



GOVERNMENT OF KERALA

**THE KERALA
CHEMICO-LEGAL EXAMINATION RULES**

(Incorporating Amendments upto 30th June 1983)

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GOVERNMENT OF KERALA

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GOVERNMENT OF KERALA

Home (A) Department

THE KERALA CHEMICO-LEGAL EXAMINATION RULES

G. O. Ms. No. 624/Home.

Dated, Trivandrum, 18th August, 1959.

In supersession of the existing Rules on the subject, the Government of Kerala hereby make the following Rules, regulating the transmission of substances for chemical analysis to the Chemical Examiner, namely:—

SECTION I

1. (a) These Rules may be called the Kerala Chemico-Legal Examination Rules.

(b) They shall come into force at once.

2. (a) In the transmission of articles to the Chemical Examiner to Government for analysis, three objects are to be mainly kept in view viz., the proof of identity, the impossibility of any interference during transit, and the preservation of the articles from decomposition.

(b) The Chemical Examiner shall bring to the notice of Government every case in which these Rules are not strictly adhered to.

3. In every case in which analysis is required for judicial purposes by the Police, Magistracy or Excise Officers, the Chemical Examiner shall as far as possible, furnish a quantitative analysis in his report under Section 510 of the Code of Criminal Procedure the report being legal and important evidence in any investigation or trial. (G.O.Rt. No. 901/70/Home dated 22-5-1970).

4. (a) In Blood and Seminal Stain cases the number of blood stains found on each exhibit and the extent of such stain, unless they are too minutes or too numerous to be described in detail shall be indicated in the report.

(b) In very important cases blood stains may be sent to the Serologist to the Government of India, Calcutta, for examination G. O. (Ms.) No. 322/Home dated 16-6-1961.

5. The report of the Chemical Examiner shall be signed by an Officer who from personal knowledge can testify to the correctness of the report embodied in it.

6. The Magistrate or the Police Officer shall make prompt and specific requisitions to the Medical Officer concerned in cases in which it is deemed necessary to have the articles sent for the opinion of the Chemical Examiner.

7. All Officers forwarding articles for analysis to the Chemical Examiner shall be responsible for seeing that the information hereunder is furnished with the letter advising the despatch of the articles:—

- (a) full details of the purpose for which analysis is required;
- (b) full particulars of the case whatever its nature may be.

8. The Rules for the guidance of Magisterial and Police Officers are contained in Section II and of Medical Officers in Section III hereunder.

Note:—Neither Section is complete by itself, the two Sections being complementary to one another. The term "Police Officer" for purposes of these Rules includes any Officer not below the rank of a Sub Inspector or an Officer in charge of a Police Station, and the term Medical Officer, includes a "Veterinary Officer" when the post-mortem or other examination is conducted by such an officer.

SECTION II

Rules for the Guidance of Magisterial and Police Officers

9. Magistrates and Police Officers shall be guided by the rules in this Section with regard to the transmission of substances to the Chemical Examiner in cases of suspected poisoning, or other cases in which the aid of the Chemical Examiner is considered necessary.

10. (a) Substances for Chemico-legal examination shall not ordinarily be forwarded by Medical Officers to the Chemical Examiner except upon the written requisition of a Magistrate or Police Officer. Such requisition shall be issued invariably and with promptitude if the Medical Officer considers it advisable to obtain the opinion of the Chemical Examiner. Conversely, the Medical Officer shall be bound to forward substances to the Chemical Examiner on receipt of a requisition to that effect from a Magistrate or Police Officer, although the Medical Officer's own opinion may be adverse to such a proceeding.

(b) When the substance in regard to which the Medical Officer considers it advisable to obtain the opinion of the Chemical Examiner is one liable to rapid decomposition, he shall forward the substance to the Chemical

Examiner in anticipation of the requisition of the Magistrate or Police Officer Viscera and other highly decomposable articles shall not be detained by the Medical Officer longer than 24 hours. In such cases the Medical Officer shall at once communicate the fact of despatch to the officer authorised under this rule to require an examination and such Officer shall thereupon send by the next post the required requisition along with the information prescribed in Rules 11 and 12.

11. The Magistrate or the Police Officer on instructing Medical Officers to forward articles for analysis to the Chemical Examiner, shall at the same time, address the latter officer, quoting the number and date of their requisition to the Medical Officer, and shall furnish the Chemical Examiner with a brief summary of the history of the case, together with the following information:—

- (a) Date and hour of Crime.
- (b) Date and time of collection of material objects.
- (c) They should also specifically mention the urgency, if any, for the Certificate, and the return of the articles after examination, if required.
- (d) if the articles are sent after charges sheet is laid in the case, the date for posting of the case should be specified.

Note.—If the articles are bulky and cannot be conveniently returned by post the messenger should be directed to wait and take back the articles if the results are likely to be ready soon. The Chemical Examiner will give priority to such cases and return the articles through the same messenger.

12. In case of suspected poisoning the principal points on which Magistrates and Police Officers shall furnish information to the Chemical Examiner are as follows:—

- (a) What interval was there between the last eating or drinking and the first appearance of symptoms of poisoning?
- (b) What interval was there between the last eating or drinking and death (if this occurred)?
- (c) What were the first symptoms?
- (d) Where any of the following symptoms present? If so, state which?
 - (i) Vomiting and Purging.
 - (ii) Deep sleep
 - (iii) Tingling of the skin and throat.

(iv). Convulsions or switchings of the muscles.

(v) Delirium and clutching at imaginary objects.

(e) Were any other symptoms noticed ?

(f) Did any other persons partake of the suspected food and drink and did they also suffer from similar or other symptoms of poisoning ?

13. Any other information available, likely to prove serviceable as a guide to the class of poison administered, shall at the same time be also furnished.

14. Certificates of chemical analysis shall not be accepted from Medical Officers, as these officers are not competent to conduct analysis for judicial purpose.

15. In every case of suspected human or animal poisoning it is desirable that all the substances requiring analysis shall be packed and forwarded to the Chemical Examiner by the nearest Medical Officer, but where a veterinary dispensary exists, or where an officer of the Veterinary Departments is available, the post-mortem or other examination of animal shall be conducted and the substances transmitted by such officer. If special circumstances render it desirable to forward any articles direct to the Chemical Examiner, the instructions given in Section III (Rules 22 to 31) shall be carefully allowed.

16. Suspected blood or seminal stains: Articles requiring examination for the presence of blood or seminal stains may be forwarded direct to the Chemical Examiner, the following rules being strictly adhered to:—

(i) When clothes are sent up they shall be sent as a whole and the stains need not be indicated by pencil marks or pins, etc. Stains on walls, floorsground, or articles of furniture, etc., shall not be scraped off, but the stained area shall be carefully cut out; and when the material is brittle, as in the case of earth or chunam, it should be carefully wrapped in cotton wool and packed in a box so that the surface may be preserved from injury. Articles of clothing, etc., if wet or moist shall be carefully dried before being packed, otherwise the stains rapidly decompose and their nature cannot be determined.

(ii) Each article requiring separate examination shall be packed separately and labelled. The labels shall be numbered consecutively and shall bear the signature of the forwarding officer, and the number and date of his letter of advice to the Chemical Examiner. All the packets belonging to one case shall then be enclosed in one box or outer covering unless disparity in the size of the

various articles makes this inconvenient. Articles belonging to different cases shall never be forwarded under the same cover. Articles sent for examination must never be used as wrappers. Labels shall not be pasted over instruments suspected to contain any stains. All parcels shall be carefully sealed by the despatching officer and packed in such a manner that they cannot be opened without destroying the seals. The seal used shall be the same throughout, either a private seal or an official seal which is kept in safe custody. Impressions of keys, weights, etc., shall not be used. A letter of advice shall be separately forwarded to the Chemical Examiner. This letter shall contain:

(a) an impression of the seal used in closing the packets and description thereof;

(b) a list of the articles forwarded and a statement as to how the articles have been forwarded. The numbers given to the articles on the list must correspond to the numbers on the labels;

(c) information as to whether any of the weapons, clothes, etc., are to be returned after examination;

(d) information as to how many persons or animals were affected, how many died, and Section of the Indian Penal Code under which any charge, is being brought.

(e) crime number;

(f) the date of posting, if any, of the case in the court;

(g) information as to whether all or any of the stains were exposed to the sun or rain, and if so for how long. If exposed to rain, whether the downpour was heavy or light. In the case of clothes, if any attempt has been made to wash them. If it is stained soil, the nature of the soil—whether loose and porous, or hard, whether barren or cultivated. In the case of stained leaves, the names of the trees are plant to which the leaf belonged.

Miscellaneous Examinations

17. (a) Under this head shall fall such examinations as the estimation of morphine and other ingredients in opium examination of ganja and other narcotic drugs, coins, documents, paints, firearms, bullets, etc., in shooting cases, gun barrel residues, fire-works and other explosives, incendiaries, articles involved in cases of explosion, bones, hairs, liquors, illicit arrack samples and blood specimens involved in offences, under the Abkari Act in force.

(b) In forwarding any miscellaneous article such as mentioned herein before, the Magistrates, Police Officers or Excise Officers as the case may be shall follow the instructions laid down in Rules 30 of Section III so far as they may be applicable and shall be careful to include in their letter or advice to the Chemical Examiner information as to the nature and object of the examination required, and to furnish any other information likely to assist the Chemical Examiner in making the required Examination.

(c) (1) In the examination of firearms, ammunition, etc., the points on which expert opinion is normally needed are (i) whether there are blood marks, or finger prints on a weapon (ii) whether a weapon shows signs of recent firing, and if so, the nature of the powder used, (iii) whether there is blood or powder on clothing, (iv) what the weight and measurements of a projectile are, and (v) whether the projectiles or cartridge case could have been or actually was fired from a particular weapon.

(2) All firearms and ammunition shall be handled and packed with special care to prevent surface markings being disturbed or obliterated. The mouth of a firearm barrel shall be corked up with tight fitting cork.

(3) The clothing of an injured person shall be carefully examined for the powder or blood marks and signs of burning. When a projectile has passed through any clothing the appearance of the part through which it has passed shall be carefully examined and described by the Magistrate or Police Officer concerned. Clothing shall be handled with particular care to prevent any flakes or smokeless powder that adhere being shaken off. It shall be carefully preserved and sent for examination. A detailed and accurate observation and record of every injury is essential for the subsequent inferences to be of value. The examiner can insist on the production of the clothing before he ventures an opinion as to the range at which the shot was fired, if the wound is situated on a part of the body which is usually clothed.

(4) All articles which have to be sent for expert opinion shall be sent in the first instance to the Chemical Examiner. An account of the case with a copy of the postmortem or wound certificate should accompany the articles sent to the Chemical Examiner. Articles sent for examination shall be wrapped up separately and labels and seals affixed to the covering material and not to the articles themselves.

(d) Samples of opium seized in connection with illicit traffic shall in the first instance be sent to the Chemical Examiner by the Excise Department. The supply of samples to the United Nations Research Laboratory in connection with

the implementation of their scheme for Scientific Research on narcotics shall be made through the Chief Chemist, Central Revenues Control Laboratory, New Delhi, to whom a full report of the tests carried out by the Chemical Examiner shall be supplied along with the samples.

(e) Excise Officers shall forward articles seized under the provisions of the Abkari Act in force through the Magistrates within whose jurisdiction the offence has been committed. (G. O. Rt. No. 901/70/Home dated 22-5-1970).

(f) In the examination of tissues and bones, the Professors of Pathology and Anatomy of the Medical College, Trivandrum may be consulted. The materials shall pass through the Professor of Forensic Medicine who shall obtain expert opinion from the Specialists and pass on the information to the Chemical Examiner.

18. Magistrates and Police Officers may sent water samples for chemico-legal examination. Such cases are not to be dealt with by the Public Analyst or Water Analyst as neither of them is a Chemical Examiner for purposes of Section 510, Code of Criminal Procedure.

SECTION III

Rules for the Guidance of Medical Officers

19. Medical officers in charge of hospitals and dispensaries shall maintain a supply of strong unmethylated spirit and suitable bottles, etc., in readiness for the transmission of viscera and other matters to the Chemical Examiner whenever occasion arises. In cases of suspected poisoning it is important that viscera and other suspected matters liable to rapid decomposition should be placed in spirit as soon as practicable. And every care should be taken lest doubt may be raised in Court as to the identity of the articles likely to require examination, or as to the possibility of their having been accidentally contaminated or improperly interfered with.

20. Post-mortem examinations are to be made as thoroughly as circumstances will permit, whenever desired by Magistrates or Police Officers. Advanced decomposition does not prevent the detection of metallic poisons in the body. Hence remains of viscera may be forwarded for examination when the condition of the body is such as to render any attempt as dissection useless.

21. On making a post-mortem, whenever there is any suspicion of poisoning the stomach should be tied at both ends (a double ligature being applied at the pyloric extremity, so that the contents of the intestines may not

escape) and removed from the body in such a manner that its contents may be retained; after removal it should be opened, the contents received into a perfectly clean bottle and the mucous surface of the stomach carefully examined, its appearance noted, and any suspicious particles found adhering thereto shall be picked off with a pair of forceps and placed in a separate small phial for transmission. And the mucous membranes of the mouth, pharynx and oesophagus shall be examined, and any unusual appearance or marks of corrosion thereon carefully noted.

22. In all cases of death from presumed poisoning, the following articles shall be forwarded for analysis each in a separate bottle unless otherwise indicated. Other viscera or tissues need not be forwarded unless in the opinion of the Medical Officer, the special circumstances of the case, which shall be clearly stated in the letter of advice, render such a proceeding advisable:—

- (a) Stomach.
- (b) Contents of the stomach, which may, if convenient, be put in the same bottle with the stomach.
- (c) Suspicious particles, if any, removed from the mucous membrane of the stomach.
- (d) A portion of the liver, not less than 16 oz. in weight or the whole liver, if it weighs less than 16 oz. and one kidney.
- (e) The vomited matter, if any. The earlier and the later vomits shall, when practicable, be sent up in different bottles. And the labels should state at what period the matters were omitted. Special directions are given in rule 24 of or the disposal of vomited matters mixed with earth, etc.
- (f) A specimen of the spirit used. Four ounces are sufficient.
- (g) The contents of the small intestines.
- (h) Any urine which may have been separately collected after the commencement of symptoms, or found in the bladder after death.
- (i) Blood and cerebrospinal fluid in suspected poisoning by insecticidal and fungicidal organic compounds (G. O. Rt. 1363/Home dated 12-8-1965).

23. Strong unmetylated spirit shall in all cases be added as laid down in the procedure for the transmission of articles for analysis detailed in Rule 30, to the contents of bottles under clauses (a), (d), (g) and (h), and also to the contents of bottles under clauses (b) and (e) of rule 22 unless alcoholic

poisoning is suspected. No spirit need be added to the contents of bottle under clause (c) of Rule 22. Care shall be taken that no vessel containing fluid matters is quite filled and that bottles containing viscera with spirit shall not be more than three-quarters filled, so that the viscera may be well shaken with spirit on the journey. For this purpose the spirit shall never be obtained from the bazaar. Formalin shall not be used as preservative except in cases where the necessary for pathological examination is indicated as it hardens the viscera and makes extractions troublesome, and tends to destroy even such a stable alkaloid as strychnine.

Note:—In case spirit is not available, the viscera may be preserved in a super saturated solution of Sodium chloride. In that case a sample solution shall be sent as provided under Rule 22 (f). [G O. (P) 201/71/Home dated 29-12-1971.]

24. Vomited and purged matters are frequently received by Medical Officers mixed with earth etc. If the admixture of earth be sufficient to render the evacuated matters dry and inoffensive, they may be packed without spirit in any convenient manner, otherwise they may be packed with spirit. Vomited and purged matters, if they have, as frequently happens, been allowed to fall on the ground, shall be carefully scrapped up not taking more earth than is necessary. The superficial scrappings should be packed separately. It is rarely necessary to remove the earth to depth greater than half inch, even in cases of suspected metallic poisoning unless the soil be of a very loose character. Except when a metallic poison is suspected it is very rarely necessary to forward purged matters.

25. If articles of food, medicine, etc., suspected to have been the vehicle by which poison has been admitted require examination, they shall each be packed separately and spirit invariably added, as in the case of viscera, to such as are liable to decomposition. Fruits, such as the plantain suspected to contain poison, should be carefully inspected, and if it shall appear that some foreign substance has been inserted, this shall be picked out and sent up for examination. If no suspicious substance can be discovered, the fruit itself shall be forwarded.

26. After having made a post-mortem examination in a case of suspected poisoning, and having preserved in spirit all articles liable to rapid decomposition which are likely to require examination, the Medical Officer shall communicate the result of his examination to the Police and on receipt of a requisition from a Magistrate or Police Officer shall forward the viscera of the deceased and such

other articles as may require analysis to the Chemical Examiner for examination. In cases where no death has occurred, but where it is suspected that poison has been administered, the Medical Officer, having preserved in spirit all articles liable to rapid decomposition, and likely to require examination, shall similarly communicate the case to the Police and on receipt of a requisition from a Magistrate or Police Officer concerned forward the vomited matters or contents of the stomach, removed by the stomach pump, or other matters requiring analysis, to the Chemical Examiner.

Medical Officers are authorised to forward suspected articles liable to rapid decomposition to the Chemical Examiner in anticipation of the requisitions of the Magistrate or the Police Officer. In such cases the Medical Officers shall at once communicate the fact of despatch to the Magistrate or the Police Officer, and that Officer shall there upon send by the next post the required requisition along with the information prescribed in Rules 11 and 12.

27. When on receipt of a requisition from a Magistrate or Police Officer, the Medical Officer forwards articles to the Chemical Examiner for examination, he shall address at the same time a letter to the Chemical Examiner advising him of their despatch. This letter shall contain:—

- (a) an impression of the seal used in closing the bottles and a description thereof;
- (b) a list of the articles forwarded and a statement as to how the articles have been forwarded;
- (c) the name of the officer from whom the requisition has been received to forward the articles, and the number and date of such requisition;
- (d) a detailed account of the post-mortem appearances observed;
- (e) an account of the symptoms observed by himself or others and a statement of the treatment, if any; adopted.

28. All bottles and packets shall be carefully sealed by the Medical Officer and closed in such a manner that they cannot be opened without destroying the seals. The seal used shall be the same throughout either a private seal or an official seal, which is always in safe keeping. Impressions of keys, weights etc., should not be used. Each bottle or packet shall be labelled and each label shall bear the number and date of the letter of advice to the Chemical Examiner relating to the case, as well as a short description of the contents, and shall be signed by the Medical Officer.

29. (a) Always, attempt shall be made to obtain some information about the case. Poisons are many and the material available for examination is limited. Some idea of the symptoms and relevant history is, therefore, enormous value to the Analyst.

(b) If any treatment has been adopted it shall be mentioned. Washing the stomach with potassium permanganate, for instance, destroys the distinctive tests for opium and hence negative reports may be received in well-defined cases of opium poisoning. Vomit is always more valuable for analysis than any stomach wash.

(c) The urine both ante and post-mortem shall be preserved. Many alkaloids are recoverable from urine which may easily be destroyed in a viscera extraction. In veronal poisoning about 75 per cent of the drug is excreted in the urine and much of this is before death.

(d) When taking a four ounce sample of the preservative, it is advisable to rinse the inside of the glass vessels to be used for the viscera with this fluid and then bottle and seal the sample.

(e) Symptoms of acute poisoning may arise from food contamination (bacterial poisons) and if this is suspected, the Medical Officer of Health should be informed.

(f) Often, pieces of plant tissue are sent in for identification; this is generally impossible unless the leaves or flowering tops are received.

(g) In cases of arsenic poisoning, special care should be taken to avoid the possibility of contamination of dishes, gloves etc., which might be carried over to the next case.

(h) Molten paraffin shall be used to seal the stoppers of the glass vessels and prevent leaks. Sealing wax or plaster of paris should be avoided.

(i) The reference number on the outside of the exhibit box should be carefully noted as the number of parcels dealt with may be many.

(j) In some cases, especially food poisoning, cholera etc., bacteriological examinations may be required, whereas in some others, issues may have to be subject to histological examinations.

30. Suspected substances may be forwarded by post, by passenger train, by steamer, or in charge of a constable. In all cases in which influential parties are implicated, the articles may be forwarded in charge of a constable. Officers

forwarding viscera, etc., by post, by rail or steamer or by constable to the Chemical Examiner, will be held personally responsible that the following instructions are carefully followed:—

Transmission by post.—When viscera etc. are forwarded through the post, the following procedure should be adopted:

(1) The suspected viscus or other material to be sent for examination should be enclosed in a glass bottle or jar provided with tight fitting stopper or cork.

(2) If the material sent is liable to decomposition, it should invariably be preserved by one of the following methods:—

(i) in cases of suspected human poisoning other than alcoholic poisoning, the material sent shall be immersed in strong unmethylated spirit, supplied by the Government Medical Stores. The spirit shall be sufficient in quantity to cover the material immersed in whatever position the vessel containing it may be held. Care shall be taken that common bazaar spirit is not used, and that no vessel containing fluid matters is filled right up to the brim. The amount of spirit added to each vessel shall be measured and the amounts so aided written on the label affixed to the vessel;

(ii) in cases of suspected alcoholic poisoning the contents of the stomach and its washings in pure water shall be placed in a bottle with a sufficient quantity of clean table salt to saturate the solution and leave a little salt undissolved. The stomach itself, after being washed in pure water as above, may be preserved in alcohol as in clause (i). A sample of the water and of the table salt used should also be invariably forwarded for examination.

(3) The precaution that the stopper or cork of the bottle fits tightly is especially necessary when alcohol is used as a preservative; in such cases a ring of bees or candle wax shall be placed round the lip of the bottle so as to cover the stopper. The stopper, or works shall be carefully tied down with bladder or leather and sealed. To ascertain that it has been securely closed the bottle or jar shall be placed for five minutes with its mouth down.

(4) The glass bottle or jar shall then be placed in a strong wooden or extra-strong tin box, which shall be large enough to allow a layer of raw cotton tow or any padding material at least three-fourths of an inch thick being put between the vessel and the box.

(5) The box itself shall be encased in some rough cloth or wrapping material which shall be securely closed and sealed. The seals shall be at intervals not exceeding three inches along each line of sewing. All the seals

must be of the same kind of wax, and must bear distinct impressions of the same device. The device shall ordinarily be the office seal of the officer despatching the parcel. The device must in no case be that of a current coin or merely a series on straight, curved, or cross lines, or impression of key or weights.

(6) Such parcels shall be packed under the immediate supervision of the Medical Officer in charge.

(7) At all stations where there is a Civil Surgeon the parcels shall invariably be sent to the post office, by that officer and not by a subordinate officer, but where there is no Civil Surgeon they may be packed and forwarded direct to the Chemical Examiner by the subordinate officer in charge of the hospital or dispensary.

(8) A declaration of the contents to the officials of the Postal Department is unnecessary and shall not be made.

Transmission by rail or steamer.—When viscera, etc., are forwarded by rail or steamer, it is unnecessary to encase the box in cloth, but with this exception the rules for forwarding articles through the post shall be observed in forwarding articles by rail or steamer.

Transmission by Constable.—When viscera, etc., are forwarded in charge of a constable, it shall not be necessary to pack the bottles, etc., in a strong box in order to protect them from rough handling during transit. But it is desirable that glass bottles containing viscera, etc., shall be wrapped in cloth or paper, so as to be not offensive to other passengers.

In every other respect the same rule shall be observed as in the transmission of viscera, etc., by rail.

31. Slides containing vaginal or cervical smears, public hairs, clothes, etc., requiring examination for suspected presence of seminal stains may be sent, care being taken to dry the stains thoroughly and to cover them with cotton wool to prevent the slides from being broken or the stains from getting damaged during transit. The packing shall be made and the letter of advice despatched as per the instructions contained in rule 16.

32. **Animal Poisoning Cases.**—(1) Sufficient precaution should be taken to ensure that viscera, etc., are not sent for examination in cases where death obviously occurred from causes other than poisoning. A careful search should be made for any indications of the presence of a sui, when this mode of poisoning is suspected, and if anything resembling a sui be found, it shall be forwarded for examination together with the injured tissues. A chemical examination of the viscera is useless in cases of sui poisoning, as in such cases poison cannot be detected in the viscera.

The mode of poisoning by sui is as follows:—

The seeds of the Abrus Precatorium (Malayalam "Kunnikuru") are powdered into a paste with water and small sharp spike, nearly an inch long called "Sui" or "Sutari" is made from the paste and hardened by drying in the sun. The "sui" is then mounted on a wooden handle and a blow struck with it, the protruding "Sui" enters the animal's flesh and remains there when the handle is withdrawn. The animal invariably dies usually in 24 to 30 hours, and much local oedema is found at the seat of injury with injection of the vessels and haemorrhagic points in the mucous membranes of the stomach and intestines.

(2) The entire alimentary canal shall be opened and its contents inspected for suspicious substances. If any suspicious substance be detected in the alimentary canal, it shall be packed in a separate vessel and spirit shall not be added unless necessary for its preservation.

(3) About two pounds of the contents of the stomach with about a pound of the contents of the intestines, shall be placed in a clean glass or well-glazed earthen vessel or vessels and strong unmethylated spirit added in the proportion of not less than one-fourth of the apparent bulk of the material when the contents are nearly dry, but if much liquid be present, spirit should be added in the proportion of one-third of the bulk of the material. Also about a pound of the liver and similar weight of the stomach shall be placed in a separate clean glass or well glazed earthen vessel and spirit should be added in the proportion of one-third of the bulk of the material. The amount of spirit added to each vessel shall be measured and the amount so added written on the label affixed to the vessel. The sample of spirit used in preserving the articles shall also be sent. Four ounces are sufficient.

(4) Dried cattle dung may be sent without addition of spirit.

(5) Suspected cattle poisons rarely require the addition of spirit for their preservation and spirit need not be used unless necessary.

(6) The instructions given as to the packing and transmission to the Chemical Examiner of substances requiring chemical examination in cases of suspected human poisoning, are applicable to these cases also, and should be carefully attended to, and the same precautions adopted as to sealing and labelling the different vessels.

(7) When under instructions from a Magistrate or Police Officer, a Medical Officer forwards articles to the Chemical Examiner for examination he shall at the same time address and forward separately a letter to the Chemical Examiner intimating their despatch.

This letter should contain—

- (a) an impression of the seal used in closing the vessels and a description thereof;
- (b) a list of the articles forwarded and information as to how the articles have been forwarded;
- (c) the name of the officer from whom the requisition has been received to forward the articles and the number and date of such requisition;
- (d) information as to the number and kind of animals affected and number of deaths; and
- (e) any information obtainable as to post-mortem appearance, nature and duration of symptoms likely to indicate the probable nature of the poison.

33. **Analysis of water.**—(i) Before forwarding a sample of water to the Chemical Examiner for analysis it is necessary to write to the Chemical Examiner and ascertain when it will be convenient to receive the sample or samples which may require to be examined, it being desirable that sample should be examined shortly after they are received at the laboratory.

(ii) Their duty of collecting the samples should always be undertaken by a responsible person. The employment of peons or servants for this purpose is strictly prohibited. The bottles used shall be thoroughly cleaned and then well rinsed out twice with water from the same source, just before finally filling them.

(iii) Glass-stoppered bottles are best, but if they are not procurable, new corks may be used with the ordinary quart wine bottles, of light coloured glass. In filling the bottles a little space should be left between the cork and the water.

(iv) Not less than one gallon of each sample of water shall be forwarded.

(v) Each bottle shall be labelled with the name of the well and the date of collection.

(vi) On forwarding water for analysis the officer concerned shall, at the same time, forward separately a letter to the Chemical Examiner. This letter shall contain:—

(a) an impression and description of the seal used in closing the bottles ;

(b) information as to the number of samples sent, and a statement as to how the samples have been forwarded ;

(c) an explanation as to the reason for which the examination is required, and information as to by whom it is desired ;

(d) a statement as to the source from which each sample was collected, and by whom and when each sample was collected.

By Order of the Governor,

C. R. KRISHNAMOORTHY,
Secretary.
