

COMMONWEALTH OF DOMINICA

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2009

NATIONAL METROLOGY

ACT 5

COMMONWEALTH OF DOMINICA

Act No. 5 OF 2009

I assent



N. J. O. Liverpool
President

23rd March, 2009.

**AN ACT TO REPEAL THE WEIGHTS AND MEASURES
ACT, CHAPTER 78:48 AND TO MAKE
PROVISIONS WITH RESPECT TO A NEW
SYSTEM OF WEIGHT AND MEASURES AND
FOR RELATED MATTERS.**

(Gazetted 2nd April, 2009)

**BE IT ENACTED by the Parliament of the Commonwealth
of Dominica as follows:**

**PART I
PRELIMINARY**

1. (1) This Act may be cited as the-
NATIONAL METROLOGY ACT, 2009.

Short title and
commencement.

(2) This Act shall come into force on such day as the Minister may by Order published in the Gazette, appoint.

Interpretation.

2.(1) In this Act

“accuracy” means the degree of conformity with one or more working, secondary national reference or international standards as the context demands;

Schedule III.

“authorised denomination” means denomination of weight or measure specified in Schedule III;

Schedule II.

“authorised units of measurement” means units of measurement specified in Schedule II;

No. 4 of 1999.

“Bureau” means the Dominica Bureau of Standards established by Part I of the Standards Act;

“calibration” means a set of operations that establish, under specific conditions, the relationship between values of quantities indicated by a measuring instrument or measuring system, or values represented by a material measure or a reference standard, and the corresponding values realized by standards;

“container” includes anything in or by which an article is cased, enclosed, contained or packed;

Cap. 190.

“Director” means the Director of the Dominica Bureau of Standards;

“District” means the various Districts in Dominica specified under the Village Council Ordinance and includes the city of Roseau;

“equipment” means a weight, measure, weighing or measuring instrument or sub-assembly of a weighing or measuring instrument;

“General Conference of Weights and Measures” means the Conférence Générale de Poids et Mesures established under the Convention du Metre (the Meter Convention) and serviced by the International Bureau of Weights and Measures;

“importer” means an individual, group of persons, agency or company who legitimately brings into the country a container or a weighing or measuring instrument;

“initial verification” means the verification of a new or repaired weight, measure or a weighing or measuring instrument prior to it being placed in service;

“in-service verification” means the periodic verification of a weight, measure or weighing or measuring instrument which has been subject to initial verification and has been in service;

“Inspector” means any person appointed as an inspector of weights and measures under this Act;

“measure” means a vessel of determinate capacity for determining the volume of a liquid or the length of a graduated rod or line;

“measuring instrument” means an instrument or object for use in the measurement of any physical attribute and includes instruments or objects for use in the measurement of weight, length, area, volume, number, time, frequency, electrical current, temperature, light intensity, capacity, any combinations or any instrument for the measurement of any quantity;

“Minister” means the Minister responsible for the administration of weights and measures;

“packer” means an individual, group of persons, agency or company who or which places in a container the item or product which is to be offered for sale;

“pattern approval” means the approval by the Director of a specific model of a weighing or measuring instrument for its intended use, after one or more instruments have been tested in accordance with the prescribed requirements;

“prescribed mark of verification” means a mark prescribed by Regulations made by the Minister under this Act;

“pre-packaged” means a container of goods in a case where

- (a) the goods are placed for sale in the container otherwise than in the presence of a person purchasing the goods; and
- (b) none of the goods can be removed from the container without disturbing the integrity of the package;

“primary standard” means an object which

- (a) represents or reproduces a unit of measurement referred to in section (3) of this Act;
- (b) has been calibrated and certified by a procedure which establishes traceability to an accurate realization of the appropriate standards by an uncertainty at a stated confidence level, held at the International Bureau of Weights and Measures;
- (c) is used for determining the accuracy of a secondary standard;

“Specified Standards Laboratory” means the national standards laboratory of any country or an international standard laboratory specified by the Minister for the purpose of this Act by notification published in the *Gazette*;

“secondary standard” means an object being a copy of, or object equivalent to a primary standard which

- (a) has been calibrated and certified to the satisfaction of the Bureau by reference to a primary standard; and
- (b) is or is to be used as a standard for the purpose of determining the accuracy of a working standard;

“stamp” means a mark, applied by an Inspector, for use as evidence that a measuring instrument is in conformity with the Regulations, whether applied by impressing, casting, engraving, etching, branding, transfer or by any means approved by the Bureau;

“trade” means the selling, purchasing, exchanging, leasing, rendering, consigning or providing of any goods, land, facility, service or work on the basis of measurement and includes the collecting of tolls, duties and taxes on the basis of measurement and the business of providing facilities for measuring by means of a prescribed measuring instrument;

“verification” means the examination of an instrument being generally of an approved type to establish that it conforms to that type and that it meets legal metrological requirements and includes re-verification;

“weight” means a body of determinate mass for use in a weighing instrument;

“weighing instrument” means an instrument for the measurement of mass or weight.

(2) For the purposes of this Act

(a) a weight or measure shall be deemed to be correct, if upon comparison with a reference of a working standard of that denomination, the error determined is equal to or less than the prescribed limit of error allowed (tolerance or maximum permissible error; mpe); and

(b) a weighing or measuring instrument shall be deemed to be correct, if upon verification, it does not have a greater limit of error than the prescribed limits of error allowed on verification.

**PART II
LEGAL AND STANDARD UNITS
OF MEASUREMENT**

Principal system of
measurement.
Schedule I.

3. (1) The International System of Units as defined in Schedule I shall be the legal units of measurement in Dominica.

Schedule II.

(2) The units indicated in Part I of Schedule II may be used with the International System of Units, because of their practical importance, wide usage or use in specialized fields.

Schedule II.

(3) The Minister may by Order appoint

(a) a date from or after which the other units specified in Part I of Schedule II shall cease to have legal force and validity in Dominica; or

(b) different dates for different undertakings or class of undertakings as specified in the Order.

Schedule II.

(4) The British Imperial System of Units as defined in Part II of Schedule II may also be used concurrently with the International Systems of Units.

(5) The Minister may, by Order, appoint

(a) a date from and after which the system of units specified in Part II of Schedule II shall cease to have legal force and validity in Dominica; or

(b) appoint different dates for different undertakings or class of undertakings, as specified in the Order.

Primary standards to be
legal units.

4. (1) For the purposes of this Act, the Minister shall procure and cause to be maintained a national standard metre and a national standard kilogram and from time to time, procure and cause to maintain such standards of the other units of measurement, as he considers necessary.

(2) Every standard of any unit of measurement procured under subsection (1) shall be equivalent of a unit of measurement defined in Schedule I or Part II of Schedule II or any multiple or sub-multiple of any such unit of measurement, and shall be made of such materials and in such manner as to be, as far as practicable, proof against mechanical and atmospheric agents and other sources of error.

Schedule I and II

5. Every standard of any unit of measurement procured under section 4 shall be verified and authenticated at a specified standards laboratory before such standard is brought into use in Dominica.

Verification of primary standards.

6. The Minister may by Notice published in the *Gazette* declare that a standard of any unit of measurement which has been procured and verified under this section shall be brought into use in Dominica and such standard shall upon such notification become a primary standard for Dominica and shall for all purposes be deemed to be true and accurate.

Declaration of Dominica's primary standards.

7. (1) Subject to subsection (2), the Minister shall, once in at least every five (5) years, cause primary standards for Dominica as he considers necessary, to be verified at a specified standards laboratory to the satisfaction of the Bureau.

Periodic verification of Dominica's primary standards.

(2) Before any primary standard for Dominica of any unit of measurement is sent out of Dominica for such purpose, the Director shall cause a secondary standard of that unit of measurement to be verified by comparison with such primary standards for Dominica to be authenticated in such manner as the Minister may direct and to be placed in the custody of the custodian of the standard for Dominica, and such secondary standard shall, during such time when the Dominica primary standard is out of Dominica, be deemed to be a primary standard for Dominica.

Secondary standards and periodic calibrations.

8. (1) The Director may, for the purposes of this Act, cause such copies as he may consider necessary of any primary standard for Dominica to be made in such manner and of such material, form and specification, as may be prescribed to be the secondary standards for Dominica.

(2) Every secondary standard of any unit of measurement shall be kept and preserved in such manner as may be prescribed at the office of and in the custody of the Director who shall, at least once every two (2) years, cause such standard to be compared with the primary standard for Dominica of that unit of measurement, and if necessary, to be corrected or adjusted, to the satisfaction of the Bureau.

Cancellation and authentication of working standards.

9. (1) The Minister may at any time by Notice published in the *Gazette* cancel any secondary standard and any standard so cancelled shall cease to be used as a secondary standard.

(2) The Minister may for the purposes of this Act procure such copies as may be necessary of the secondary standards of any unit of measurement.

(3) Every copy referred to in subsection (2) shall be made in such manner and of such materials, form and specifications as may be prescribed.

Verification and authentication of working standards.

10. (1) The Director shall cause every copy of a secondary standard referred to in section 9 (2) to be verified, and if found to be correct, to be authenticated, in the prescribed manner.

(2) Every copy so authenticated in accordance with subsection (1) shall be known as working standard for the purposes of this Act, and shall be so deemed until the contrary is proved to be true and accurate.

(3) Every working standard in the custody of the Director, an Inspector or any other agency to which custody has been assigned shall be verified once at least in every period of one (1) year by comparison against a secondary standard of that unit of measurement.

(4) In the event of damage of a working standard, such standard shall not be used unless it has been compared with a secondary standard of that unit of measurement and found to be true and accurate, and authenticated by the Director in the prescribed manner.

11. A court shall take judicial notice of every primary, secondary and working standard for Dominica.

Judicial notice of standards.

12. The Director, designated under section 29 shall be the custodian of primary, secondary and working standards for Dominica.

Custodian of Dominica Standards.

PART III USE OF AUTHORIZED UNITS OF MEASUREMENT

13. (1) Every contract, bargain, sale or dealing made or had in Dominica whereby any work, goods, wares, merchandise or other thing is or are to be done, sold, hired, delivered, carried, measured, computed, paid for, or agreed to by a unit of measurement, shall be made and had according to any one of the authorised units of measurement specified in Schedule II.

Use of authorized units for all purposes.

Schedule II.

(2) On the commencement of this Act, where any fees and duties are to be charged or collected in Dominica these fees and duties shall be based on the authorised units of measurement specified in Schedule II.

(3) The packing in Dominica of any article or container for the purposes of sale shall be done according to any one of the authorized units of measurement specified in Schedule II.

14. Section 13 shall not apply to goods which are intended for dispatch to a destination out of Dominica.

Exemption of export goods.

PART IV
MEASURING INSTRUMENTS USED FOR TRADE

Weighing and measuring instruments.

Schedule II.

15. All weighing and measuring instruments for trade used in Dominica shall be in the authorised units of measurement specified in Schedule II.

Use of authorised denominations of weights and measures. Schedule III.

16.(1) No person shall use a weight or measure other than a weight or measure of an authorised denomination specified in Part I or Part II of Schedule III for the purpose of any trade.

(2) Subject to subsection (3), no person shall use for the purposes of any trade, or have in his possession for use in any trade any

(a) weight which purports to be of an authorised denomination, unless the denomination Schedule is indelibly marked on the top or side of it in legible figures and letters;

(b) measure of length or volume which purports to be of a denomination equivalent to an authorised denomination unless the denomination is marked indelibly on the outside of it in legible figures and letters.

(3) Nothing in this section shall be considered to require the marking of a denomination of any weight, if the small size of such weight renders the marking impracticable.

Use of weighing or measuring instruments.

17. No person shall use for the purpose of any trade, or have in his possession for use in any trade, any weighing or measuring instruments which do not bear a stamp indicating the maximum weight or measure, as the case may be, which may be weighed or measured by means of such instrument.

Prohibition of sale and use of weights, measures and measuring instruments.

18. (1) No person shall sell or expose for sale any weights or measures or weighing or measuring instruments which have not been verified and stamped by an Inspector with the prescribed mark of verification.

(2) No person shall use a weight, measure or weighing or measuring instrument which has not been verified and stamped by an Inspector with the prescribed mark of verification.

19. (1) Any person who in any shop, warehouse, store, market or public place sells any goods by weight or measure, whether on his own behalf or on behalf of the owner of such goods, shall on demand made by the person to whom the goods are to be delivered where the

Sellers to weigh or measure article if required.

- (a) goods are sold by weight, weigh the goods in a weighing instrument, in the presence of that person; or
- (b) goods are sold by volume or capacity, measure the article in a measure of volume or capacity, in the presence of that person; or
- (c) article is sold by linear measure, measure the article using a measure of length, in the presence of that person.

(2) Subsection (1) shall not apply to the sale of pre-packaged goods.

PART V MANUFACTURE AND INSPECTION OF MEASURING EQUIPMENT

20. (1) All weighing and measuring equipment for use in trade and for purposes specified in subsection (2) shall be subject to

Verification of weighing and measuring equipment.

- (a) pattern approval as specified in section 24;
- (b) initial verification in accordance with requirements to be prescribed by the Minister;
- (c) in-service verification in accordance with requirements to be prescribed by the Minister; and
- (d) verification after repair or modification.

(2) The use of specific prescribed weighing or measuring equipment in the following fields

- (a) public health;
- (b) postal services;
- (c) the sale of electricity and water; and
- (d) industry, engineering; or
- (e) any other field,

shall be subject to the provisions of subsection (1).

Periodic examination of
weights and measuring
instruments

21. (1) The Director shall fix the times and places within each District or area for the examination and verification of the weights and measures and weighing and measuring instruments.

(2) Public notice of the time and place fixed under subsection (1) for the examination and verification of weights and measures and weighing and measuring instruments shall be given by the Director as the case may be, in the manner and at the times as he considers necessary.

(3) An Inspector shall attend every examination fixed under subsection (1) with the working standards and shall

- (a) examine in the prescribed manner every weight or measure which is produced to him for that purpose and compare it with a working standard of that weight or measure; and
- (b) examine and test in the prescribed manner every weighing or measuring instrument which is produced to him for the purpose.

(4) Nothing in subsection (1) shall be deemed to prevent an Inspector from examining, comparing or testing any weight or weighing or measuring instrument which is produced to him for examination at any time or place other than a time or place fixed under this section.

(5) No Inspector shall examine any weight or measure or weighing or measuring instrument under this section, except upon payment of the prescribed fee for the examination.

22. (1) An Inspector who, upon examination under section 21 finds any weight or measure or measuring instrument to be correct, and is in all respect in compliance with this Act and any Regulations made under this Act, shall stamp such weight, measure or instrument in the prescribed manner with the prescribed mark of verification.

Stamping of mark of verification

(2) No Inspector shall stamp with a mark of verification, any weight or measure or weighing or measuring instrument which is not correct or which does not comply with this Act or any Regulation which is applicable in the case of such weight, measure or instrument, as the case may be.

(3) No Inspector shall stamp any weight or measure with a mark of verification -

(a) unless such weight or measure is of an authorised denomination; and

(b) unless he has tested it by comparison with a working standard of that weight or measure.

23. Every weight or measure or weighing or measuring instrument which has been duly stamped by an Inspector under this Act with the prescribed mark of verification shall be a legal weight, measure or instrument, as the case may be, in any part of Dominica.

Legal status of weights stamped by Inspectors.

24. (1) All weights, measures and weighing and measuring equipment used for purposes of trade and in the fields specified in section 20 (2) shall be subject to pattern approval by the Director in accordance with the specifications and limits of error as may be prescribed.

Pattern approval of weighing and measuring equipment.

(2) The fees charged for testing, verification and stamping of weights, measures or weighing and measuring instruments shall be credited to the accounts of the Bureau in the manner prescribed.

(3) Where a subsequent examination of any weight, measure or weighing or measuring instrument that has been approved earlier by the Director is found to be defective, the Director may cancel such earlier approval and notify any person of that cancellation.

Prohibition of sale,
repair and manufacture of
weights and measures.

25. (1) No person shall sell, manufacture or repair any weight or measure or any weighing or measuring instrument except under the authority of a licence issued by the Director under this section.

(2) Every person who wishes to obtain a licence under subsection (1)

- (a) to repair any weight, measure or weighing or measuring instrument shall
 - (i) demonstrate to the satisfaction of the Director his ability or the ability of the persons employed by him, to repair the type of measuring instrument specified in this Act; and
 - (ii) be in possession of such equipment, tools and other facilities as may be required for the proper execution of the repair;
- (b) to manufacture any weight, measure or weighing or measuring instrument shall -
 - (i) demonstrate to the satisfaction of the Director, his ability or the ability of persons employed by him to manufacture the type of weight, measure or weighing or measuring instrument which he seeks to manufacture;

(ii) be in possession of the equipment, tools and other facilities as may be required for the manufacture or assembly of the weight, measure or weighing or measuring instrument; and

(iii) submit to the Director the drawings and samples as may be required of the weight, measure or weighing and measuring instrument which he intends to manufacture, for pattern approval.

(3) A licence to sell, manufacture or repair weights, measures, and weighing and measuring instruments shall not be issued to any person except upon payment of the prescribed fee.

(4) Every licence issued by the Director under this section shall be in the prescribed form, subject to such conditions as may be prescribed, and shall be in force until the date specified in the licence.

(5) The Director may revoke any licence issued under this section if the holder of the licence is convicted of an offence under this Act.

(6) Regulations may be made, prohibiting persons licensed under this section from demanding or accepting, in respect of the repair or adjustment of weights, measures, and weighing and measuring instruments, fees in excess of the maximum fees as may be prescribed.

PART VI PRODUCT QUANTITIES AND PRE-PACKAGES

26. (1) No person shall sell any goods by weight or measure unless he does so by net weight or measure.

Sale to be by set weight or measure.

(2) Subject to section 27 (2), any person who, in selling or purporting to sell any goods by weight or other measurement or by number, delivers or causes to be delivered to the buyer a lesser quantity than that purported to be supplied or that corresponding with the price charged for those goods commits an offence.

Pre-packaged goods.

27. (1) The net weight or measure marked on pre-packaged goods shall be subject to the tests and limits as prescribed by Order made by the Minister and published in the *Gazette*.

(2) No person shall sell or expose for sale any goods in a container or goods that have been pre-packaged by weight or by measure unless such goods comply with the limits specified by Order made by the Minister and published in the *Gazette*.

Schedule II.

(3) Subject to such exemptions as may be prescribed by Order made by the Minister, a person shall not sell any pre-packaged goods by weight or measure unless the net weight or the net measure is marked on the container in the prescribed manner in terms of authorised units of measurement specified in Schedule II.

(4) Any person who supplies, sells or exposes for sale goods in a container or pre-packaged goods that are so made, formed or filled as to be misleading as to the nature, weight or capacity of the contents commits an offence.

(5) Any person who is an importer, or a packer of pre-packaged goods shall ensure that such pre-packaged goods are marked in the prescribed manner with -

(a) a statement of the quantity contained in terms of authorised units of measurement specified in Schedule II; and

(b) the name and address of the manufacturer, or the packer or the importer or a mark which enables the manufacturer or the importer or the packer to be readily ascertained.

PART VII
NATIONAL METROLOGY SERVICE

28. The National Metrology Service shall be a part of the Bureau established by the Standards Act or any enactment replacing it.

National Metrology Service.
Act No. 4 of 1999.

29. (1) The Minister shall, for the purposes of this Act, designate the Director to be or to act as the Director of Metrology.

Designation of Director and Deputy Director of metrology.

(2) An officer of the Bureau shall be designated by the Director to be or to act as the Deputy Director of Metrology.

(3) The Deputy Director of Metrology designated under subsection (2) may, subject to the general direction and control of the Director exercise, perform or discharge all or any of the powers, duties or functions, conferred or imposed on or assigned to the Director by or under this Act.

30.(1) For the purposes of this Act, the Director shall designate employees of the Bureau to be Inspectors and shall provide every Inspector with documentary evidence of his designation.

31. (1) No Inspector shall use any working standard for the purposes of testing any weight or measure at any time after the expiry of a period of one (1) year from the date on which that standard was last stamped as correct.

Use of unstamped standards, etc., by inspectors.

(2) No Inspector shall use for the purposes of this Act a weighing or measuring instrument which is provided for his use unless that instrument has been verified in the prescribed manner.

32. (1) No Inspector shall derive any profit from or be employed in the making or selling of weights or measures or weighing or measuring instruments.

Inspectors not to derive profit from selling of weights and measures.

(2) No Inspector shall repair, alter or adjust any weight or measure or weighing or measuring instrument.

(3) Notwithstanding subsection (2) where the Director is satisfied that it is desirable for an Inspector to adjust weights and measures and weighing and measuring instruments within the area of any district as the case may be, the Director may, if he or she thinks fit, authorise that Inspector to act in that area as an adjuster of weights and measures and weighing and measuring instruments.

(4) Where an adjustment is required, the weight or measuring instrument shall be immediately verified by another Inspector in the presence of the Inspector who has been authorised to be an adjuster.

(5) Any Inspector who is authorised under subsection (3) to act as an adjuster of weights and measures and weighing and measuring instruments shall not adjust any weight or measure or weighing or measuring instrument except upon payment of the prescribed fee for such adjustment.

Deposit fees.

33. All fees paid under this Part to any Inspector shall be credited to the Bureau accounts.

Registers to be kept by inspectors.

34. Every Inspector shall keep a register in the prescribed form in which he shall enter such particulars as may be prescribed relating to the performance of his duties under this Act and shall at such times as may be prescribed transmit the register to the Deputy Director or Director for examination.

PAR VIII**AUTHORITY OF THE NATIONAL
METROLOGY SERVICE**

35. The Director or the Deputy Director or any Inspector may at any reasonable time enter any factory, shop, store, warehouse, shed, land, vehicle or premises in which any weight or measure or weighing or measuring instrument is or is suspected to be kept or used for the purpose of any trade, or any article or goods are offered or exposed for sale and may -

Powers of inspection of director and other officers.

- (a) search for, or require the person for the time being in charge to produce for inspection, all or any of the weights and measures and weighing or measuring instruments;
- (b) inspect any weight or measure which is found or produced for examination, and compare it with a working standard of that weight or measure;
- (c) inspect and test any weighing or measuring instrument which is found or produced for examination;
- (d) seize and detain for the purpose of a prosecution for an offence under this Act or any other written law any weight or measure or weighing or measuring instrument which is found upon such comparison or test to be incorrect, or which appears to the Inspector to have been or is likely to be used in contravention of any provision of this Act or such other written law, as the case may be;
- (e) inspect and weigh or inspect and measure, any article or goods which are kept, offered or exposed for sale in order to ascertain whether the provisions of this Act are being complied with in respect of such article or goods and seize and detain any article or goods in respect of which or in relation to which a contravention of any provisions of this Act has been or is suspected to have been committed;

(f) require the production of all books, accounts or documents relating to goods seized under paragraph (e) and inspect any copy of any of these books, accounts or documents;

(g) take such samples of any goods seized or detained as may be reasonably required by him for the proper performance of his duties.

PART IX OFFENCES AND PENALTIES

Use of unmarked
weights or measures.

36. Subject to section 16(3), any person who uses for any trade or has in his possession for use in any trade, any weight or measure which is unmarked with its denomination commits an offence and is liable on summary conviction to a fine of \$5,000 or to imprisonment for a term of three (3) months or to both such fine and imprisonment in the case of repeat offenders.

Sale of unstamped
weights and measures.

37. Any person who sells or exposes for sale any weight or measure or weighing or measuring instrument which has not been stamped by an Inspector with the prescribed mark of verification commits an offence and is liable on summary conviction to a fine of \$5,000 or to imprisonment for a term of six (6) months or to both such fine and imprisonment in the case of repeat offenders.

Use and possession of
unstamped weights and
measures.

38. (1) Any person who uses for the purposes of any trade or has in his possession for use in any trade, any weight or measure or weighing or measuring instrument which has not, in the period of twelve (12) months preceding such time, been stamped by an Inspector with the prescribed verification mark commits an offence and is liable on summary conviction to a fine of \$3,000 or to imprisonment for a term of six (6) months or to both such fine and imprisonment in the case of repeat offenders.

(2) Any person who contravenes section 20(1) in respect of weighing and measuring equipment for use in the fields specified in section 20(2) commits an offence and is liable on

summary conviction to a fine of \$3,000 or to imprisonment for a term of six (6) months or to both such fine and imprisonment in the case of repeat offenders.

39. Any person who -

Forgery of stamp or mark
by Inspectors.

- (a) forges or counterfeits any stamp or mark provided under this Act for the use of Inspectors in stamping weights or measures or weighing or measuring instruments;
- (b) makes, uses, sells, exposes for sale, utters or otherwise disposes of any weight or measure or weighing or measuring instrument bearing any stamp or mark which he knows to be false, forged or counterfeited;
- (c) removes any mark which has been stamped by an Inspector on any weight or measure or weighing or measuring instrument and inserts such mark on any other weight, measure, or weighing or measuring instrument; or
- (d) increases or diminishes a weight or measure which has been stamped or certified by an Inspector under this Act or tampers with a weighing or measuring instrument which has been so stamped or uses, sells, exposes for sale, utters for sale, keeps in his possession for use in a trade or otherwise disposes of any weight or measure which he knows to be so increased, diminished or false or any weighing or measuring instrument which he knows to be tampered with,

commits an offence and is liable on summary conviction to a fine of \$5,000 or to imprisonment for a term of six (6) months or to both such fine and imprisonment in the case of repeat offenders.

Use or possession of incorrect weighs and measures.

40. Any person who uses for the purpose of any trade, or has in his possession for use in any trade, any weight or measure or weighing or measuring instrument which is not correct commits an offence and is liable on summary conviction to a fine of \$5,000 or to imprisonment for a term of six (6) months or to both such fine and imprisonment in the case of repeat offenders.

False, incorrect or untrue declaration or statement.

41. Any person who, in any place or area by any means whether direct or indirect, makes any false, incorrect or untrue declaration or statement as to the number, quantity, measure, gauge or weight of any goods or things in connection with their purchase, sale, weighing or measurement, or in the computation of any charges for services rendered on the basis of weight or measure or who sells or, causes to be sold or delivers or causes to be delivered to a purchaser anything by weight or measure short of the quantity demanded or represented by the seller, commits an offence and is liable on summary conviction to a fine of \$5,000 or to imprisonment for a term of six (6) months or to both such fine and imprisonment in th case of repeat offenders

Deceptive packaging.

42. Any person who supplies, sells or exposes for sale any goods in a container or pre-packaged goods which is so made, formed or filled as to be misleading as to the nature, weight or capacity of the contents, commits an offence and is liable on summary conviction to a fine of \$5,000 or to imprisonment for a term of six(6) months or to both such fine and imprisonment in the case of repeat offenders.

Use of false weight or measure.

43. Any person who uses any false weight or false measure of capacity, or uses any weight or any measure of length representing it to be a different weight or measure from what it is, commits an offence and is liable on summary conviction to a fine \$5,000 or imprisonment for a term of six (6) months or to both such fine and imprisonment in the case of repeat offenders.

Importing or packing of pre-packaged goods.

44. Any person who -
(a) imports or packs pre-packaged goods in contravention of the requirements of section 26(2);

-
- (b) fails to mark in authorised units on any pre-package good the number, net weight or measure it contains; or
 - (c) fails to indicate the name and address of the manufacturer, or the importer or mark enabling identification of such name and address,

commits an offence and is liable on summary conviction to a fine of \$5,000 or to imprisonment for a term of six (6) months or to both such fine and imprisonment in the case of repeat offenders.

45. Any person who sells or exposes for sale a pre-packaged goods on which the number, the goods' net weight or measure is not marked on the package in terms of the units specified in Schedule II commits an offence and is liable on summary conviction to a fine of \$5,000 or to imprisonment for a term of six (6) months or to both such fine and imprisonment.

Selling of unmarked pre-packed goods.

46. Any person who

- (a) except under the authority of a licence issued by the Director under this Act, manufactures or repairs any weight or measure or weighing or measuring instrument; or
- (b) being the holder of such licence, commits a breach of any condition lawfully inserted in the licence,

Repair or manufacture of weights and measures without licence.

commits an offence and is liable on summary conviction to a fine of \$2,000 or to imprisonment for a term of three (3) months or to both such fine and imprisonment in the case of repeat offenders.

47. Any person who refuses to produce a weight or measure or weighing or measuring instrument when required to do so by the Director, the Deputy Director or an Inspector acting under section 35 of this Act; or who resists or obstructs that person in the exercise of the powers conferred upon him by that section

Refusal to produce weight or measure for inspection.

commits an offence and is liable on summary conviction to a fine of \$5,000 or to imprisonment for a term of six (6) months or to both such fine and imprisonment in the case of repeat offenders.

Breach by Inspectors.

48. Any Inspector who commits a breach of any provision of Part VIII or IX, or any Regulation relating to the examination, testing, calibration, verification or stamping of weights or measures or weighing or measuring instruments, commits an offence and is liable on summary conviction to a fine of \$2,000 or to imprisonment for a term of three (3) months or to both such fine and imprisonment in the case of repeat offenders.

General penalty.

49. Any person who commits a breach of any provision or any Regulations of this Act, where no punishment is expressly provided for such breach, is liable on summary conviction, to a fine of \$5,000.

Forfeiture of weights and measures.

50. Any court may on the conviction of any person for an offence under this Act relating to any weight or measure or weighing or measuring instrument, make an order declaring that such weight or measure or weighing or measuring instrument shall be forfeited, and every weight or measure or weighing or measuring instrument which is so forfeited shall be disposed of in such manner as the court may prescribe.

Evidence of possession.

51. For the purposes of this Act any weight or measure or weighing or measuring instrument which is found in the possession of any person who carries on any trade, shall be deemed, until the contrary is proved, to be in the possession of that person for use in trade.

Principal, liable for offences of servants and agents.

52. Where an offence under this Act is committed by an agent or servant of a manufacturer or trader, such an offence shall be deemed to have been committed by that manufacturer or trader unless he proves that the offence was committed without his knowledge, or that he exercised due diligence to prevent the commission of that offence.

53. (1) Subject to subsection (2), where an offence under this Act is committed by a representative of a body of persons -

Offences of a body corporate.

- (a) where that body of persons is a body corporate, the body corporate; or
- (b) where the body of persons is a body other than a body corporate, every person who at the time of the commission of the offence was a director or officer of that body,

shall be considered to have committed the offence.

(2) A director or officer shall not be deemed to have committed that offence if he proves that the offence was committed without his knowledge, or that he exercised due diligence to prevent the commission of that offence.

(3) A body corporate who commits an offence under this Act is liable on summary conviction to a fine of \$5000.00

PART 10

MISCELLANEOUS PROVISIONS

54. (1) The Director, Deputy Director, and Inspector or any other person authorised by the Director may request the assistance of a Police Officer in the enforcement of the provisions of this Act.

Police assistance.

(2) A Police Officer who is requested to give assistance under subsection (1) shall give the required assistance.

Fees.

55. The fees to be levied for testing, verification, calibration and stamping of weights, measures or weighing and measuring instruments shall be as prescribed by Regulations made under this Act.

56. (1) The Minister may make Regulations for the purpose of carrying out or giving effect to the provisions of this Act.

Regulations.

(2) A fine of \$5,000 or a term of imprisonment of six (6) months may be attached to Regulations made under this Act.

Amendment of schedules. **57.** The Minister may by Order amend the Schedules to this Act by adding or removing any unit of measurement specified in this Act.

Settlement of disputes. **58.** (1) Where dispute arises between an Inspector and any other person as to the meaning or construction of any Regulation or as to the methods to be adopted in testing any weight, measure or weighing or measuring instrument, the dispute shall, be brought to the attention of the Director by either party.

(2) The Director shall consider and investigate the dispute and make a decision which decision shall be communicated to both parties to the dispute

Certificate of Director or Deputy Director to be prima facie evidence. **59.** A certificate issued by the Director or Deputy Director regarding the condition of any weight, measure or weighing or measuring instrument, examined by an Inspector shall, without further proof, be admissible in evidence in any court, and shall be prima facie proof of the facts stated in the certificate.

Chap. 78:48. **60.** The Weights and Measures Act, 1917 is repealed.

SCHEDULE I

(Section 3 (1))

DEFINITION OF THE INTERNATIONAL SYSTEM OF UNITS (SI)

1. Definition of the System SI

1.1 The SI units belong to the International System of Units, of which the international abbreviation of the name is ~ SI ~.

1.2 The SI units consist of:
the base units;
the derived units;

2. **Base units:**

2.1 The names and symbols of the base units are respectively

for length	Metre	m
for mass	Kilogram	kg
for time	Second	s
for electric current	Ampere	A
for thermodynamic temperature	Kelvin	K
for amount of substance	Mole	mol
for luminous intensity	Candela	cd

2.2 Definitions of base units: -

The base units shall have the definitions assigned by the Minister from time to time by way of Regulations, being the meaning appearing to the Minister to reproduce in English the international definition adopted by the General Conference of Weights and Measures and in force at the date of the making of the Regulations.

3. **Derived units:**

3.1 The derived units are formed by combining base units with each other, by combining base units with other derived units, and by combining derived units with each other, according to the algebraic relations linking the corresponding quantities. The symbols for derived units are obtained by means of the mathematical signs for multiplication, division and use of exponents. Most commonly used derived units are indicated in sections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

3.2 **Units of Space, Time and Periodic Phenomena**

3.2.1 Plane angle: radian (symbol: rad).

The radian is the plane angle between two radii, which cut off on the circumference of a circle an arc equal in length to the radius.

$$(1 \text{ rad} = \frac{1 \text{ m}}{1 \text{ m}} = 1)$$

3.2.2 Solid angle Steradian (symbol sr).

The steradian is the solid angle, which having its vertex in the centre of sphere, cuts off an area of the surface of the sphere equal to that of a square with its side of equal length to the radius of the sphere.

$$(1 \text{ sr} \frac{1 \text{ m}^2}{1 \text{ m}^2} = 1)$$

3.2.3 Wave number: 1 per metre (symbol : m^{-1})

1 per metre is the wave number of a monochromatic radiation whose wavelength is equal to 1 metre.

$$(1 \text{ m}^{-1} = \frac{1}{1 \text{ m}})$$

3.2.4 Area: the square metre (symbol: m^2).

The square meter is the surface of a square having a side of 1 metre.

$$(1 \text{ m}^2 = 1 \text{ m.m.}).$$

3.2.5 Volume : the cubic metre (symbol: m^3).

The cubic metre is the volume of a cube having a side of 1 metre.

$$(1 \text{ m}^3 = 1 \text{ m.m.m}).$$

3.2.6 Frequency: the hertz (symbol: Hz).

The hertz is the frequency of a periodic phenomenon of which the periodic time is 1 second.

$$(1 \text{ Hz} = 1 \text{ s}^{-1} = \frac{1}{1 \text{ s}})$$

3.2.7 Angular velocity: radian per second (symbol: rad/s or rad.s⁻¹).

The radian per second is the angular velocity of a body which animated by a uniform rotation around a fixed axis, turns 1 radian in 1 second.

$$(1 \text{ rad/s} = \frac{1 \text{ rad}}{1 \text{ s}} =)$$

- 3.2.8 Angular acceleration: radian per second squared (symbol: rad/s^2 or rad.s^{-2}).

The radian per second squared is the angular acceleration of a body which is animated by a rotation varying uniformly around a fixed axis, and whose angular velocity varies by 1 radian per second in 1 second.

$$(1 \text{ rad/s}^2 = \frac{1 \text{ rad/s}}{1 \text{ s}})$$

- 3.2.9 Speed: metre per second (symbol: m/s or m.s^{-1}).

The metre per second is the speed of a body which animated by a uniform movement, covers 1 metre in 1 second.

$$(1 \text{ m/s} = \frac{1 \text{ m}}{1 \text{ s}})$$

- 3.2.10 Acceleration: metre per second squared (symbol: m/s^2 or m.s^{-2}).

The metre per second squared is the acceleration of body, animated by a uniformly varied movement whose speed varies in 1 second by 1 metre per second.

$$(1 \text{ m/s}^2 = \frac{1 \text{ m/s}}{1 \text{ s}})$$

3.3 Units of Mechanics

- 3.3.1 Linear density: kilogram per metre (symbol: kg/m or kg.m^{-1}). The kilogram per metre is the linear density of a homogeneous body of uniform section having a mass of 1 kilogram and a length of 1 metre.

$$(1\text{kg/m} = \frac{1\text{kg}}{1\text{m}})$$

- 3.3.2 Surface density: kilogram per square metre (symbol kg/m² or kg.m⁻²).

The kilogram per square metre is the density of a homogeneous body having a mass of 1 kilogram and a surface area of one square metre.

$$(1\text{kg/m}^2 = \frac{1\text{kg}}{1\text{m}^2})$$

- 3.3.3 Density (mass density) : kilogram per cubic metre (symbol : kg/m³ or kg.m⁻³).

The kilogram per cubic metre is the density of a homogeneous body having a mass of 1 kilogram and a volume of 1 cubic metre.

$$(1\text{kg/m}^3 = \frac{1\text{kg}}{1\text{m}^3})$$

- 3.3.4 Force Newton (symbol: N).

The Newton is the force which, when applied to a body having a mass of 1 kilogram, gives it an acceleration of 1 metre per second squared.

$$(1\text{N} = 1\text{kg.m/s}^2)$$

- 3.3.5 Pressure, Stress: Pascal (symbol: Pa.).

The Pascal is the uniform pressure which, when acting on a plane surface of 1 square metre, exercises perpendicularly to that surface a total force of 1 Newton. It is also the uniform stress which, when acting on a plane surface of 1 square meter, exercises on that surface a total force of 1 Newton.

$$(1\text{Pa} = \frac{1\text{N}}{1\text{m}^2})$$

- 3.3.6 Dynamic viscosity: Pascal second (symbol: Pa.s).

The Pascal second is the dynamic viscosity of a homogeneous fluid in which the uniform linear movement of a plane surface of 1 square metre leads to a retarding force of 1 Newton, when there is a difference in velocity of 1 metre per second between two parallel planes separated by a distance of 1 metre.

$$(1\text{Pa.s} = \frac{1\text{Pa.m}}{\text{lm/s}})$$

- 3.3.7 Kinematic viscosity: metre squared per second (symbol: m²/s or m².s⁻¹).

The metre squared per second is the kinematic viscosity of a fluid whose dynamic viscosity is 1 Pascal second and whose density is 1 kilogram per cubic metre.

$$(1\text{m}^2/\text{s} = \frac{1\text{Pa.s}}{1\text{kg/m}^3})$$

- 3.3.8 Work, Energy, Quantity of heat : joule (symbol : J).

The Joule is the work done when the point of application of a force of 1 Newton is displaced through a distance of 1 metre in the direction of the force.

$$(1\text{J} = 1\text{N.m})$$

- 3.3.9 Power, Energy flow rate, Heat flow: rate watt (symbol : W).

The watt is the power which gives rise to a production of energy equal to 1 Joule per second.

$$(1\text{W} = \frac{\text{LJ}}{1\text{s}})$$

- 3.3.10 Volume flow rate: cubic metre per second (symbol m³/s or m³.s⁻¹)

The cubic metre per second is the volume flow rate of a uniform flow such that a substance having a volume

of 1 cubic metre passes through the cross section considered in 1 second.

$$(1 \text{ m}^3/\text{s} = \frac{1 \text{ m}^3}{1 \text{ s}})$$

- 3.3.11 Mass flow rate kilogram per second (symbol kg/s or kg.s⁻¹)
The kilogram per second is the mass flow rate of a uniform flow such that a substance having a mass of 1 kilogram passes through the cross section considered in 1 second.

$$(1 \text{ kg/s} = \frac{1 \text{ kg}}{1 \text{ s}})$$

3.4 Units of Heat

- 3.4.1 Entropy: Joule per Kelvin (symbol J/K or J.K-1).

The Joule per Kelvin is the increase in the entropy of a system receiving a quantity of heat of 1 Joule at the constant thermodynamic temperature of 1 Kelvin, provided that no irreversible change takes place in the system.

$$(1 \text{ J/K} = \frac{1 \text{ J}}{1 \text{ K}})$$

- 3.4.2 Specific heat capacity: Joule per kilogram Kelvin (symbol J/kg.K) or J.(kg.K)⁻¹ or J.kg⁻¹.k⁻¹.

The Joule per kilogram Kelvin is the specific heat capacity of a homogeneous body having a mass of 1 kilogram in which the addition of a quantity of heat of 1 Joule produces a rise in temperature of 1 Kelvin.

$$(1 \text{ J}/(\text{kg.K}) = \frac{1 \text{ J}}{1 \text{ kg.K}})$$

- 3.4.3 Thermal conductivity: watt per metre Kelvin symbol: W/(m.K) or W.m-1.K-1)

The watt per metre Kelvin is the thermal conductivity of a homogeneous body in which a difference of

temperature of 1 Kelvin between two parallel planes having a surface of 1 square metre and which are 1 metre apart produces between these planes a heat flow rate of 1 watt.

$$(1\text{W}/(\text{m.K}) = \frac{1\text{W}/\text{m}^2}{1\text{K}/\text{m}})$$

3.5 Units of Electricity and Magnetism

3.5.1 Quantity of electricity, Electric charge: coulomb (symbol: C). The coulomb is the quantity of electricity carried in 1 second by a current of 1 ampere.

$$(1\text{C} = 1\text{A} \cdot 1\text{s} = 1\text{A} \cdot \text{s})$$

3.5.2 Electric potential, electric tension, Electromotive force: volt (symbol: V).

The volt is the difference of electric potential between two points of a conducting wire carrying a constant current of 1 ampere, when the power dissipated between these two points is equal to 1 watt.

$$(1\text{V} = \frac{1\text{W}}{1\text{A}})$$

3.5.3 Electric field strength: volt per metre (symbol: V/m).

The volt per metre is the strength of the electric field which exercises a force of 1 Newton on a body charged with a quantity of electricity of 1 coulomb.

$$(1\text{V}/\text{m} = \frac{1\text{N}}{1\text{C}})$$

3.5.4 Electric resistance: Ohm (symbol: Ω)

The Ohm is the electric resistance between two points of a conductor when a constant potential difference of 1 volt, applied to these points, produces in the conductor a current of 1 ampere, the conductor not being the seat of any electromotive force.

$$(1\dot{U} = \frac{1V}{1A}).$$

3.5.5 Conductance: Siemens (symbol: S).

The Siemens is the conductance of a conductor having an electric resistance of 1 ohm.

$$(LS = 1\dot{U}^{-1} = \frac{1}{1\dot{U}^{-1}})$$

3.5.6 Electric capacitance: farad (symbol: F).

The farad is the capacitance of a capacitor between the plates of which there appears a difference of electric potential of 1 volt, when it is charged by a quantity of electricity of 1 coulomb.

$$(1F = \frac{1C}{1V})$$

3.5.7 Inductance: Henry (symbol: H).

The Henry is the electric inductance of a closed circuit in which an electromotive force of 1 volt is produced when the electric current in the circuit varies uniformly at the rate of 1 ampere per second.

$$(1H = \frac{1V.s}{1\dot{A}})$$

3.5.8 Magnetic flux, magnetic induction flux: Weber (symbol: Wb).

The Weber is the magnetic flux which, linking a circuit of 1 turn, would produce in it an electromotive force of 1 volt, if it were reduced to zero at a uniformed rate in 1 second.

$$(1Wb=1V.s).$$

- 3.5.9 Magnetic induction, magnetic flux density: Tesla (symbol: T).

The Tesla is the uniform magnetic induction, which, distributed normally over a surface of 1 square metre, produces across the surface a total magnetic flux of 1 Weber.

$$(1\text{T} = \frac{1\text{Wb}}{1\text{m}^2})$$

- 3.5.10 Magnetomotive force: ampere (symbol: A).

The ampere is the Magnetomotive force along any closed curve which surrounds once only an electric conductor through which an electric current of 1 ampere passes.

- 3.5.11 Magnetic field strength: ampere per metre (symbol: A/m or A.m-1).

The ampere per metre is the strength of the magnetic field produced in vacuum along the circumference of a circle of 1 metre circumference by an electric current of 1 ampere, maintained in a straight conductor of infinite length of negligible circular cross section, forming the axis of the circle mentioned.

$$(1\text{A/m} = \frac{1\text{A}}{1\text{m}})$$

3.6 Units of Light and Electromagnetic Radiation

- 3.6.1 Radiant intensity: watt per steradian (symbol: W/ sr or W.sr-1).

The watt per steradian is the radiant intensity of a point source emitting a uniform radiant flux of 1 watt in a solid angle of 1 steradian.

$$(1\text{W/sr} = \frac{1\text{W}}{1\text{sr}})$$

- 3.6.2 Luminance: candela per square metre (symbol: cd/m^2 or $\text{cd}\cdot\text{m}^{-2}$).

The candela per square metre is the luminous luminance perpendicular to the plane surface of 1 square metre of a source of which the luminous intensity perpendicular to that surface is 1 candela.

$$(1 \text{ cd} = \frac{1 \text{ cd}}{1 \text{ m}^2})$$

- 3.6.3 Luminous flux : lumen (symbol: lm).

The lumen is the luminous flux emitted in the unit solid angle (steradian) by a uniform point source having a luminous intensity of 1 candela.

$$(1 \text{ lm} = 1 \text{ cd}\cdot\text{sr}).$$

- 3.6.4 Illuminance: lux (symbol: lx).

The lux is the Illuminance of a surface receiving a luminous flux of 1 lumen, uniformly distributed over a square metre of the surface.

$$(1 \text{ lx} = \frac{1 \text{ lm}}{1 \text{ m}^2})$$

3.7 Units of Ionizing Radiations

- 3.7.1 Activity (of a radioactive source): becquerel (Symbol: Bq).

The Becquerel is the activity of a radioactive source in which one nuclear transformation or transition occurs per second.

$$(1 \text{ Bq} = \frac{1}{1 \text{ s}})$$

3.7.2 Absorbed dose: gray (symbol: Gy).

The gray is the dose absorbed in an element of matter of 1 kilogram mass to which the energy of 1 Joule is imparted by ionizing radiations whose energy fluence is constant.

$$(1 \text{ Gy} = \frac{1 \text{ J}}{1 \text{ kg}})$$

3.7.3. Exposure: Coulomb per kilogram (symbol: C/kg or C.kg)¹.

The coulomb per kilogram is the exposure of a photonic ionizing radiation, which can produce in a quantity of air of 1 kilogram mass, ions of one sign carrying a total electric charge of 1 Coulomb, the energy fluence being uniform in the quantity of air considered.

4. Decimal Multiples and Sub-multiples of SI Units

4.1 The decimal multiples and sub-multiples of SI units are formed by means of the decimal numerical factors set out in subsection 4.2 by which the SI unit concerned is multiplied.

4.2 The names of the decimal multiples and sub-multiples of the SI units are formed by means of SI prefixes designating the decimal numerical factors.

	Factors	SIPrefix	Symbol
1 000 000 000 000 000 000 000 000 000 =	10^{24}	yotta	Y
1 000 000 000 000 000 000 000 000 =	10^{21}	zetta	Z
1 000 000 000 000 000 000 000 =	10^{18}	exa	E
1 000 000 000 000 000 000 =	10^{15}	peta	P
1 000 000 000 000 000 =	10^{12}	tera	T
1 000 000 000 =	10^9	giga	G
1 000 000 =	10^6	mega	M
1000 =	10^3	kilo	k
100 =	10^2	hecto	h
10 =	10^1	deca	da
0.1 =	10^{-1}	deci	d
0.01 =	10^{-2}	centi	c
0.001 =	10^{-3}	milli	m
0.000001 =	10^{-6}	micro	u
0.000000001 =	10^{-9}	nano	n
0.000000000001 =	10^{-12}	pico	p
0.000000000000001 =	10^{-15}	femto	f
0.000000000000000001 =	10^{-18}	atto	a
0.000000000000000000001 =	10^{-21}	zepto	z
0.000000000000000000000001 =	10^{-24}	yocto	y

- 4.3 A prefix shall be considered to be combined with the name of the unit to which it is directly attached.
- 4.4 The symbol of the prefix shall be placed before the symbol of the unit without intermediate space; the whole forms the symbol of the multiple or sub-multiple of the unit. The symbol of the prefix is therefore considered to be combined with the symbol of the unit to which it is directly attached, forming with it a new unit symbol which can be raised to a positive or negative power and which can be combined with other unit symbols to form the symbols for compound units.
- 4.5 Compound prefixes, formed by the juxtaposition of several SI prefixes, are not permitted.
- 4.6 The names and symbols of the decimal multiples and sub-multiples of the unit of mass are formed by the addition of the SI prefixes to the word <gram>. (Symbol g). $1\text{ g} = 0.001\text{ kg} = 10^{-3}\text{ kg}$.

SCHEDULE II (Section 3 (2))

PART I

Authorised Units for use in trade

Part I The International System of Units and other Units**1.1 Measurement of length****1.1.1 SI units**

kilometre (km) = 1000 metres
metre (in) = as defined in *Schedule I*
centimetre (cm) = 10^{-2} metre
millimetre (mm) = 10^{-3} metre
micrometre (μm) = 10^{-6} metres

1.1.2 Other units

nautical mile = 1852 metres

1.2 Measurement of Area**1.2.1 SI units**

square metre (m^2) = as defined in the *First Schedule*.
square kilometre ($(\text{km})^2$) = 1 000 000 square metres
square millimetre ($(\text{mm})^2$) = 1/1 000 000 th of square metre

1.2.2 Other units

hectare (ha) = 10 000 square metres
acre (a) 100 square metres
square centimetre ((cm^2)) = 1/1 0000 th of a square metre

1.3 Measurement of Plane and Solid angle**1.3.1 Plane angle**

radian (rad) = as defined in *Schedule I*.
degree ($^\circ$) = $\frac{1}{180}$ radians
minute ($'$) = $\frac{1}{10800}$ radians
second ($''$) = $\frac{1}{648 000}$ radians

1.3.2 Solid angle

steradian (sr) = as defined in *Schedule I*.

1.4 Measurement of Speed**1.4.1 SI units**

metre per second (m/s) = as defined in *Schedule I*.

1.4.2 Other units

kilometre per hour = 10/36 metres per second

knot = 1.852 kilometre per hour

1.5 Measurement of Volume or Capacity**1.5.1 SI units**

cubic metre as defined in *Schedule I*.

1.5.2 Other units

Hectolitre (hl) = 100 litres

Litre (l or L) = $1/1000$ th of a cubic metre = 1 cubic decimetre

cubic centimetre ((cm)³) = $1/1000000$ th of a cubic metre

decilitre (dl) = $1/10$ th of a litre

centilitre (Cl) = $1/100$ th of a litre

millilitre (ml) = $1/1000$ th of a litre

1.6 Measurement of Mass**1.6.1 SI units**

kilogram (kg) = as defined in *Schedule I*.

gram (g) = $1/1000$ th of kilogram

milligram (mg) = $1/1000000$ th of a kilogram

microgram (μ g) = $1/1000000000$ th of a kilogram

1.6.2 Other units

tonne (t) = 1000 kilogram

metric carat = 200 milligrams

1.7 Measurement of Density (mass density)**1.7.1 SI units**

kilogram per cubic metre = as defined in *Schedule I*.

1.7.2 Other units

Tonne per cubic metre = 1000 kilograms per cubic metre

1.8 Measurement of Force**1.8.1 SI units**

Meganewton (MN) = 1,000,000 newtons

Kilonewton (kN) = 1,000 newtons

Newton (N) = as defined in *Schedule I*.

Millinewton (mN) = 1/1000th of a Newton

1.9 Measurement of pressure and stress**1.9.1 SI units**

Mega Pascal (MPa) = 1,000,000 Pascals

Kilopascal (kPa) = 1 000 Pascals

Pascal (Pa) = as defined in *Schedule I*.

1.10 Measurement of linear density of Textiles**1.10.1 Other units**

tex (tex) = The mass in grams of one kilometre of yarn.

= 1 g/1 km 10⁻⁶kg/m

millitex (mtex) = 1/1000th of a tex

decitex (dtex) = 1/10th of a tex

kilotex (ktex) = 1000 tex.

1.11 Measurement of Time and Frequency**1.11.1 Time**

Minute (mm) = 60 seconds

Hour (h) = 3600 seconds

Day (d) = 86400 seconds

Week = 7 days

Month and year of the Gregorian calendar

1.11.2 Frequency

Gigahertz (GHz) = 1,000,000,000 Hertz

Megahertz (MHz) = 1,000,000 Hertz

Kilohertz (kHz) = 1,000 Hertz

Hertz (Hz) = as defined in *Schedule I*.

1.12 Measurement of Temperature**1.12.1 SI units**

Kelvin (K) = as defined in *Schedule I*.

1.12.2 Other units

Degree Celsius ($^{\circ}\text{C}$) = one Kelvin (K)

The Celsius temperature scale is defined by the following equation:

$$t = T - T_0 \text{ where}$$

t = temperature in degrees Celsius,

T = temperature in Kelvin

$$T_0 = 273.15\text{K}$$

1.13 Measurement of Energy and Power**1.13.1 Energy, Work and Quantity of Heat**

Joule (J) = as defined in *Schedule I*.

Kilo Joule (k^{J}) = 1000 joules

Mega Joule (MJ) = 1000 000 joules and all other multiples and sub-multiples as defined in paragraph 4 of *Schedule 1*

Watt hour (Wh) = 3.6×10^3 Joules

Kilowatt hour (kWh) 1000 watt-hour

Electron volt (eV) = the energy acquired by an electron in passing through a potential difference of 1 volt in vacuum.

1.13.2 Power, Energy flow rate and Heat flow rate

Milliwatt (mW) = 1/1000 of a watt

Watt (W) = as defined in *Schedule I*. Kilowatt

(kW) = 1000 watts

Megawatt (MW) = 1000 000 watts and all other multiples and sub-multiples as defined in paragraph 4, of *Schedule I*.

1.14 Specific Energy**1.14.1 SI units**

Kilojoules per kilogram (kJ/kg) = 1000 Joules per kilogram

Joule per kilogram (J/kg) = 1 Joule per kilogram.

1.14.2 Other units

Joule per gram (J/g) = 1/1,000 th Joules per kilogram

1.15 Electric current**1.15.1 SI units**

Ampere (A) = as defined in *Schedule I*.

Milliampere (mA) = 1/1 000 th of ampere

Microampere ($\hat{\text{A}}$) = 1/1000000th of ampere

1.16 Electromotive force and potential difference**1.16.1 SI units**

Kilovolt (kV) = 1 000 volts

Volt (V) = as defined in *Schedule I*.

Millivolt (mV) = 1/1 000 th of a volt

Microvolt ($\hat{\text{V}}$) = 1/1 000 000th of a volt

1.17 Electric capacitance**1.17.1 SI Units**

Henry (H) = as defined in *Schedule I*.

Millihenry (mH) = 1/1 000 th of a Henry

Microhenry ($\hat{\text{H}}$) = 1/1000 000th of a Henry

1.18 Electric resistance**1.18.1 SI units**

Megaohm ($\hat{\text{M}}\hat{\text{U}}$) = 1,000,000 ohms

kiloohm ($\hat{\text{k}}\hat{\text{U}}$) = 1000 ohms

Ohm ($\hat{\text{U}}$) = as defined in *Schedule I*.

Milliohm ($\hat{\text{m}}\hat{\text{U}}$) = 1/1 000th of an Ohm

Microohm ($\hat{\text{U}}$) = 1/1,000,000 th of an Ohm

1.19 Quantity of Electricity**1.19.1 S1 units**

Coulomb (C) = as defined in *Schedule I*.

Millicoulomb (mC) = 1/1000 th of Coulomb

microcoulomb ($\hat{\text{C}}$) = 1/1000000th of Coulomb

1.19.2 Other units

amperehour (Ah) = 3600 Coulombs

1.20 Luminous intensity1.20.1 **SI units**Candela (Cd) = as defined in *Schedule I*.**1.21 Illumination**1.21.1 **SI units**lux (lx) = as defined in *Schedule I*.**1.22 Luminous flux**1.22.1 **SI units**lumen (lm) = as defined in *Schedule I*.**1.23 Activity**1.23.1 **SI units**Becquerel (Bq) = as defined in *Schedule I*.
millibecquerel (mBq) = $1/1,000^{\text{th}}$ of Becquerel**1.24 Absorbed dose**1.24.1 **SI units**gray (Gy) = as defined in *Schedule I*
milligray (mGy) $1/1,000$ of gray**1.25 Exposure**1.25.1 **SI units**Coulomb per kilogram (C/kg) = as defined in
Schedule I.**PART II****The British Imperial System of Units**1. **Measurement of length**

yard (yd)	=	0.9144 metre
mile	=	1760 yards
furlong	=	220 yards
chain	=	22 yards

	foot (ft)	=	1/3 rd of a yard
	inch (in)	=	1/36 th of a yard
2.	Measurement of area		
	Square mile	=	640 acres
	Acre	=	4840 square yards
	Rood	=	1210 square yards
	Square pole or perch	=	121/4 square yards
	Square yard	=	The superficial area equal to that of a square each side of which measures 1 yard.
	Square foot	=	1/9 th of a square yard
	Square inch	=	1/144 th of a square foot
3.	Measurement of volume or capacity		
3.1	Volume in general		
	Cubic yard	=	A volume equal to that of a cube each edge of which measures 1 yard
	Cubic foot	=	1/27 th of a cubic yard
	Cubic inch	=	1/1728 th of a cubic foot
3.2	Liquid measures		
	Gallon (gal)	=	0.004 546 092 cubic metre
	Quart (qt)	=	1/4 gallon
	Pint (pt)	=	1/2 quart
	Gill	=	1/4 pint
	Fluid ounce (fl oz)	=	1/20 pint
	fluid drachms	=	1/8 fluid ounce
	Minim	=	1/60 fluid drachms
	Bushel	=	8 gallons

1Peck	=	2 gallons
Chaldron	=	288 gallons

3.3 **Measurement of mass or weight**

Ton	=	2240 pounds
Hundredweight (cwt)	=	112 pounds
Quarter	=	28 pounds
Stone	=	14 pounds
Pound (lb)	=	0.45359237kilogram
Ounce (oz)	=	1/16 pound
Dram	=	1/16 ounce
Grain (gr)	=	1/7000 pound
Ounce troy	=	480 grains

SCHEDULE III (Section 16(1))

Weights and Measures lawful for use in trade

PART I

The International System of Units and other metric units

1.1 Linear measures

Measures of -

100 metres
 50 metres
 30 metres
 20 metres
 10 metres
 5 metres
 3 metres
 2 metres
 1 metre
 1 centimetre
 1 millimetre
 1 micrometre

1.2 Square Measures

Measures of, or any multiple of, 1 square decimetre.

1.3 Cubic measures

Measures of, or any multiple of, the cubic decimetre = 0.001 m³

1.4 Capacity measures

Measures of-

10 litres or any multiple of 10 litres

5 litres

2.5 litres

2 litres

1 litre

500 millilitres

250 millilitres

200 millilitres

100 millilitres

50 millilitres

25 millilitres

20 millilitres

10 millilitres

5 millilitres

2 millilitres

1 millilitre

1.5 Weights**1.5.1 Weights of -**

50 kilograms

20 kilograms

10 kilograms

5 kilograms

2 kilograms

1 kilogram

500 grams

200 grams

100 grams

50 grams

20 grams

10 grams

5 grams

2 grams

1 gram

500 milligrams

200 milligrams

100 milligrams

50 milligrams

20 milligrams

10 milligrams

5 milligrams

2 milligrams

1 milligram

1.5.2 Weights of-

500 carats (metric)
 200 carats (metric)
 100 carats (metric)
 50 carats (metric)
 20 carats (metric)
 10 carats (metric)
 5 carats (metric)
 2 carats (metric)
 1 carat (metric)
 0.5 carat (metric)
 0.25 carat (metric)
 0.2 carat (metric)
 0.1 carat (metric)
 0.05 carat (metric)
 0.02 carat (metric)
 0.01 carat (metric)

PART II**The British Imperial System****2.1 Linear measures**

Measures of-

100 feet	10 feet
66 feet	8 feet
50 feet	6 feet
33 feet	5 feet
20 feet	4 feet
1 yard	1/10 th of an inch
2 feet	1/16 th of an inch
1 foot	1/32 th of an inch
6 inches	1/64 th of an inch
1 inch	1/100 th of an inch
	1/128 th of an inch
	1/256 th of an inch
	1/1000 th of an inch

2.2 Square measures

Measures of, or any multiple of, 1 square foot

2.3 Cubic measures

Measures of, or any multiple of 1/4 th cubic yard.

2.4 Capacity measures

Measures of-

1 gallon or any multiple of 1 gallon

1/2 gallon;

1 quart

1 pint

1/2 pint

8 fluid ounces

6 fluid ounces

4 fluid ounces

1 fluid ounce or sub-multiples of 1 fluid ounce

4 fluid drachms

2 fluid drachms

1 fluid drachm

60minims

30minims

10minims

1 bushel

1/2 bushel

1 peck

2.5 Weights**2.5.1** Weights of-

56 pounds 7 pounds

50 pounds 5 pounds

28 pounds 4 pounds

20 pounds 2 pounds

14 pounds 1 pound

10 pounds 8 ounces

4 ounces

2 ounces 100 grains

1 ounce 50 grains

8 drains 30 grains

4 drams	20 grains
	10 grains
2 drams	5 grains
	3 gains
1 dram	2 grains, 1 grain
1/2 dram	1 grain
	0.5 grain
	0.3 grain
	0.2 grain
	0.1 grain
	0.05 grain
	0.03 grain
	0.02 grain
	0.01 grain

2.5.2 **Weights of-**

500 ounces troy	
400 ounces troy	5 ounces troy
300 ounces troy	4 ounces troy
200 ounces troy	3 ounces troy
100 ounces troy	2 ounces troy
50 ounces tray	1 ounce troy
40 ounces tray	
30 ounces troy	
20 ounces troy	
10 ounces troy	

Passed in the House of Assembly this 2nd day of March, 2009.

DEIRDRE D. JULES (MRS.)

(Acting) Clerk of the House of Assembly.

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