No. 102. THE PHARMACY AND POISONS LAW, 1945.

Rules made by the Pharmacy and Poisons Board under Section 10.

In exercise of the powers vested in them by section 10 of the Pharmacy and Poisons Law, 1945, the Pharmacy and Poisons Board with the approval of the Governor in Council hereby make the following Rules:—

1. These Rules may be cited as the Pharmacy (Examinations) Rules,

1947.

2. In these Rules, unless the context otherwise requires—

"Board" means the Pharmacy and Poisons Board constituted under the provisions of section 3 of the Pharmacy and Poisons Law, 1945;

"Registrar" means the Director of Medical and Health Services.

3. A person desiring to obtain a certificate from the Board for the purposes of paragraph (c) of section 9 of the Pharmacy and Poisons Law, 1945, must satisfy the Board that he has passed what is referred to in these Rules as "the Pharmacy Examinations".

4. The Pharmacy Examinations shall consist of two parts, that is to

say:—

(a) Part I (Chemistry);

(b) Part II (General Pharmacy).

PART I.—(CHEMISTRY) EXAMINATIONS.

5. Part I (Chemistry) of the Pharmacy Examinations shall be held twice a year at such dates and before such person or persons as the Board may direct by notice published in the *Gazette*.

6. A candidate desiring to enter for a Chemistry examination shall apply to the Registrar not less than ten days before the date fixed for the

examination.

- 7. No candidate shall be permitted to sit for a Chemistry examination unless when applying to sit for the first time he furnishes the Registrar with—
 - (a) either a certificate that he has passed the "Teachers' Training College" entrance Examination, or a certificate for a full passing out of any one of the following institutions, that is to say—

the English School, Nicosia,

the American Academy, Larnaca,

the Moslem Lycée,

the Pancyprian Gymnasium, Nicosia,

the Gymnasium, Limassol,

the Gymnasium, Famagusta,

the Gymnasium, Paphos,

the Gymnasium, Kyrenia,

the Commercial Lyceum, Larnaca; and,

(b) a certificate, on the official Form obtainable from the Registrar signed by the Government Analyst or his authorized representative, or the Principal of any other Institution or Laboratory approved by the Board for giving instruction in Practical Chemistry, certifying that the candidate has attended at the Government Chemical Laboratory or other Institution or Laboratory a systematic course in practical Chemistry of at least 300 hours.

8. To pass the Chemistry examination a candidate must pass written and oral examinations conducted in accordance with the syllabuses set

out in Appendix I of these Rules:

Provided that the Board may from time to time by notice published

in the Gazette, alter such syllabuses.

9. Successful candidates in the Chemistry examinations shall be those who obtain 55% of the total marks and not less than 50% in any one

subject.

10. The Board shall cause to be published in the Gazette a list of successful candidates and shall issue to each such candidate a certificate therefor.

PART II.—(GENERAL PHARMACY) EXAMINATIONS.

11. Part II (General Pharmacy) of the Pharmacy Examinations shall be held on such dates and before such person or persons as the Board may direct by notice published in the Gazette.

12. A candidate desiring to enter for the General Pharmacy Examinations shall apply in writing to the Registrar not less than ten days

before the date fixed for this Examination.

13. No candidate shall be permitted to sit for the General Pharmacy Examinations unless when applying to sit for the first time he furnishes the Registrar with:-

(a) a certificate as in rule 10 hereof mentioned:

Provided that the Board may dispense with such a certificate if otherwise satisfied that the candidate has passed any other examinations of an equal standard;

(b) a certificate that he has passed the English Ordinary Exami-

nation:

Provided that the Board may dispense with such a certificate if otherwise satisfied that the candidate has a satisfactory knowledge of the English language;

(c) a Birth Certificate from the Commissioner;

(d) a certificate or certificates signed by a registered pharmacist or pharmacists that the candidate has, subsequent to having passed Part I (Chemistry) of the Pharmacy Examinations or such other examinations as the Board may be satisfied that they are of an equal standard, undergone a practical course of study, as in rule 14 hercof provided, with such pharmacist or pharmacists of not less than 4000 hours in the aggregate:

Provided that no certificate shall be accepted by the Board, unless the pharmacist issuing the same shall have first notified the Board in writing as soon as the candidate concerned has began with him the practical course of study hereinbefore

mentioned:

Provided further that, where a candidate satisfies the Board that before the coming into operation of these rules he had attended a practical course of study with a pharmacist or pharmacists, the Board may, in computing the 4000 hours hereinbefore mentioned, take into account any hours which the candidate had passed in attending such course of study with such pharmacist or pharmacists before the coming into operation of these rules.

- 14. The practical course of study which the candidate shall undergo as in paragraph (d) of rule 13 hereof provided shall include:-
 - (a) the manipulation of Pharmaceutical Apparatus in common use;

(b) the recognition, by sensory characters, of the chief crude drugs and chemical substances used in medicine;

- (c) compounding of pharmaceutical preparations and dispensing of medicines;
- (d) the reading, translation and copying of prescriptions including the checking of doses;

(e) the storage of drugs and medicinal preparations, and (f) the knowledge of keeping records required by the Laws and Regulations affecting pharmaceutical practice.

15. To pass the General Pharmacy Examinations a candidate must pass written and oral examinations in Pharmacy, Materia Medica, Forensic Pharmacy, compounding and dispensing of medicines, practical and oral, translation of prescriptions, written and oral, conducted in accordance with the syllabuses set out in Appendix II of these Rules:

Provided that the Board may from time to time by notice published

in the Gazette, alter such syllabuses.

16. Successful candidates in the General Pharmacy Examinations shall be those who obtain 55% of the total marks and not less than 50%

in any one subject.

17. The Board shall issue to every candidate who passes the General Pharmacy Examinations a certificate to the effect that he has passed the Pharmacy Examinations as in these Rules provided.

APPENDIX I.

Rule 8.

SYLLABUSES FOR THE CHEMISTRY EXAMINATIONS.

(i) Physical Chemistry.

Constitution of matter.
Changes of state.
Physical and chemical changes.
The properties of solids, liquids and gases.
Units of metric and imperial system.

Temperature and Thermometry. Thermometers, Calories.

Specific heat. Latent heat, quantity of heat. Dulong & Petit's Law.

Conservation of energy.

Phenomena of sublimation, evaporation, ebullition, isomerism, allotropy, catalysis.

Vapour pressure of solutions.

Saturated and unsaturated vapours.

Barometry, humidity and hygrometric state. Dew point.

General properties of permanent gases.

The relation of gases to heat. Charles'-GayLussac's Law.

The relation of gases to pressure. Boyle's & Mariotte's Law.

Liquefaction of gases, critical point.

Solution, Solute, Solvent.
Saturation and solubility curves, Henry's Law.
Osmotic pressure, semipermeable membranes, diffusion.
Crystallization, Isomorphism, Mischerlich's Law.
Simple consideration of electrolysis and electrolytic dissociation.

(ii) General Chemistry.

Atoms and molecules.

Elements, compounds, mixtures.

Symbols and nomenclature.

Outline of methods for determination of molecular and atomic weights.

The Laws of Chemical reaction.

Chemical formulae and equations.

Valency, basicity, equivalent weights, standard solutions. Oxidation and reduction, hydrolysis, reversible reaction.

(iii) Inorganic Chemistry.

The Chemistry of Hydrogen, Oxygen, Nitrogen, Phosphorus, Carbon, Fluorine, Chlorine, Bromine, Iodine, Sulphur, Sodium, Potassium, Magnesium, Calcium, Zinc, Lead, Copper, Iron, Aluminium, Mercury and Tin and their important compounds.

The most important compounds of Ammonium, Lithium, Arsenic, Antimony, Bismuth, Silicon, Strontium, Barium, Manganese, Chromium, Silver, Gold.

Atmospheric Air.

Acids, Bases, Salts.

Combustion, Flame.

(iv) Organic Chemistry.

Elements of Organic Chemistry.

Purification of Organic compounds.

Composition of Organic compounds.

Aliphatic and Aromatic compounds.

Paraffin series, Methane, Petroleum, Vaseline.

Olefines and Ethylene.

Saturated and unsaturated organic compounds.

Acetylene and the Acetylene series.

Halogen compounds. Methyl Chloride, Ethyl Chloride. Chloroform, Iodoform, Carbon Tetrachloride. Alcohols, Monohydric alcohols. Methyl alcohol, Ethyl alcohol.

Dehydration of alcohol. Methylated spirit.

Dihydric and Trihydric alcohols. Glycol, Glycerol.

Primary, secondary and tertiary alcohols.

Fermentation treated in a general way.

Ethers, Di-ethyl Ether, Dimethyl Ether.

Esters, Esterification, Nitroglycerin, Ethyl Acetate. Amyl Acetate.

Dimethyl sulphate.

Aldehydes. Preparation and properties of aldehydes.

Formaldehyde, Acetaldehyde, Chloral.

Ketones, Formation and properties of Ketones, Acetone.

The fatty acids. Formic, Acetic acid. Vinegar, Propionic, Butyric, Palmitic, Stearic and Oleic acids.

Hydroxy-acids, Lactic and Tartaric acids.

Dibacic acids. Oxalic acid.

Amines. Methylamine. Ethylamine.

Oils and fats. Saponification. Soaps. Amides Urea, Carbamide, Urethane.

Amino Acids and protein treated in a general way.

Carbohydrates. General properties of Sugar, Glucose, Fructose, Sucrose, Lactose, Maltose, Dextrin, Starch and Cellulose.

Cyanogen compounds, Prussic Acid, Potassium Cyanide.

Aromatic compounds. Benzene and its homologues.

Toluenes, Xylenes, Nitro-compounds, Nitrobenzene, Dinitrobenzene.

Phenol and its homologues. Aromatic amines, Aniline.

Aromatic alcohols and aldehydes. Benzyl alcohol, Benzaldehyde.

Aromatic acids. Benzoic, Toluic, Salicilic acid.

Coal tar and petroleum distillation treated in a general way.

Alkaloids treated in a general way.

(v) Practical Chemistry.

Weighing and measuring solids and liquids.

Freezing and boiling points.

Specific gravity of solids and liquids.

Hydrometers.

Gravimetric analysis.

Gravimetric analysis of sulphates.

Volumetric analysis. Standard solution.

Preparation of N, N/10 and N/100 sol.

Indicators. Volumetric apparatus. Volumetric analysis of Chlorides.

Estimation of acidity and alkalinity of different substances.

Tests for the important metallic radicles and acidic radicles.

Alcoholometry. Tests for alcohols, strength of alcohols.

Estimation of Ammonia, Nitrates and Nitrites in a sample of water. Estimation of temporary, permanent, and total hardness in a sample of water.

Preparation of salts by different methods.

Note: The standard required will be approximately that of the intermediate examinations in Chemistry. The syllabus is well covered by the following books or other books of similar standard.

Organic Chemistry—

E. S. Holmyard. Outlines of Organic Chemistry.

Inorganic, Physical and General Chemistry—

Mellor. Intermediate Inorganic Chemistry. Newth. Textbook of Inorganic Chemistry. Zengelis. Textbook of Inorganic Chemistry.

APPENDIX II.

Rule 15.

SYLLABUSES FOR GENERAL PHARMACY.

(i) Materia Medica and Pharmacy.

The drugs and preparations mentioned in the latest Edition of the British Pharmacopoeia and its Addenda; their characters; their method of preparation; their maximum doses.

Recognition of common drugs and preparations which possess

distinctive features.

The mode of administration and the chief action of drugs and preparations of the British Pharmacopoeia and its Addenda.

Storage of drugs and their preparations.

The interpretation of prescriptions and the translation of Latin prescriptions into English including abbreviations in common use.

The following pharmaceutical processes:—

Absorption Distillation Lixiviation Calcination Drying & Desiccation Maceration Carbonization Elutriation Percolation Clarification Expression Powders Colation Evaporation Solution Comminution Infusion Standarization Isotonic Solution Sublimation. Crystallization Levigation Decoction

Incompatibility (Chemical and Physical).

The preparation of Sera Vaccines included in the British Pharma. copoeia and its Addenda.

The preparation of sterile medicaments and materials.

(ii) Dispensing.

Candidates are expected—

To have a working knowledge of the Metric and Imperial systems of weights and measures, and to be able to weigh and measure accu-

rately.

To dispense autograph prescriptions, in Latin or English and to prepare cachets, capsules, emulsion, gargles, inhalations, injections, liniments, lotions, mixtures, ointments, pastes, pills, powders, sprays, suppositories, etc., and to fill ampoules.

To detect promptly unusual doses, and instances of chemical and physical incompatibility, more especially with regard to poisonous

drugs.

To make such of the galenical preparations of the British Pharmacopoeia as do not involve lengthy or complicated processes.

To have a knowledge of the solubilities of the more commonly

occurring chemicals used in dispensing.

To write directions accurately and legibly, to comply with all statutory regulations regarding labelling, etc., and to wrap and direct each article neatly.

(iii) Forensic Pharmacy.

The following Laws and the Regulations made thereunder: The Pharmacy and Poisons Law, 1945; the Dangerous Drugs Law, 1925 to 1931; the Foods and Drugs Law, 1938, and any laws or regulations amending or substituted for the same.

Made this 31st day of March, 1947.

P. W. Dill-Russell, Acting Director of Medical and Health Services, Chairman of the Board.

No. 103.

THE DEFENCE (CONTROL OF FUEL AND CHARCOAL) ORDER, 1944.

NOTICE UNDER CLAUSE 6.

In exercise of the powers vested in me under clause 6 of the Defence (Control of Fuel and Charcoal) Order, 1944, I hereby revoke, with effect from to-day, Notification No. 351 published in Supplement No. 3 to the Gazette of the 2nd November, 1944, whereby the following were declared Fuelwood Controlled areas:—

- (a) The villages of Lefka, Apliki, Mavrovouni, Yeradjies, Kalopanayiotis, Nikos (Oekos), Moutoullas and Pedhoulas in the Nicosia District.
- (b) The villages of Prodhromos, Lemithou, Tris Elies, Kaminaria, Ayios Dhimitrios, Paleomylos, Phini, Platres (Pano and Kato) and Mandria in the Limassol District.

M. Tingherides, Fuel and Charcoal Controller.