

THE WEIGHTS AND MEASURES ACT (31st May, 1976)

ARRANGEMENT OF SECTIONS
Acts 14 of 1976 | 10 of 1993 | 2 of 1996

Part I. *Preliminary*

1. Short title.
2. Interpretation.

Part II. *Units and Standards of Measurement*

3. Units of measurement.
4. Jamaican reference standards.
5. Working standards and testing and stamping equipment.
- 5A. Power of Minister to provide for metric conversion.

Part III. *Weighing and Measuring Equipment for use for Trade*

6. Weighing and measuring equipment used for trade.
7. Testing of weighing or measuring equipment on request.
8. Approval of patterns of weighing or measuring equipment.
9. General testing of weighing and measuring equipment.
10. Units of measurement lawful for use for trade.
11. Sale of goods by weight or measurement.
12. Sale of pre-packed goods by weight or measurement.
13. Seller to weigh or measure goods in buyer's presence if requested.
14. Short weight, etc.
15. Deceptive packaging.

Part IV. *Inspectors of Weights and Measures*

16. Appointment of inspectors.
17. Powers of entry and inspection.
18. Directions to secure compliance.
19. Inspectors may act as arbitrators, etc.
20. Inspectors may make tests and reports on request.
21. Inspectors to account for and pay over fees received.

Part V. *Miscellaneous*

22. Regulations.
23. Offences.
24. Evidence of possession of equipment for use for trade.
25. Offences by corporations or associations.
26. Defence of mistake, accident, etc.
27. Offences due to default of third person.
28. Evidence of facts in certain documents.

First Schedule - Definitions of Units of Measurement (Section 3)

Second Schedule - Measures and Weights Lawful for use for Trade (Section 4)

PART I. *Preliminary*

1. Short title.

1. This Act may be cited as the Weights and Measures Act.

2. Interpretation.

2. In this Act, unless the context otherwise requires

"Bureau" means the Bureau of Standards established by the Standards Act;

"container" includes any form of packaging of goods for sale as single item, whether by way of wholly or partly enclosing the goods or by way of attaching the goods to, or winding the goods round, some other article, and in particular includes a wrapper or confining band;

"inspector" means a person appointed as an inspector of weights and measures under this Act;

"mark" includes label;

"occupier", in relation to any stall, vehicle, vessel or aircraft or in relation to the use of any place for any purpose, means the person for the time being in charge of the stall, vehicle, vessel or aircraft or, as the case may be, the person for the time being using that place for that purpose;

"premises" includes any place and any stall, vehicle, vessel or aircraft;

"pre-packed" means made up in advance ready for retail sale in or on a container; and on any premises where articles of any description are so made up, or are kept or stored for sale after being so made up, any articles of that description found made up in or on a container shall be deemed to be pre-packed unless the contrary is proved; and it shall not be sufficient proof of the contrary to show that the container has not been marked in accordance with the requirements of this Act or of any regulations made thereunder;

"stamp" means a mark for use as evidence of the passing of weighing or measuring equipment as fit for use for trade, whether applied by impressing, casting, engraving, etching, branding, transfer or by any other means;

"trade" includes any transaction for the transferring or rendering of money or money's worth in consideration of money or money's worth;

"weighing or measuring equipment" means equipment for measuring in terms of length, area, volume, capacity, weight or number, whether or not the equipment is constructed to give an indication of the measurement made or other information determined by reference to that measurement.

PART II. *Units and Standards of Measurement*

3. Units of measurement.

3. (1) Subject to Section 5A, the yard or the metre shall be the unit of measurement of length and the pound or the kilogram shall be the unit of measurement of mass by reference to which any measurement involving a measurement of length or mass shall be made in Jamaica; and

(a) the yard shall be 0.9144 metre exactly;

(b) the pound shall be 0.453 592 37 kilogram exactly.

(2) The First Schedule shall have effect for defining for the purposes of measurements falling to be made in Jamaica the units of measurement set out in that Schedule; and for the purposes of any measurement of weight falling to be so made, the weight of anything may be expressed, by reference to the units of measurement set out in Part V of that Schedule, in the same terms as its mass.

(3) The Minister may from time to time by order amend the First Schedule by adding to or removing from it any unit of measurement.

4. Jamaican reference standards.

4. (1) The Minister shall cause to be maintained, in accordance with the provisions of this section, standards which shall be known collectively as the Jamaican reference standards.

(2) The Jamaican reference standards shall consist of such of the measures and weights set out in the Second Schedule as the Minister considers to be proper and sufficient; and a reference standard of any linear or capacity measure may, as the Minister thinks fit

(a) be provided either as a separate standard or by means of divisions marked on a standard of larger measure; and

(b) either be marked in whole or in part with subdivisions representing any smaller unit of measurement or multiples or fractions of such a unit or have no such marking.

(3) The Jamaican reference standards shall be deposited at such places and shall be placed in the custody of such persons as the Minister shall direct.

(4) Before being brought into use each Jamaican reference standard shall have its value determined in such manner as the Minister shall direct.

(5) The value of each Jamaican reference standard shall, at intervals not exceeding ten years, be redetermined in such manner as the Minister shall direct.

(6) Where it is proposed to send any Jamaican reference standard out of Jamaica temporarily, the Minister shall cause to be provided, as a temporary reference standard, an appropriate measure or weight of the denomination of that Jamaican reference standard and shall by order declare that measure or weight to be a temporary Jamaican reference standard.

(7) The Minister may from time to time by order amend the Second Schedule by adding to it or removing from it any measure or weight.

5. Working standards and testing and stamping equipment.

5. (1) The Bureau shall provide for use by inspectors, and shall maintain or from time to time replace, such standards (in this Act referred to as working standards) of such of the measures and weights set out in the Second Schedule, such testing equipment, and such stamping equipment, as the Bureau may from time to time approve or require as being proper and sufficient for the efficient discharge by inspectors of their functions under this Act.

(2) Working standards and testing and stamping equipment provided under this section shall be of material and form approved by the Bureau and except so far as may be necessary for the purpose of their use elsewhere, shall be kept under such control as the Bureau may from time to time direct or approve; and a working standard of a linear, cubic or capacity measure may

(a) be provided either as a separate standard or by means of divisions marked on a standard of a larger measure; and

(b) either be marked in whole or in part with subdivisions representing any smaller unit of measurement or multiples or fractions of such a unit or have no such markings.

(3) Working standards shall from time to time be tested by comparison with Jamaican reference standards or other working standards more recently tested and shall, if necessary, be adjusted to within such limits of error as may be prescribed.

(4) Testing equipment provided under subsection (1) shall be tested and adjusted in accordance with such provisions as may be prescribed.

5A. Power of Minister to provide for metric conversion.

5A. The Minister may by order published in the *Gazette* -

(a) notwithstanding anything to the contrary, amend any reference to measurement in imperial units in any enactment to the corresponding measurement in metric units;

(b) declare, in respect of any industry operating in Jamaica and specified in the Order, the date on or before which the units of measurement used in that industry shall be converted to metric units.

PART III. Weighing and Measuring Equipment for use for Trade

6. Weighing and measuring equipment used for trade.

6. For the purposes of this Act, any weighing or measuring equipment used in

(a) determining the weight, measurement or number of goods supplied, or acquired by way of trade on the basis of weight measurement or number; or

(b) computing the payment for work or services rendered or for any tool or duty charged on the basis of weight, measurement or number; or

(c) determining weight or measurement upon payment of money; or

(d) grading agricultural produce by reference to weight or measure, for the purpose of trade, shall be deemed to be in use for trade.

7. Testing of weighing or measuring equipment on request.

7. (1) Any person wishing to have any weighing or measuring equipment passed as fit for use for trade shall submit the equipment to an inspector in such manner as the Bureau may direct and, subject to the provisions of this Act and of any regulations made thereunder and after payment by that person of such fee, if any, as may be prescribed the inspector shall

(a) test the equipment by means of such standards and testing equipment as he considers appropriate or, subject to any conditions which may be prescribed, by means of other equipment which has already been tested and which the inspector considers suitable for the purpose; and

(b) if the equipment submitted falls within the prescribed limits of error and satisfies the requirements of this Act and of any regulations made thereunder, give to the person submitting it a statement in writing to the effect that it is passed as aforesaid; and

(c) keep a record of the test.

(2) Any person who forges, alters or defaces a statement in writing referred to in paragraph (b) of subsection (1) shall be guilty of an offence.

8. Approval of patterns of weighing or measuring equipment.

8. (1) Any person wishing to ascertain whether any pattern of weighing or measuring equipment is suitable for use for trade may, in such manner as may be prescribed, submit that pattern to the Bureau for examination.

(2) Where any pattern of weighing or measuring equipment is submitted to the Bureau pursuant to subsection (1) the Bureau shall, on payment of such fee, if any, as may be prescribed, examine the suitability for use for trade of equipment of that pattern, having regard in particular to the principle, materials and methods used or to be used in its construction, and if the Bureau is satisfied that equipment of that pattern is suitable for use for trade, it shall issue a certificate of approval of that pattern and cause notice of the approval to be published in the *Gazette*.

(3) The Bureau may from time to time authorize such minor modifications as it thinks fit of any pattern of weighing or measuring equipment in respect of which a certificate of approval has been granted under this section, and shall cause notice of any modifications authorized by it to be published in the *Gazette*.

(4) A certificate of approval may contain a condition that equipment of the pattern in respect of which that certificate is granted shall be used for trade in only such place, or for only such period, or for only such purpose, as is specified in the certificate.

(5) The Bureau may at any time revoke any certificate of approval granted under this section and shall cause notice of the revocation of any certificate of approval to be published in the *Gazette*.

(6) Any equipment of a pattern in respect of which a certificate of approval has been granted under this section may, and in such cases as may be prescribed shall, be marked in the prescribed manner so as to identify it with the pattern to which the certificate relates.

9. General testing of weighing and measuring equipment.

9. (1) The Bureau may from time to time by notice published in a daily newspaper printed and circulating in Jamaica, and published also in such other manner as the Bureau thinks fit, appoint a day (which shall not be earlier than the fourteenth day after the last publication of the notice) on which an inspector will visit any district, village or town specified in the notice to inspect and test weighing and measuring equipment used for trade in that district, village or town.

(2) On the day appointed under subsection (1) an inspector

(a) shall visit the district, village or town specified in the notice referred to in that subsection, taking with him such working standards, testing and stamping equipment as he thinks necessary; and

(b) may enter any premises in which he reasonably believes any weighing or measuring equipment is kept to be sold or used for trade; and

(c) may request any person in the premises to produce for inspection and testing any weighing or measuring equipment in the custody of that person for sale or for use for trade; and

(d) may exercise any other power, and shall perform any other duty, conferred or imposed by section 17 on an inspector.

(3) Any person to whom a request is made pursuant to paragraph (c) of subsection (2) shall submit to the inspector, for inspection and testing, all weighing and measuring equipment in his custody.

(4) Where any weighing or measuring equipment is submitted to an inspector for testing, the inspector shall

(a) test the equipment by means of such working standards and testing equipment as he considers appropriate or, subject to any conditions which may be prescribed, by means of other equipment which has already been tested and which the inspector considers suitable for the purpose; and

(b) if the equipment submitted falls within the prescribed limits of error, give to the person submitting it a statement in writing to the effect that it is passed as fit to be used for trade; and

(c) except as otherwise expressly provided by or under this Act, cause the equipment to be stamped with the prescribed stamp; and

(d) keep a record of the test.

(5) No weight or measure shall be

(a) stamped as mentioned in paragraph (c) of subsection (4) unless it has been marked in the prescribed manner with its purported value;

(b) stamped or marked if it is too small to be stamped or marked.

(6) Any person who without reasonable cause fails to comply with any requirement properly made of him by an inspector under this section shall be guilty of an offence.

10. Units of measurement lawful for use for trade.

10. (1) No person shall use for trade any unit of measurement which is not included in the First Schedule.

(2) No person shall use the carat (metric) for trade except for the purposes of transactions in precious stones first or pearls, and no person shall use the ounce troy for trade except for the purposes of transactions in, or in articles made from, gold, silver or other precious metals, including transactions in gold or silver thread, lace or fringe.

(3) Any person who contravenes any of the provisions of this section shall, subject to subsection (4), be guilty of an offence, and any measure or weight used, or in any person's possession for use, in contravention of any of those provisions shall be liable to be forfeited.

(4) This section shall not apply to any transaction in connection with the export of goods to a country where a system of units of measurement other than those authorized by this Act is used for trade.

11. Sale of goods by weight or measurement.

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

(2) Any person who sells any goods by weight or measurement expressed in metric units shall inform the purchaser, in such manner as may be prescribed, of the correct equivalent of the weight or measurement in imperial units.

(3) Any person contravening this section shall be guilty of an offence.

12. Sale of pre-packed goods by weight or measurement.

12. (1) Subject to such exemptions as may be prescribed, no person shall sell any pre-packed goods by weight or measurement unless the net weight or the capacity measurement of those goods is marked on the container in the prescribed manner by reference to an imperial unit of measurement included in the First Schedule.

(2) Subject to the provisions of this Act, no person shall supply by way of trade any goods in a container marked with any unit of weight or measurement differing in name or size from the appropriate units specified in the First Schedule unless its correct equivalent in units of weight or measurement so specified are also marked on that container

(a) not less conspicuously than the unit of weight or measurement first mentioned;
or

(b) in the prescribed manner.

(3) Any person contravening subsection (1) or subsection (2) shall be guilty of an offence.

13. Seller to weigh or measure goods in buyer's presence if requested.

13. (1) Any person selling by weight or measurement any goods, other than pre-packed goods which satisfy the requirements of section 12, shall weigh or measure the goods in the presence of the buyer if requested by the buyer to do so.

(2) Any person who contravenes subsection shall be guilty of an offence.

14. Short weight, etc.

14. 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 than corresponds with the price charged shall be guilty of an offence.

15. Deceptive packaging.

15. Any person who supplies by way of trade goods in or on a container which is so made, formed or filled as to be misleading as to the nature or quantity of the contents shall be guilty of an offence.

PART IV. *Inspectors of Weights and Measures*

16. Appointment of inspectors.

16. (1) Subject to the provisions of the Standards Act, the Bureau may appoint, from among persons having such qualifications as may be prescribed, such number and categories of inspectors of weights and measures as the Bureau considers necessary for the efficient discharge of the functions conferred or imposed on inspectors by or under this Act.

(2) Every inspector shall be furnished with a certificate of appointment in the prescribed form.

17. Powers of entry and inspection.

17. (1) An inspector may at any reasonable time enter any premises in which he reasonably believes any goods are bought or sold or any weighing or measuring equipment is kept to be used for trade and may, in those premises

- (a) inspect and test any weighing or measuring equipment therein;
 - (b) examine and test any goods therein and where necessary break open any container of those goods;
 - (c) require the production of all books, accounts or documents relating to goods therein and inspect and copy any of those books, accounts or documents;
 - (d) take such samples of any goods therein as may be reasonably required by him for the proper performance of his duties;
 - (e) make such other examination and enquiry as may be necessary to ascertain whether the provisions of this Act or any regulations made thereunder have been or are being complied with;
 - (f) require any person in possession or control of any goods therein to render such explanations and give such information relating to those goods as may be reasonably required;
 - (g) seize, remove and detain any weighing or measuring equipment, goods, book, account, document, or other thing which he has reasonable cause to believe will afford evidence of an offence against this Act or any regulations made thereunder;
 - (h) make, on behalf of the Bureau, such purchases of goods as may appear expedient for the purpose of determining whether or not the provisions of this Act or any regulations made thereunder are being complied with.
- (2) An inspector exercising or attempting to exercise his power under this section shall, if the person in charge of the premises requests him to do so, produce to that person his certificate of appointment.
- (3) An inspector entering any premises pursuant to this section may take with him such other person and such equipment as may appear to him necessary.
- (4) Before removing any article under the provisions of paragraph (g) of subsection (1) the inspector removing it shall, at the request of the person in whose possession or control the article is at the time of removal, furnish that person with a written receipt therefor.
- (5) Any person who
- (a) obstructs or hinders an inspector exercising his powers under this section; or
 - (b) fails to comply with any requirement properly made of him by an inspector under this section; or
 - (c) gives to that inspector information which he knows or ought to know to be false or misleading, shall be guilty of an offence.

(6) Nothing in this section shall be construed as requiring a person to answer any question or give any information if to do so might incriminate him.

18. Directions to secure compliance.

18. (1) An inspector may give to any person who has, for use for trade

(a) any weighing or measuring equipment; or

(b) any package or label or any other article of whatever kind, which does not comply with the provisions of this Act or of any regulations made thereunder, directions in writing requiring him to take such steps as shall be specified in those directions to secure compliance with those provisions.

(2) Any person aggrieved by any directions given pursuant to subsection (1) may appeal in writing to the Bureau within seven days after the date on which those directions were given, and the Bureau may confirm, revoke or amend those directions.

(3) Subject to the provisions of subsection (2) any person who fails to comply with directions given pursuant to subsection (1) shall be guilty of an offence.

(4) Nothing in this section shall be construed to affect any proceedings which may be taken for failure to comply, as respects anything referred to in paragraph (a) or (b) of subsection (1), with the provisions of this Act or any regulations made thereunder.

19. Inspectors may act as arbitrators, etc.

19. (1) In any civil proceedings relating to the supply of goods and services, the court may, subject to any rules of court, and with the agreement of the Bureau, require an inspector to act as arbitrator, assessor, or referee, or to carry out any inspection, survey, measurement or weighing, or to take any samples, or to make any observation. plan or model, or to try any experiment.

(2) In any dispute relating to the supply of goods and services, the parties to such dispute may request the Bureau to nominate an inspector to act as arbitrator or umpire within the meaning of the Arbitration Act, and for this purpose the Bureau may nominate such inspector as it thinks fit.

20. Inspectors may make tests and reports on request.

20. An inspector may, at the request of any person and subject to the payment by that person of such fee, if any, as may be prescribed, carry out and submit to that person a report on

(a) a weighing or other measurement of any goods submitted for the purpose by that person at such place as the Bureau may direct or approve; or

(b) a test of the accuracy of any weighing or measuring equipment so submitted.

21. Inspectors to account for and pay over fees received.

21. Every inspector shall, at such times as the Bureau may direct, account for and pay over to the Bureau all fees taken by him under this Act.

PART V. *Miscellaneous*

22. Regulations.

22. (1) The Minister may make regulations

(a) with respect to

(i) the materials and principles of construction of weighing or measuring equipment for use for trade;

(ii) the purposes for which particular types weighing or measuring equipment may used for trade;

(iii) the manner of erection, siting or use weighing or measuring equipment used trade;

(iv) the circumstances in which, conditions under which and manner in which stamps may be obliterated or defaced;

(v) the abbreviations of or symbols for units of measurement which may be used for trade;

(b) with respect to the inspection, testing and passing of any weighing or measuring equipment used for the purpose of, or in connection with, the computation of tolls, rates, taxes, charges or payments of any kind;

(c) with respect to the inspection, testing, passing as fit for use for trade and stamping or authentication of weighing or measuring equipment, including

(i) the prohibition of the stamping or authentication of such equipment in such circumstances as may be specified in the regulations;

(ii) the circumstances in which an inspector may remove or detain any weighing or measuring equipment for inspection or testing;

(iii) the marking of any weighing or measuring equipment found unfit for use for trade;

(d) restricting or controlling the importation, manufacture, repairing or sale of any weighing or measuring equipment designed to be used for trade and providing for the issuing of licences for such importation, manufacture, repairing or sale;

(e) to prohibit the use for trade of any pattern of weighing or measuring equipment specified in the regulations unless a certificate of approval is granted in respect of that pattern;

(f) requiring that weighing or measuring equipment of any type described in the regulations shall be tested and passed by an inspector before that equipment is sold or is used for trade;

(g) prescribing what unit of measurement may be treated, for use for trade, as the equivalent of or of any multiple or fraction of, any unit of measurement included in the First Schedule;

(h) to prohibit the sale of any goods specified in the regulations except

(i) by weight or measurement or number expressed in such manner as may be so specified; or

(ii) in such quantities as may be so specified;

(hh) [*Deleted by Act 2 of 1996*]

(i) prescribing any matter or anything which may be, or is required by this Act to be, prescribed.

(2) Regulations made under this Act may contain

(a) different provisions for different types of weighing or measuring equipment and for different classes or descriptions of goods;

(b) exemptions from any of the provisions of those regulations.

(3) Regulations made under this Act may provide in respect of the breach of any of the provisions thereof that the offender shall be liable to a fine not exceeding two thousand dollars and in default of payment to imprisonment for a term not exceeding twelve months, or to both such fine and imprisonment.

(4) A draft of all regulations proposed to be made under this section shall be published in the *Gazette* so as to permit representations to be made to the Bureau by any person concerning any provision of the draft regulations to which that person objects.

(5) The Bureau shall consider any objection, made in writing within thirty days after the publication of the draft regulations, concerning any provision of the draft regulations and shall submit to the Minister such recommendations in relation to that objection as it considers proper.

(6) The Minister shall, in making the regulations, consider any recommendations submitted to him in accordance with subsection (5).

23. Offences.

23. (1) Any person who uses for trade, or has in his possession for use for trade, any weighing or measuring equipment which is false or unjust shall be guilty of an offence and the equipment shall be liable to be forfeited.

(2) If any fraud is committed in the using of any weighing or measuring equipment for trade, the person committing the fraud and any person who is party thereto shall be guilty of an offence and the equipment shall be liable to be forfeited.

(3) Any person who uses for trade, or has in his possession for use for trade

(a) any weight or any linear, square, cubic or capacity measure which is not included in the Second Schedule; or

(b) any weighing or measuring instrument constructed to indicate in terms of some weight or measure which is not included in the First Schedule,

shall be guilty of an offence and the weight, measure or measuring instrument, as the case may be, shall be liable to be forfeited.

(4) Any person who supplies to any other person for use for trade any weighing or measuring equipment

(a) which is false or unjust; or

(b) which does not comply with any requirement of this Act or of any regulations made thereunder, shall be guilty of an offence.

(5) Any person guilty of an offence under this Act shall be liable on summary conviction before a Resident Magistrate to a fine not exceeding two thousand dollars and in default of payment to imprisonment for a term not exceeding twelve months and, in the case of a continuing offence, to a further fine not exceeding one hundred dollars for every day on which the offence continues after conviction.

24. Evidence of possession of equipment for use for trade.

24. Where any weighing or measuring equipment is found in the possession of any person carrying on trade or on any premises which are used for trade, that person or, as the case may be, the occupier of those premises shall be deemed for the purposes of this Act, or of any regulations made thereunder, unless the contrary is proved, to have that equipment in his possession for use for trade.

25. Offences by corporations or associations.

25. Where an offence under this Act or under any regulations made thereunder which has been committed by a corporate body or by any association of persons (whether incorporated or not) is proved to have been committed with the consent or connivance of, or to be attributable to any neglect on the part of, any director, manager, secretary or other similar officer of that body or association or any person who was purporting to act in any such capacity, he as well as that body or association shall be liable to be prosecuted and punished accordingly.

26. Defence of mistake, accident, etc.

26. In any proceedings for an offence under this Act or under any regulations made thereunder, it shall be a defence for the person charged to prove

(a) that the commission of the offence was due to a mistake, or to an accident or some other cause beyond his control; and

(b) that he took all reasonable precautions and exercised all due diligence to avoid the commission of such an offence by himself or any person under his control.

27. Offences due to default of third person.

27. (1) A person against whom proceedings are brought for an offence under this Act or under any regulations made thereunder shall, upon information duly laid by him and upon giving to the Clerk of the Courts not less than three clear days' notice of his intention to avail himself of the provisions of this subsection, be entitled to have brought before the court in those proceedings any other person to whose act or default he alleges that the commission of the offence was due; and if, after the offence has been proved the original defendant proves that the commission thereof was due to an act or default of that other person

(a) that other person may be convicted of the offence; and

(b) if the original defendant further proves that he exercised all due diligence to avoid the commission of the offence by him or any person under his control, the original defendant shall be acquitted of the offence.

(2) Where a defendant seeks to avail himself of the provisions of subsection (1)

(a) the prosecutor, as well as the person whom the defendant charges with the offence, shall have the right to cross-examine the defendant, if he gives evidence, and any witness called by him in support of his pleas, and to call rebutting evidence;

(b) the court may make such order as it thinks fit for the payment of costs by any party to the proceedings to any party thereto.

28. Evidence of facts in certain documents.

28. A document purporting to be signed by an inspector and certifying

(a) that any weighing or measuring equipment specified therein was inspected and tested by him on a date specified therein, and the result of the inspection and test; or

(b) that any goods specified therein were weighed, measured or counted by him on a date specified therein and were found to be of a weight, measurement or number specified therein, shall, upon production thereof in evidence in any proceedings, be evidence of the facts certified therein and in the absence of evidence in rebuttal thereof shall be conclusive evidence of those facts.

FIRST SCHEDULE (Section 3)

Definitions of Units of Measurement

PART I

Base Units

Quantity Unit and Symbol Definition of Unit

amount of substance mole (mol) The amount of substance of a system which contains as many elementary entities as there are atoms in 0.012 kilogram of carbon. Note: When the mole is used the elementary entities must be specified and may be atoms, molecules, ions, electrons, other particles or specified groups of such particles.

electric current ampere (A) That constant current which, if maintained in two straight parallel conductors of infinite length of negligible circular cross-section and placed one metre apart in vacuum, would produce between them a force equal to 2×10^{-7} newton per metre of length.

length metre (m) The length of the path travelled by light in vacuum during a time interval of $1/299\,792\,458$ of a second.

luminous intensity candela (cd) The luminous intensity in a given direction of a source that emits non-chromatic radiation of a frequency, 540×10^{12} hertz and that has a radiant intensity in that direction of $1/683$ watt per steradian.

mass kilogram (kg) The unit of mass, which is equal to the mass of the international prototype of the kilogram.

thermodynamic temperature kelvin (K) The fraction, $1/273.16$ of the thermo-dynamic temperature of the triple point of water.

time second (s) The duration of $9\,192\,631\,770$ periods of the radiation corresponding to the transition between the two hyperfine levels of the ground state of the cesium 133 atom.

PART II

Derived Units

Physical Quantity Unit and Symbol Derivation Definition of Unit

absorbed dose gray (Gy) J/kg The energy imparted by ionizing radiation to a mass of matter corresponding to one joule per kilogram.

activity (of radionuclides) becquerel (Bq) S The activity of a radionuclide having one spontaneous nuclear transition per second.

electric capacitance farad (F) C/V -A.s/V The electric capacitance that exists between two conductors when the transfer of an electric charge of one coulomb from one to the other changes the potential difference between them by one volt.

electric charge, quantity of electricity coulomb (C) A.s The quantity of electric charge that is transferred each second by an electric current of one ampere.

electric conductance siemens (S) s^{-1} The electric conductance of a conductor that has an electrical resistance of one ohm.

electric potential difference volt (V) W/A -J/C The potential difference that exists between two points on a conductor carrying an unvarying electric current of an ampere when the power dissipated between those points is equal to one watt.

electric resistance ohm (Ω)V/A The electric capacitance that exists between two points on a conductor which does not contain any source of electromotive force when a constant potential difference of one volt maintained between those points results in a current of one ampere in the conductor.

force newton (N) $kg.m/s^2$ The force which when applied to a body having a mass of one kilogram causes an acceleration of one metre per second in the direction of application of the force.

frequency hertz (Hz) s^{-1} The frequency of a periodic phenomenon of which the period is one second.

illuminance, illumination lux (lx) lm/m^2 The illumination of one lumen per square metre.

inductance henry (H) $V.s/A$ The electric inductance of a closed circuit in which an electromotive force of one volt is produced when the electric current that traverses the circuit varies uniformly at the rate of one ampere per second.

luminous flux lumen (lm) $cd.sr$ The luminous flux emitted into unit solid angle by an isotropic point source having a luminous intensity of one candela.

magnetic flux weber (Wb) $V.s$ The flux which linking a circuit of one turn produces in it an electromotive force of one volt as it is reduced to zero at a uniform rate in one second.

magnetic flux density magnetic induction telsa (T) Wb/m^2 The density of one weber of magnetic flux per square metre.

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

power, radiant flux watt (W) J/s The power used when work is done or energy is expended at the rate of one joule per second.

pressure stress pascal (Pa) N/m^2 The pressure or stress which arises when a force of one newton is applied uniformly over an area of one square metre.

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

work, energy, quantity of heat joule (J) N.m The work done or the energy expended when a force of one quantity newton moves the point of application a distance of one metre in the direction of that force.

PART III

Special or Permitted Units

Physical Quantity	Unit and Symbol	Derivation	Equivalent of Unit
area	are a	1 are=100m ²	
	hectare ha	1 hectare=10 000m ²	
marine and aerial	nautical mile	nautical mile	1 nautical mile=1852m
mass	tonne t	1t = 1000kg	
navigation	knot	knot	1 knot =1 nautical mile per hour
plane angular measure	degree ^o	1 ^o = <u> </u> ? 180 radian	
	minute'	1' - <u> </u> 60	
	second''	1 ^o - <u> </u> '60	
pressure	bar	bar	1 bar = 100 000 Pa
	standard atmosphereatm	1 atm = 101 325 Pa	
temperature	degree Celsius	°C	1°C = 1 K (temperature intervals)
time	minute	min	1 min = 60s
	hour h	1h = 60m	
	day d	1d = 24h	
	week wk	1wk = 7d	
	calendar year yr.	1yr = 365d or 366d (leap year)	
volume capacity	litre L	L	1L = 1dm ³

Note: Special or permitted units are internationally agreed units which are deviations from the strict International System of Units. They are permitted either because of their practical importance or because of their use in specialized scientific fields.

PART IV

Units used with the International System of Units in Specialized Scientific Fields

Name of Unit Unit Symbol Definition

angstrom A° 1 A° = 10⁻¹⁰m

astronomical unit AU 1 AU = 149 600 x 10⁶m

barn b 1 b = 10⁻²⁸m²

curie Ci 1 Ci = 3.7 x 10¹⁰s⁻¹

electronic eV 1 eV = 1.602 19 x 10⁻¹⁹J

gal Gal 1 Gal = 10⁻² metre per (second)²

metric carat CM 1 CM = 2 x 10⁻⁴ kg

parsec pc 1 pc = 3 086 x 10¹³m

rontgen R 1 R = 2.58 x 10⁻⁴ C kg⁻¹

unified atomic mass u 1 u = 1.660 44 x 10⁻²⁷ kg

PART V

Customary Units of measurement deemed to be derived from the International System of Weights and Measures

Unit Abbreviation or Symbol Base SI Unit from which derived Value

AREA

square mile ___ metre 2.5899 sq. kilometres

acre ___ metre 4046.86 sq. metres

square rod metre 24.687 sq. metres

square yard metre 0.8361 sq. metres

square foot metre 0.0929 sq. metres

square inch metre 645.16 sq. millimetres

CAPACITY MEASUREMENT

barrel bbl metre 0.15987294 cubic metre

gallon gal metre 0.00454609 cubic metre

minim (1/76,800 gal))
metre)

fluid drachm) The value of the respective units is proportionate to the
value of the gallon)
(1/1,280 gal) metre)

)
pint (1/8 gal) pt metre)

quart (1/4 gal) qt metre)

LENGTH

yard yd metre) 0.9144 metre

mile (1,760 yds) m metre)

chain (22 yds) ch metre) The value of the respective units is
proportionate to the value of the yard

foot (1/3 yd) ft metre)

rod, pole or perch (5 1/2 yds) metre))

inch (1/36 yd) in metre)

MASS

A VOIRDUPOIS SERIES

pound lb. kilogram (kg) 0.45351237 kg

grain (1/7000 lb.) gr. kilogram)

ounce (1/16 lb.) oz kilogram)

stone (14 lbs) st. kilogram) The value of the respective units is proportionate
to the value of the pound

quarter (28 lbs) qr. kilogram)

hundred weight (112 lbs) cwt kilogram)

ton (2,240 lbs) kilogram)

TROY SERIES

ounce troy(12/175 lb.) oz tr. kilogram

VOLUME

cubic yard cu yd metre 0.764554857 cubic metre

cubic foot(1/27 cu yd) cu ft metre)) The value of the respective units is proportionate to the value of the cubic yard.

cubic inch(1/46,656 cu yd) cu in metre))

PART VI

Prefixes for multiples and sub-multiples of base supplementary and derived units of measurement

Prefix Symbol Definition

yotta	y	10 ²⁴
zetta	Z	10 ²¹
exe	E	10 ¹⁸
peta	P	10 ¹⁵
tera	T	10 ¹²
giga	G	10 ⁹
mega	M	10 ⁶
kilo	k	10 ³
hecto	h	10 ²
deca	da	10 ¹
deci	d	10 ⁻¹
centi	c	10 ⁻²
milli	m	10 ⁻³
micro	u	10 ⁻⁶
nano	n	10 ⁻⁹
pico	P	10 ⁻¹²
femto	f	10 ⁻¹⁵
atto	a	10 ⁻¹⁸
zepto	z	10 ⁻²¹
yocto	y	10 ⁻²⁴

Note: The International System of Units (SI) prefixes are not applicable to the base unit kilogram but are applicable to the one thousandth part thereof, that is to say, the gram, and may be used in conjunction with some of the units specified in Part IV."

PART VII

Measurement of Time

Hour 60 minutes

Minute 60 seconds

SECOND shall have the meaning from time to time assigned by order of the Minister, being the meaning appearing to the Minister to reproduce in English the international definition of the second in force at the date of the making of the order

SECOND SCHEDULE (Section 4)

Reference Standards of Measures and Weights

PART I

Linear Measures

Imperial System

Measures of

100 feet 10 feet 1 yard

66 feet 8 feet 2 feet

50 feet 6 feet 1 foot

33 feet 5 feet 6 inches

20 feet 4 feet 1 inch

Metric System

Measures of

50 metres 2 metres

30 metres 1.5 metres

20 metres 1 metres

10 metres 0.5 metre

5 metres 1 decimetre

3 metres 1 centimetre

PART II

Square Measures

Imperial System

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

Metric System

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

PART III

Cubic Measures

Imperial System

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

Metric System

Measures of, or of any multiple of, 0.1 cubic metre.

PART IV

Capacity Measures

Imperial System

Measures of

any multiple of 1 gallon 1 gill

1 gallon 4 fluid ounces

1/2 gallon 1/2 gill

1 quart 2 fluid ounces

1 pint 1/4 gill

1/2 pint 1 fluid ounce

8 fluid ounces

6 fluid ounces

Metric System

Measures of

any multiple of 10 litres 100 millilitres

10 litres 50 millilitres

5 litres 25 millilitres

2 1/2 litres 20 millilitres

2 litres 10 millilitres

1 litre 5 millilitres

500 millilitres 2 millilitres

250 millilitres 1 millilitre

200 millilitres

PART V

Mass or Weights

IMPERIAL SYSTEM

Weight of: -

1 ounce	10 grains 0.02 grain 0.01 grain	0.03 grain
---------	---------------------------------------	------------

20 ounces	20 grains	0.05 grain
-----------	-----------	------------

4 ounces	30 grains	0.1 grain
----------	-----------	-----------

8 ounces	50 grains	0.2 grains
----------	-----------	------------

1 pound	100 grains	0.3 grain
---------	------------	-----------

2 pounds	0.5 dram	0.5 grain
----------	----------	-----------

5 pounds	1 dram	1 grain
----------	--------	---------

10 pounds	2 dram	2 grains
-----------	--------	----------

20 pounds	4 dram	3 grains
-----------	--------	----------

50 pounds	8 dram	5 grains
-----------	--------	----------

Troy Weights of: -

500 ounces	0.5 ounce
400 ounces	0.4 ounce
300 ounces	0.3 ounce
200 ounces	0.2 ounce
100 ounces	0.1 ounce
50 ounces	0.05 ounce
40 ounces	0.04 ounce
30 ounces	0.03 ounce
20 ounces	0.02 ounce
10 ounces	0.01 ounce
5 ounces	0.005 ounce
4 ounces	0.004 ounce
3 ounces	0.003 ounce
2 ounces	0.002 ounce
1 ounce	0.001 ounce."

Metric System

Weights of

20 kilograms	50 milligrams
10 kilograms	20 milligrams
5 kilograms	10 milligrams
2 kilograms	5 milligrams
1 kilogram	2 milligrams
500 grams	1 milligram
200 grams	500 carats (metric)
100 grams	200 carats (metric)
50 grams	100 carats (metric)
20 grams	50 carats (metric)
15 grams	20 carats (metric)
10 grams	10 carats (metric)
5 grams	5 carats (metric)
4 grams	2 carats (metric)

3 grams	1 carat (metric)
2 grams	0.5 carat (metric)
1 gram	0.25 carat (metric)
500 milligrams	0.2 carat (metric)
400 milligrams	0.1 carat (metric)
300 milligrams	0.05 carat (metric)
200 milligrams	0.02 carat (metric)
150 milligrams	0.01 carat (metric)
100 milligrams	