsula exchange system embracing the following exchanges:-" insert "Parow," before "Pinelands," with effect from 1 May 1971.

DEPARTMENT OF RAILWAYS, HARBOURS AND AIRWAYS

No. R. 746

7 May 1971

DEPARTMENT OF THE SOUTH AFRICAN RAILWAYS AND HARBOURS.—AMENDMENT OF THE GENERAL RAILWAY REGULATIONS

The State President has been pleased, in terms of section 3 of the Railways and Harbours Control and Management (Consolidation) Act, 1957 (Act 70 of 1957), to approve of the following amendments to the General Railway Regulations published under Government Notice R. 1560 in *Regulation Gazette* 239 of 11 October 1963, with effect from 1 April 1971:

Definitions**Regulation 1**

"combustible liquid": Delete "(73° F)", "(150° F)", "(120° F)", "(120° F)", "(150° F)" and "(100° F)" in the second, fourth, fifth and seventh lines respectively and substitute "1 Bar" for "16 lb. per square inch" in the seventh line.

"compressed gas": Delete "(60° F)" and "(100° F)" in the fourth and sixth lines and substitute "1.7 Bar" and "2.7 Bar" for "25 lb. per square inch" and "40 lb. per square inch" in the third and fifth lines, respectively.

"liquefiable gas": Delete "(32° F)" and "(86° F)" in the second and last lines.

"flammable liquid": Delete "(73° F)" and "(100° F)" in the second and last lines and substitute "1 Bar" for "16 lb. per square inch" in the fifth line.

"pressure forming liquid": Substitute "1 Bar" and "2.7 Bar" for "16 lb. per square inch" and "40 lb. per square inch" respectively. Delete "(100° F)" in the last line.

"ton": Substitute "shall mean a mass of 1 000 kilograms" for "shall mean a weight of 2 000 pounds".

"vapour pressure": Delete "(100° F)".

Regulation 5 (a)

Substitute "kilometre" for "mile" in the second line.

Regulation 12 (a) and (b)

Substitute "40 kilometres" (four times) for "25 miles".

(b) In die Engelse teks:

(i) Skrap die woord "not" waar dit vir die eerste keer in item 12 van die opleidingskursusse vir die ambag "Diamond Crossworking" voorkom;

(ii) vervang die woord "Conditions" waar dit in item 7 (ii) van die opleidingskursusse vir die ambag "Diamond Cutting" voorkom deur die woord "Condition"; en

(iii) vervang die woord "four" waar dit in item 22 van die opleidingskursusse vir die ambag "Diamond Sawing" voorkom deur die woorde "two and a half".

M. VILJOEN, Minister van Arbeid.

DEPARTEMENT VAN POS- EN TELEGRAAFWESE

No. R. 738

7 Mei 1971

WYSIGING VAN TELEFOONREGULASIES

Dit het die Staatspresident behaag om kragtens artikel 2 (4) van Wet 44 van 1958, sy goedkeuring te heg aan onderstaande wysiging van die Telefoonregulasies:

Regulasie 40

Voeg, met ingang van 1 Mei 1971, onder "(iii) Die Kaapse Skiereilandse sentralestelsel met inbegrip van die volgende sentrales:-" "Parow," voor "Pinelands," in.

DEPARTEMENT VAN SPOORWEE, HAWENS EN LUGDIENS

No. R. 746

7 Mei 1971

DEPARTEMENT VAN DIE SUID-AFRIKAANSE SPOORWEE EN HAWENS.—WYSIGING IN DIE ALGEMENE SPOORWEGREGULASIES

Dit het die Staatspresident behaag om kragtens artikel 3 van die Konsolidasiewet op die Beheer en Bestuur van Spoorweë en Hawens, 1957 (Wet 70 van 1957), goedkeuring te verleen aan die volgende wysigings van die Algemene Spoorwegregulasies afgekondig by Goewermentskennisgewing R. 1560 in *Regulasiekoerant* 239 van 11 Oktober 1963, met ingang van 1 April 1971:

Woordbepalings**Regulasie 1**

"brandbare vloeistof": Skrap "(73° F)", "(150° F)", "(120° F)", "(120° F)", "(150° F)" en "(100° F)" in die tweede, vierde, vyfde, sesde en agste reëls onderskeidelik en vervang "16 lb. per vierkantduim" deur "1 bar" in die sewende reël.

"dampdruk": Skrap "(100° F)".

"drukvormende vloeistof": Skrap "(100° F)" in die vierde reël en vervang "16 lb. maar hoogstens 40 lb. per vierkantduim" in die derde reël deur "1 bar maar hoogstens 2.7 bar".

"saamgeperste gas": Skrap "(60° F)" en "(100° F)" in die derde en sesde reëls en vervang "25 lb. per vierkantduim" en "40 lb. per vierkantduim" deur onderskeidelik "1 bar" en "2.7 bar" in die vierde en sesde reëls.

"vervloeibare gas": Skrap "(32° F)" en "(86° F)" in die tweede en derde reëls.

"vlambare vloeistof": Skrap "(73° F)" en "(100° F)" in die tweede en vyfde reëls en vervang "16 lb. per vierkantduim" deur "1 bar" in die vyfde reël.

"ton": Vervang "n gewig van 2,000 pond" deur "n massa van 1 000 kilogram".

Regulasie 5 (a)

Vervang "myl" in die derde reël deur "kilometer".

Regulasie 12 (a) en (b)

Vervang "25 myl" (vier keer) deur "40 kilometer".

Regulation 12 (e)

Substitute "27 kilometres", "21 kilometres" and "48 kilometres" for "17 miles", "13 miles" and "30 miles" respectively.

Regulation 13

Substitute "40 kilometres" for "25 miles" in the third line.

Regulation 14 (b)

Substitute "upon payment of the full single fare at the ordinary scale of fares for the extra distance, if the distance to" for "upon payment of the full single fare at the ordinary mileage scale of fares for the extra mileage if the distance to" in the 10th and 11th lines.

Regulation 14 (c)

Substitute "single rail fare at the ordinary scale of fares for the extra rail distance (computed on the basis of the combined rail distances, if applicable), if the distance to be" for "single rail fare at the ordinary mileage scale of fares for the extra rail mileage (computed on the basis of the combined rail mileages, if applicable), if the distance to be" in the 12th, 13th and 14th lines.

Regulation 14 (d)

Substitute "full single rail fare for the extra rail distance (computed on the basis of combined rail distances, if applicable) if" for "full single rail fare for the extra rail mileage (computed on the basis of combined rail mileages, if applicable) if" in the 12th and 13th lines and "journey" for "mileage" in the 19th line.

Regulation 16 (a)

Substitute "300 kilometres" for "200 miles" in the eighth line.

Regulation 16 (b) (1)

Substitute "300 kilometres" for "200 miles" in the ninth line.

Regulation 20

Substitute "40 kilometres" for "25 miles" in the third line.

Regulation 35 (e)

Substitute "mass" for "weight" in the second line.

Regulation 38 (a)

Substitute "125 kilograms in mass" for "250 lb. in weight" in the last line.

Regulation 39 (a)

Substitute "50 kilograms", "35 kilograms" and "25 kilograms" (twice) for "100 lb.", "75 lb." and "50 lb." (twice) respectively; "this mass" for "these weights" in the last line and "Mass" for "Weight" in the margin.

Regulation 39 (b)

Substitute "mass" for "weights" in the first line.

Regulation 57 (a) (1)

Substitute "with a mass exceeding 125 kilograms" for "weighing more than 250 lb."

Regulation 59 (e)

Substitute "10 kilometres" (twice) and "16 kilometres" (twice) for "six miles" and "10 miles", respectively.

Regulation 70

Substitute "ten kilograms in mass" for "twenty-five pounds in weight".

Regulation 74

Substitute "mass" for "weight" in the third line.

Regulasie 12 (e)

Vervang "17 myl", "13 myl" en "30 myl" onderskeidelik deur "27 kilometer", "21 kilometer" en "48 kilometer".

Regulasie 13

Vervang "25 myl" deur "40 kilometer" in die derde reël.

Regulasie 14 (b)

Vervang "mylskaalpryse vir die ekstra mylafstand" in die dertiende reël deur "afstandskaalpryse vir die ekstra afstand".

Regulasie 14 (c)

Vervang "mylskaalpryse vir die ekstra spoormylafstand (bereken op die gesamentlike spoormylafstand indien van toepassing)" in die 14de, 15de en 16de reëls deur "afstandskaalpryse vir die ekstra spoorafstand (bereken op die gesamentlike spoorafstand indien van toepassing)".

Regulasie 14 (d)

Vervang "spoormylafstand betaal (bereken op die gesamentlike spoormylafstand indien van toepassing), en as die totale spoormylafstand" in die 14de, 15de en 16de reëls en "mylafstand" in die 18de reël deur onderskeidelik "spoorafstand betaal (bereken op die gesamentlike spoorafstand indien van toepassing), en as die totale spoorafstand" en "afstand".

Regulasie 16 (a)

Vervang "200 myl" in die sesde reël deur "300 kilometer".

Regulasie 16 (b) (1)

Vervang "200 myl" in die 10de reël deur "300 kilometer".

Regulasie 20

Vervang "25 myl" in die derde reël deur "40 kilometer".

Regulasie 35 (e)

Vervang "oorgewig" deur "oormassa" in die tweede reël.

Regulasie 38 (a)

Vervang "250 lb." in die laaste reël deur "125 kilogram".

Regulasie 39 (a)

Vervang "100 lb.", "75 lb." en "50 lb." (twee keer) onderskeidelik deur "50 kilogram", "35 kilogram" en "25 kilogram" (twee keer) en "gewigte" in die derde paragraaf deur "massas".

Regulasie 39 (b)

Vervang "gewigte" in die eerste reël deur "massas".

Regulasie 57 (a) (1)

Vervang "250 lb." deur "125 kilogram".

Regulasie 59 (e)

Vervang "ses myl" deur "10 kilometer" (twee keer) en "tien myl" deur "16 kilometer" (twee keer).

Regulasie 70

Vervang "n gewig van vyf-en-twintig pond" deur "n massa van 10 kilogram".

Regulasie 74

Vervang "gewig" deur "massa" in die derde reël.

Regulation 77 (f) (1)

Substitute "110 centimetres by 85 centimetres", "75 centimetres", "50 centimetres", "464 square centimetres" and ".093M" for "3 feet 6 inches by 2 feet 9 inches", "30 inches", "20 inches", "half a square foot" and "one square foot", respectively in the first, second, third, fifth, eighth and ninth lines.

Regulation 77 (f) (2)

Substitute "13 centimetres" for "5 inches" in the third line.

Regulation 86

Substitute "mass" for "weight" in the third line.

Regulation 95

Substitute "mass" for "weight" in the fourth line.

Regulation 101 (b)

Substitute "mass" for "weight" in the third line.

Regulation 104 (b)

Substitute "mass" for "weights" in the third line.

Regulation 105

Substitute "mass" for "weight" in the second line.

Regulation 111 (a)

Substitute "mass" for "weight" in the fifth line.

Regulation 111 (b)

Substitute "thirteen point seven metres" for "forty-five feet".

Regulation 114 (b)

Substitute "1 500 kilograms in mass" for "3,000 lb. in weight" in the third and fourth lines.

Regulation 120 (c)

Substitute "mass" for "weight" in the third line.

Regulation 120 (e)

Substitute "500 kilograms" and "125 kilograms" for "1,000 lb." and "250 lb.", respectively, in the first and second lines.

Regulation 124 (a)

Substitute "1 000 kilograms" for "2,000 lb." in the third line.

Regulation 127 (c)

Substitute "1 500 kilograms in mass" for "3,000 lb. in weight" in the fifth and sixth lines and the second line of the exception.

Regulation 128 (a)

Substitute "1 500 kilograms in mass" for "3,000 lb. in weight" in the second line.

Regulation 136 (a)

Substitute "3 kilometres", "10 kilometres", "16 kilometres", "50 kilometres" and "80 kilometres" for "2 miles", "6 miles", "10 miles", "30 miles" and "50 miles", respectively.

Regulation 146

Substitute "mass" for "weight" in the seventh line.

Regulation 171

Substitute "mass" for "weights" in the third line.

Regulation 189 (a)

Substitute "mass" for "weights" in the seventh line.

Regulation 190

Substitute "2.75 metres" for "9 feet" in the fourth line.

Regulasie 77 (f) (1)

Vervang "3 voet 6 duim by 2 voet 9 duim", "30 duim", "20 duim", "halwe vierkantvoet" en "vierkant voet" in die tweede, derde, vierde, agste en negende reëls deur "110 sentimeter by 85 sentimeter", "75 sentimeter", "50 sentimeter", "464 vierkante sentimeter" en ".093M" onderskeidelik.

Regulasie 77 (f) (2)

Vervang "5 duim" deur "13 sentimeter".

Regulasie 86

Vervang "gewig" (twee keer) in die vierde reël deur "massa".

Regulasie 95

Vervang "gewig" deur "massa" in die vierde reël.

Regulasie 101 (b)

Vervang "gewig" deur "massa" in die vierde reël.

Regulasie 104 (b)

Vervang "gewigte" deur "massas" in die laaste reël.

Regulasie 105

Vervang "gewig" deur "massa" in die tweede reël.

Regulasie 111 (a)

Vervang "gewig" deur "massa" in die voorlaaste reël.

Regulasie 111 (b)

Vervang "vyf-en-veertig voet" in die vyfde reël deur "dertien punt sewe meter".

Regulasie 114 (b)

Vervang "3,000 lb." in die derde reël deur "1 500 kilogram".

Regulasie 120 (c)

Vervang "gewig" deur "massa" in die eerste reël.

Regulasie 120 (e)

Vervang "1,000 lb." en "250 lb." in die eerste en tweede reëls deur "500 kilogram" en "125 kilogram" onderskeidelik.

Regulasie 124 (a)

Vervang "2,000 lb." in die derde reël deur "1 000 kilogram".

Regulasie 127 (c)

Vervang "3,000 lb." in die sesde reël deur "1 500 kilogram" sowel as in die tweede reël van die uitsondering.

Regulasie 128 (a)

Vervang "3,000 lb." deur "1 500 kilogram" in die eerste reël.

Regulasie 136 (a)

Vervang "2 myl", "6 myl", "10 myl", "30 myl" en "50 myl" deur "3 kilometer", "10 kilometer", "15 kilometer", "50 kilometer" en "80 kilometer" onderskeidelik.

Regulasie 146

Vervang "gewig" deur "massa" in die 17de reël.

Regulasie 171

Vervang "gewigte" deur "massas" in die voorlaaste reël.

Regulasie 189 (a)

Vervang "gewigte" deur "massas" in die voorlaaste reël.

Regulasie 190

Vervang "9 voet" deur "2.75 meter" in die laaste reël.

Regulation 226

Substitute "2 000 kilograms" for "3,000 lb." in the second line and "mass" for "weight" in the margin.

Regulation 230

Substitute "500 grams" for "one pound" in the sixth line.

Regulation 231

Substitute "mass" for "weight" in the first, sixth, seventh, eighth and last lines and "Mass" for "Weight" in the margin.

Regulation 232

Substitute "mass" for "weight" in the second line.

Regulation 233

Substitute "mass" for "weight" in the fourth line.

Regulation 235

Substitute "mass" for "weight" in the sixth (twice), seventh and 18th lines.

Regulation 236

Substitute "mass" for "weight" in the second line and margin.

Regulation 249 (a)

Substitute "22c per 100 kilograms" for "10c per 100 lb." in the first line.

Regulation 249 (b)

Substitute "100 kilograms in mass" for "100 lb. in weight" in the eighth line and "mass" and "100 kilograms" for "weight" and "100 lb." in the 15th and 17th lines respectively.

Regulation 255 (b)

Substitute "250 metres" for "250 yards" in the ninth line.

DEPARTMENT OF SOCIAL WELFARE AND PENSIONS

No. R. 737

7 May 1971

GOVERNMENT SERVICE PENSIONS ACT, 1965 (PERMANENT FORCE PENSION FUND)

I, Cornelius Petrus Mulder, Minister of Social Welfare and Pensions, do hereby, under the powers vested in me by section 5 of the Government Service Pensions Act, 1965 (Act 62 of 1965), amend the regulations promulgated by Government Notice R. 1968 of 10 December 1965, as amended, as set out in the Schedule.

C. P. MULDER, Minister of Social Welfare and Pensions.

SCHEDULE

1. Regulation 2 (1) is amended by the substitution for paragraph (e) of the following paragraph:

"(e) while employed for a fixed number of months or years unless in terms of any regulation made under the Defence Act, 1957 (Act 44 of 1957), which relates to the conditions of service of members of the Permanent Force, he has on or after the ninth day of October 1970, been

Regulasie 226

Vervang "3,000 lb." in die tweede reël deur "1 500 kilogram".

Regulasie 230

Vervang "een pond" in die vyfde en sesde reëls deur "500 gram".

Regulasie 231

Vervang "gewig" deur "massa" in die eerste, vyfde, sewende (twee keer) en twaalfde reëls en "Gewigte" in die kantlyn deur "Massas".

Regulasie 232.

Vervang "gewig" deur "massa" in die tweede reël.

Regulasie 233

Vervang "gewig" deur "massa" in die vierde reël.

Regulasie 235

Vervang "gewig" deur "massa" in die vyfde, sesde en 17de reëls.

Regulasie 236

Vervang "gewig" deur "massa" in die tweede en vierde reëls en "Gewig" deur "Massa" in die kantlyn.

Regulasie 249 (a)

Vervang "10c per 100 lb." in die eerste reël deur "22c per 100 kilogram".

Regulasie 249 (b)

Vervang "100 lb." in die agste reël deur "100 kilogram" en "gewig" en "100 lb." deur "massa" en "100 kilogram" onderskeidelik in die 15de en 17de reëls.

Regulasie 255 (b)

Vervang "250 jaarts" in die negende reël deur "250 meter".

DEPARTEMENT VAN VOLKSWELSYN EN PENSIOENE

No. R. 737

7 Mei 1971

REGERINGSDIENSPENSIOENWET, 1965 (STAANDEMAG-PENSIOENFONDS)

Ek, Cornelius Petrus Mulder, Minister van Volkswelsyn en Pensioene, wysig hierby, kragtens die bevoegdheid my verleen by artikel 5 van die Regeringsdienspensioenwet, 1965 (Wet 62 van 1965), die regulasies afgekondig by Goewermentskennisgewing R. 1968 van 10 Desember 1965, soos gewysig, soos in die Bylae uiteengesit.

C. P. MULDER, Minister van Volkswelsyn en Pensioene.

BYLAE

1. Regulasie 2 (1) word gewysig deur paragraaf (e) deur die volgende paragraaf te vervang:

"(e) terwyl hy vir 'n bepaalde aantal maande of jare in diens is, tensy hy ingevolge 'n regulasie wat kragtens die Verdedigingswet, 1957 (Wet 44 van 1957), uitgevaardig is en betrekking het op die diensvoorwaardes van lede van die Staande Mag, op of na die negende dag van Oktober 1970 as 'n gekwalifiseerde vlieënier of navigator

enrolled in that Force as a qualified pilot or navigator for a period which, together with any period prior to such enrolment during which he served in a whole-time capacity in the said Force as a qualified pilot or navigator, is equal to 20 years;”.

2. Regulation 13 is amended—

(i) by the substitution in subregulation (1) for all the words preceding paragraph (a) of the following words:

“A member with not less than 10 years of pensionable service who retires or is retired or discharged from the Permanent Force in terms of section 7 of the Act or for a reason mentioned in regulation 12 (1) (b), (c), (d) or (e) or who, being a pilot or navigator referred to in regulation 2 (1) (e), retires or is retired from the Permanent Force by reason of the expiry of the period for which he was enrolled for service in the said Force, shall be entitled to the following benefits, namely—”;

(ii) by the substitution in subregulation (1) (b) (ii) for all the words preceding the scale of the following words:

“if such member retires or is retired or discharged for any other reason referred to in this subregulation, be calculated at a percentage of the said average in respect of each year of pensionable service, according to the following scale:”; and

(iii) by the addition to subregulation (3) of the following paragraph, the existing subregulation becoming paragraph (a):

“(b) If a member who is a pilot or navigator referred to in regulation 2 (1) (e), retires or is retired by reason of the expiry of the period for which he was enrolled for service in the Permanent Force all annuity payments in respect of the period ending on the last day of the month in which such member reaches the age of 55 years shall be made out of revenue and the gratuity payment partly out of revenue and partly out of the Fund in accordance with tables approved by the Secretary.”.

No. R. 744 7 May 1971 AMENDMENT OF WAR VETERANS' PENSIONS REGULATIONS

By virtue of the powers vested in me by section 15 of the War Veterans' Pensions Act, 1968 (Act 25 of 1968), I, Cornelius Petrus Mulder, Minister of Social Welfare and Pensions, in so far as the administration of the said Act is assigned to me by Proclamation R. 287, dated 18 September 1968, in consultation with the Minister of Finance, hereby amend, with effect from the first day of October 1968, the regulations made under the said section and promulgated by Government Notice R. 1758, dated 30 September 1968, by the substitution for regulation 13 of the following regulation:

13. (1) Subject to the provisions of subregulations (2), (3) and (4), any pension granted to any war veteran in terms of section 4 of the Act or restored in terms of regulation 20 may—

(a) if such pension is so granted not less than one year after the date on which the applicant has attained the prescribed age; or

vir diens in daardie Mag ingeskryf is vir 'n tydperk wat saam met 'n tydperk waarin hy voor sodanige inskrywing in 'n voltydse hoedanigheid as 'n gekwalifiseerde vlieënier of navigator in genoemde Mag gedien het, gelyk is aan 20 jaar;”.

2. Regulasie 13 word gewysig—

(i) deur in subregulasie (1) al die woorde wat paragraaf (a) voorafgaan deur die volgende woorde te vervang:

“'n Lid met minstens 10 jaar pensioengewende diens, wat uit die Staande Mag aftree of afgedank of ontslaan word ingevolge artikel 7 van die Wet of om 'n rede genoem in regulasie 12 (1) (b), (c), (d) of (e) of wat 'n vlieënier of navigator in regulasie 2 (1) (e) bedoel is en weens die verstryking van die tydperk waarvoor hy vir diens in die Staande Mag ingeskryf is uit daardie Mag aftree of afgedank word, is geregtig op onderstaande voordele, naamlik—”;

(ii) deur in subregulasie (1) (b) (ii) al die woorde wat die skaal voorafgaan deur die volgende woorde te vervang:

“as sodanige lid aftree of afgedank of ontslaan word om 'n ander rede in hierdie subregulasie bedoel, bereken word teen 'n persentasie van genoemde gemiddelde ten opsigte van elke jaar pensioengewende diens, ooreenkomstig onderstaande skaal:”; en

(iii) deur die volgende paragraaf by subregulasie (3) te voeg terwyl die bestaande subregulasie paragraaf (a) word:

“(b) As 'n lid wat 'n vlieënier of navigator in regulasie 2 (1) (e) bedoel is, weens die verstryking van die tydperk waarvoor hy vir diens in die Staande Mag ingeskryf is, aftree of afgedank word, word alle jaargeldbetalings ten opsigte van die tydperk wat eindig op die laaste dag van die maand waarin sodanige lid die leeftyd van 55 jaar bereik, uit inkomste gedoen, en word die gratifikasiebetaling gedeeltelik uit inkomste en gedeeltelik uit die Fonds gedoen ooreenkomstig tabelle wat die Sekretaris goedkeur.”.

No. R. 744 7 Mei 1971 WYSIGING VAN OUDSTRYDERSPENSIOEN-REGULASIES

Kragtens die bevoegdheid my verleen by artikel 15 van die Wet op Oudstryderspensioene, 1968 (Wet 25 van 1968), wysig ek, Cornelius Petrus Mulder, Minister van Volks-welsyn en Pensioene, vir sover die uitvoering van genoemde Wet by Proklamasie R. 287 van 18 September 1968 aan my opgedra is, in oorleg met die Minister van Finansies, hierby met ingang van die eerste dag van Oktober 1968 die regulasies kragtens genoemde artikel uitgevaardig en afgekondig by Goewermentskennisgewing R. 1758 van 30 September 1968 deur regulasie 13 deur die volgende regulasie te vervang:

13. (1) Behoudens die bepalings van subregulasies (2) (3) en (4), kan enige pensioen wat aan 'n oudstryder toegeken word ingevolge artikel 4 van die Wet of herste word ingevolge regulasie 20—

(a) indien sodanige pensioen aldus toegeken word minstens een jaar na die datum waarop die applikan die voorgeskrewe ouderdom bereik het; of

(b) if such pension is so restored not less than one year after the date on which it was last cancelled in terms of the said regulation,

be supplemented by the appropriate amount shown below:

<i>Period of postponement of pension</i>	<i>Amount per annum R</i>
One year after the date of attainment of the prescribed age or the date of cancellation.....	48
Two years after the date of attainment of the prescribed age or the date of cancellation.....	72
Three years after the date of attainment of the prescribed age or the date of cancellation.....	96
Four years or more after the date of attainment of the prescribed age or the date of cancellation.....	120

(2) (a) No pension shall be supplemented in terms of subregulation (1) if the applicant or pensioner has at any time during the period between the date on which he or she has attained the prescribed age and the date on which the pension is granted or between the date of cancellation and the date of the restoration of the pension, as the case may be, been in receipt of any benefits under the Act, the Social Pensions Ordinance, 1965 (Ordinance 2 of 1965) of South-West Africa, the German War Veterans' Pensions Ordinance, 1965 (Ordinance 3 of 1965) of South-West Africa, the Aged Persons Act, 1967 (Act 81 of 1967), the Blind Persons Act, 1968 (Act 26 of 1968), or the Disability Grants Act, 1968 (Act 27 of 1968).

(b) If any pension lawfully supplemented in terms of subregulation (1) or the provisions of regulation 13 as it existed immediately before the commencement of the said subregulation (1), is cancelled or again cancelled in terms of regulation 20 and such pension is subsequently reviewed and restored or again reviewed and restored in terms of the said regulation 20, the pension so restored or again so restored shall first be supplemented by the amount by which it had been supplemented before such cancellation and such amount shall be taken into account in determining the amount by which such pension may be supplemented on the restoration in question: Provided that the amount by which any pension may be supplemented shall not exceed the total amount by which it could have been supplemented if the periods in respect of which the pension is supplemented were uninterrupted.

(3) The provisions of subregulations (1) and (2) shall not apply to any person granted a pension under the provisions of section 3 (2) of the Act.

(4) For the purposes of this regulation—

(a) "date of cancellation" shall mean the date of cancellation referred to in subregulation (1) (b); and

(b) "prescribed age" shall mean the age of 65 years, in the case of a man, and 60 years in the case of a woman.

C. P. MULDER, Minister of Social Welfare and Pensions.

No. R. 745

7 May 1971

AMENDMENT OF THE OLD AGE PENSIONS REGULATIONS

By virtue of the powers vested in me by section 20 of the Aged Persons Act, 1967 (Act 81 of 1967), I, Cornelius Petrus Mulder, Minister of Social Welfare and Pensions, in so far as the administration of the said Act is assigned to me by Proclamation R. 283, dated 18 September 1968, in consultation with the Minister of Finance, hereby amend, with effect from the first day of October 1968, the regulations made under the said section and promulgated by

(b) indien sodanige pensioen aldus herstel word minstens een jaar na die datum waarop dit laas ingevolge genoemde regulasie ingetrek is,

met die toepaslike bedrag soos hieronder vermeld, aangevul word.

<i>Tydperk van uitstelling van pensioen</i>	<i>Bedrag per jaar R</i>
Een jaar na die datum van bereiking van die voorgeskrewe ouderdom of die datum van intrekking.....	48
Twee jaar na die datum van bereiking van die voorgeskrewe ouderdom of die datum van intrekking.....	72
Drie jaar na die datum van bereiking van die voorgeskrewe ouderdom of die datum van intrekking.....	96
Vier jaar of meer na die datum van bereiking van die voorgeskrewe ouderdom of die datum van intrekking.....	120

(2) (a) Geen pensioen mag ingevolge subregulasie (1) aangevul word nie indien die applikant of pensioentrekker te eniger tyd gedurende die tydperk tussen die datum waarop hy of sy die voorgeskrewe ouderdom bereik het en die datum waarop die pensioen toegeken is of tussen die datum van intrekking en die datum van herstelling van die pensioen, na gelang van die geval, enige voordele ontvang het ingevolge die Wet, die Ordonnansie op Maatskaplike Pensioene, 1965 (Ordonnansie 2 van 1965) van Suidwes-Afrika, die Duitse Oudstryderspensioen-ordonnansie, 1965 (Ordonnansie 3 van 1965) van Suidwes-Afrika, die Wet op Bejaarde Persone, 1967 (Wet 81 van 1967), die Wet op Blindes, 1968 (Wet 26 van 1968), of die Wet op Ongeskiktheidstoelaes, 1968 (Wet 27 van 1968).

(b) Indien enige pensioen wetlik aangevul kragtens subregulasie (1) of die bepalings van regulasie 13 soos dit bestaan het onmiddelik voor die inwerkingtreding van genoemde subregulasie (1), ingevolge regulasie 20 ingetrek word of weer ingetrek word en sodanige pensioen later ingevolge genoemde regulasie 20 hersien en herstel of weer hersien en herstel word, word die pensioen aldus herstel of weer herstel eers aangevul met die bedrag waarmee dit voor sodanige intrekking aangevul was en sodanige bedrag word in berekening gebring by die bepaling van die bedrag waarmee sodanige pensioen by die onderhawige herstelling aangevul kan word: Met dien verstande dat die bedrag waarmee enige pensioen aangevul kan word nie die totale bedrag mag oorskry waarmee dit aangevul sou kon word indien die tydperke ten opsigte waarvan die pensioen aangevul word, aaneenlopend was nie.

(3) Die bepalings van subregulasies (1) en (2) is nie van toepassing op enige persoon aan wie daar kragtens die bepalings van artikel 3 (2) van die Wet 'n pensioen toegeken is nie.

(4) Vir doeleindes van hierdie regulasie beteken—

(a) "datum van intrekking" die datum van intrekking in subregulasie (1) (b) bedoel; en

(b) "voorgeskrewe ouderdom" die ouderdom van 65 jaar in die geval van 'n man, en 60 jaar in die geval van 'n vrou.

C. P. MULDER, Minister van Volkswelsyn en Pensioene.

No. R. 745

7 Mei 1971

WYSIGING VAN DIE OUDERDOMSPENSIEN-REGULASIES

Kragtens die bevoegdheid my verleen by artikel 20 van die Wet op Bejaarde Persone, 1967 (Wet 81 van 1967), wysig ek, Cornelius Petrus Mulder, Minister van Volkswelsyn en Pensioene, vir sover die uitvoering van genoemde Wet by Proklamasie R. 283 van 18 September 1968 aan my opgedra is, in oorleg met die Minister van Finansies, hierby met ingang van die eerste dag van Oktober 1968 die regulasies kragtens genoemde artikel uitgevaardig en

Government Notice R. 1756, dated 30 September 1968, by the substitution for regulation 13 of the following regulation:

13. (1) Subject to the provisions of subregulations (2), (3) and (4), any pension granted to any aged person in terms of section 10 of the Act or restored in terms of regulation 20 may—

(a) if such pension is so granted not less than one year after the date on which the applicant has attained the prescribed age; or

(b) if such pension is so restored not less than one year after the date on which it was last cancelled in terms of the said regulation,

be supplemented by the appropriate amount shown below.

Period of postponement of pension	Amount per annum R
One year after the date of attainment of the prescribed age or the date of cancellation.....	48
Two years after the date of attainment of the prescribed age or the date of cancellation.....	72
Three years after the date of attainment of the prescribed age or the date of cancellation.....	96
Four years or more after the date of attainment of the prescribed age or the date of cancellation.....	120

(2) (a) No pension shall be supplemented in terms of subregulation (1) if the applicant or pensioner has at any time during the period between the date on which he or she has attained the prescribed age and the date on which the pension is granted or between the date of cancellation and the date of the restoration of the pension, as the case may be, been in receipt of any benefits under the Act, the Social Pensions Ordinance, 1965 (Ordinance 2 of 1965) of South-West Africa, the German War Veterans' Pensions Ordinance, 1965 (Ordinance 3 of 1965) of South-West Africa, the War Veterans' Pensions Act, 1968 (Act 25 of 1968), the Blind Persons Act, 1968 (Act 26 of 1968), or the Disability Grants Act, 1968 (Act 27 of 1968).

(b) If any pension lawfully supplemented in terms of subregulation (1) or the provisions of regulation 13 as it existed immediately before the commencement of the said subregulation (1), is cancelled or again cancelled in terms of regulation 20 and such pension is subsequently reviewed and restored or again reviewed and restored in terms of the said regulation 20, the pension so restored or again so restored shall first be supplemented by the amount by which it had been supplemented before such cancellation and such amount shall be taken into account in determining the amount by which such pension may be supplemented on the restoration in question: Provided that the amount by which any pension may be supplemented shall not exceed the total amount by which it could have been supplemented if the periods in respect of which the pension is supplemented were uninterrupted.

(3) The provisions of subregulations (1) and (2) shall not apply to any person granted a pension under the provisions of section 7 (3) of the Act.

(4) For the purposes of this regulation—

(a) "date of cancellation" shall mean the date of cancellation referred to in subregulation (1) (b); and

(b) "prescribed age" shall mean the age of sixty-five years, in the case of a man, and sixty years, in the case of a woman.

C. P. MULDER, Minister of Social Welfare and Pensions.

afgekondig by Goewermentskennisgewing R. 1756 van 30 September 1968 deur regulasie 13 deur die volgende regulasie te vervang:

13. (1) Behoudens die bepalings van subregulasies (2), (3) en (4), kan enige pensioen wat aan 'n bejaarde persoon toegeken word ingevolge artikel 10 van die Wet of herstel word ingevolge regulasie 20—

(a) indien sodanige pensioen aldus toegeken word minstens een jaar na die datum waarop die applikant die voorgeskrewe ouderdom bereik het; of

(b) indien sodanige pensioen aldus herstel word minstens een jaar na die datum waarop dit laas ingevolge genoemde regulasie ingetrek is,

met die toepaslike bedrag soos hieronder vermeld, aangevul word.

Tydsperk van uitstelling van pensioen	Bedrag per jaar R
Een jaar na die datum van bereiking van die voorgeskrewe ouderdom of die datum van intrekking.....	48
Twee jaar na die datum van bereiking van die voorgeskrewe ouderdom of die datum van intrekking.....	72
Drie jaar na die datum van bereiking van die voorgeskrewe ouderdom of die datum van intrekking.....	96
Vier jaar of meer na die datum van bereiking van die voorgeskrewe ouderdom of die datum van intrekking.....	120

(2) (a) Geen pensioen mag ingevolge subregulasie (1) aangevul word nie indien die applikant of pensioentrekker te eniger tyd gedurende die tydperk tussen die datum waarop hy of sy die voorgeskrewe ouderdom bereik het en die datum waarop die pensioen toegeken is of tussen die datum van intrekking en die datum van herstelling van die pensioen, na gelang van die geval, enige voordele ontvang het ingevolge die Wet, die Ordonnansie op Maatskaplike Pensioene, 1965 (Ordonnansie 2 van 1965) van Suidwes-Afrika, die Duitse Oudstryderspensioenordonnansie, 1965 (Ordonnansie 3 van 1965) van Suidwes-Afrika, die Wet op Oudstryderspensioene, 1968 (Wet 25 van 1968), die Wet op Blindes, 1968 (Wet 26 van 1968), of die Wet op Ongeskiktheidstoelaes, 1968 (Wet 27 van 1968).

(b) Indien enige pensioen wetlik aangevul ingevolge subregulasie (1) of die bepalings van regulasie 13 soos dit bestaan het onmiddellik voor die inwerkingtreding van genoemde subregulasie (1), ingevolge regulasie 20 ingetrek word of weer ingetrek word en sodanige pensioen later ingevolge genoemde regulasie 20 hersien en herstel of weer hersien en herstel word, word die pensioen aldus herstel of weer herstel eers aangevul met die bedrag waarmee dit voor sodanige intrekking aangevul was, en sodanige bedrag word in berekening gebring by die bepaling van die bedrag waarmee sodanige pensioen by die onderhawige herstelling aangevul kan word: Met dien verstande dat die bedrag waarmee enige pensioen aangevul kan word nie die totale bedrag mag oorskry waarmee dit aangevul sou kon word indien die tydperke ten opsigte waarvan die pensioen aangevul word, aaneenlopend was nie.

(3) Die bepalings van subregulasies (1) en (2) is nie van toepassing op enige persoon aan wie daar kragtens die bepalings van artikel 7 (3) van die Wet 'n pensioen toegeken is nie.

(4) Vir doeleindes van hierdie regulasie beteken—

(a) "datum van intrekking" die datum van intrekking in subregulasie (1) (b) bedoel; en

(b) "voorgeskrewe ouderdom" die ouderdom van vyf-en-sestig jaar in die geval van 'n man, en sestig jaar in die geval van 'n vrou.

C. P. MULDER, Minister van Volkswelsyn en Pensioene

CONTENTS

No.		PAGE
PROCLAMATIONS		
R. 92.	Sea Fisheries Act, 1940	1
R. 94.	Bantu Authorities Services Board	2
R. 95.	Prohibition of the export of cattle, sheep, goats and pigs	2
GOVERNMENT NOTICES		
Agricultural Economics and Marketing, Department of		
GOVERNMENT NOTICES		
R. 743.	Oilseeds Control Scheme: Levy and special levy on oilseeds	2
R. 747.	Regulations for regulating the require- ments in connection with the export of avocados	3
R. 748.	Regulations relating to the grading, packing and inspection of fruit, excluding citrus fruit and certain deciduous fruit ...	8
R. 757.	Prices for maize products: Revocation ...	8
Health, Department of		
GOVERNMENT NOTICES		
R. 734.	South African Pharmacy Board: Rules and minimum curriculum for the diploma in Pharmacy	9
R. 735.	South African Nursing Council: Revoca- tion of Government Notices R. 1998, R. 1999 and R. 2000 of 27 December 1963	27
R. 739.	The Medical, Dental and Pharmacy Act, 1928: Therapeutic substances regulations ...	27
Labour, Department of		
GOVERNMENT NOTICES		
R. 736.	Bedding Manufacturing Industry, Trans- vaal: Amendment of Provident Fund, Sick Benefit Society and Mortality Benefit Association Agreement	28
R. 749.	National Apprenticeship Committee for the Diamond Cutting Industry: Amend- ment of conditions of Apprenticeship ...	30
Posts and Telegraphs, Department of		
GOVERNMENT NOTICE		
R. 738.	Amendment of Telephone Regulations ...	32
Railways and Harbours, Department of		
GOVERNMENT NOTICE		
R. 746.	Amendment of the General Railway Regulations	32
Social Welfare and Pensions, Department of		
GOVERNMENT NOTICES		
R. 737.	Government Service Pensions Act, 1965 ...	35
R. 744.	Amendment of War Veterans' Pensions Regulations	36
R. 745.	Amendment of the Old Age Pensions Regulations	37

INHOUD

No.		BLADSY
PROKLAMASIES		
R. 92.	Wet op Seevisserye, 1940	1
R. 94.	Raad vir Bantoe-owerheidsdienste	2
R. 95.	Verbod op die uitvoer van beeste, skape, bokke en varke	2
GOEWERMENSKENNISGEWINGS		
Arbeid, Departement van		
GOEWERMENSKENNISGEWINGS		
R. 736.	Beddegoednywerheid, Transvaal: Wysiging van Voorsorgfonds-, Siektbystandsver- eniging- en Sterftbystandsvereniging- ooreenkoms	28
R. 749.	Nasionale Vakleerlingskapkomitee vir die Diamantslypnywerheid: Wysiging van leervoorwaardes	30
Gesondheid, Departement van		
GOEWERMENSKENNISGEWINGS		
R. 734.	Suid-Afrikaanse Aptekerskommissie: Reëls en minimum leergang vir die diploma in Farmasie	9
R. 735.	Die Suid-Afrikaanse Verpleegstersraad: Intrekking van Goewermensken- nisgewings R. 1998, R. 1999 en R. 2000 van 27 Desember 1963	27
R. 739.	Die Wet op Geneeshere, Tandartse en Aptekers, 1928: Regulasies betreffende terapeutiese stowwe	27
Landbou-ekonomie en -bemarking, Departement van		
GOEWERMENSKENNISGEWINGS		
R. 743.	Oliesadebeheerskema: Heffing en spesiale heffing op oliesade	2
R. 747.	Regulasies ter reëling van die vereistes in verband met die uitvoer van avokado's ...	3
R. 748.	Regulasies met betrekking tot die grade- ring, verpakking en inspeksie van vrugte, uitgenome sitrusvrugte en sekere sagte- vrugte	8
R. 757.	Pryse van mielieprodukte: Herroeping ...	8
Pos-en-telegraafwese, Departement van		
GOEWERMENSKENNISGEWING		
R. 738.	Wysiging van Telefoonregulasies	32
Spoorweë en Hawens, Departement van		
GOEWERMENSKENNISGEWING		
R. 746.	Wysiging van die Algemene Spoorweg- regulasies	32
Volkswelsyn en Pensioene, Departement van		
GOEWERMENSKENNISGEWINGS		
R. 737.	Regeringsdienspensioenwet, 1965	35
R. 744.	Wysiging van Oudstryderspensioenregu- lasies	36
R. 745.	Wysiging van Ouderdomspensioenregu- lasies	37

