

DE-7/2021/77

Question Booklet
Alpha Code

A

Question Booklet
Serial Number

--

Name:		Reg.No.		Signature:	
-------	--	---------	--	------------	--

DEPARTMENTAL TESTS — JULY, 2021

Total Number of Questions : 100

[Time : 1½ hours

(Maximum Marks : 100)

INSTRUCTIONS TO CANDIDATES

1. The question paper will be given in the form of a Question Booklet. There will be four versions of question booklets with question booklet alpha code viz. A, B, C & D.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the question booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a question booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your question booklet is un-numbered, please get it replaced by new question booklet with same alpha code.
6. The Question Booklet will be sealed at the middle of the right margin. Candidate should not open the question booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the question booklet supplied contains all the 100 questions in serial order. The question booklet does not have unprinted or torn or missing pages and if so the fact should be brought to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the question booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black – Ball Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative marks for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over the Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.
14. **If any candidates make a marking of answer in the question paper and exchange with other candidate during the course of the examination, the answer script will be invalidated and the candidates will be debarred for a minimum period of 2 years from appearing the Departmental Tests.**

DE-7/2021/77

Maximum : 100 marks

Time : 1½ hours

1. “Dealer”, in relation to any weight or measure is defined under Section _____ of Legal Metrology Act, 2009?
(A) 2.b (B) 3.c
(C) 2.d (D) 3.d
2. The International Organization of Legal Metrology, is an intergovernmental organization, created in 1955 and based in _____ country?
(A) Germany (B) Italy
(C) England (D) France
3. “Pre-packaged commodity” is defined under :
(A) Rule 2.k of the Legal Metrology (Packaged Commodities) Rules, 2011
(B) Section 2.l of the Legal Metrology Act, 2009.
(C) Rule 2.c of the Legal Metrology (Packaged Commodities) Rules, 2011
(D) Section 2.r of the Legal Metrology Act, 2009.
4. Which of the following is not correct as per Legal Metrology Act, 2009?
(A) Base unit of mass shall be the kilogram.
(B) Base unit of amount of substance shall be the mole.
(C) Base unit of time shall be the second;
(D) Base unit of thermodynamic temperature shall be the Fahrenheit.
5. Any weight or measure which conforms to the standard unit of such weight or measure and also conforms to such of the provisions of _____ of the Legal Metrology Act, 2009 as are applicable to it shall be the standard weight or measure.
(A) Section 7 (B) Section 6
(C) Section 5 (D) Section 4
6. The provisions of the Legal Metrology Act, 2009, related to verification and stamping of weight and measures shall not apply to any weight or measure :
(A) Used in any factory exclusively engaged in the manufacture of any arms, ammunition or both for the use of the Armed forces of the Union.
(B) Used for scientific investigation or for research.
(C) Manufactured exclusively for export.
(D) All of the above

7. The provisions of the Indian Penal Code (45 of 1860) and Section 153 of the Code of Criminal Procedure, 1973 in so far as such provisions relate to offences with regard to weight or measure, shall not apply to any offences which is punishable under the Legal Metrology Act, 2009, is provide under which section of the Legal Metrology Act, 2009?
 (A) Section 50 (B) Section 52
 (C) Section 53 (D) Section 51
8. _____ is the international body which regulates metrological standards, on which India is a member?
 (A) NABL (B) OIML
 (C) ISO (D) None of the above
9. Manufacture, repair or sale of any weight or Measure without valid license issued by the Controller of Legal Metrology is prohibited under _____ of Legal Metrology Act, 2009 ?
 (A) Sec 23 (B) Sec 24
 (C) Sec 25 (D) Sec 26
10. Verification and stamping of weights and Measures is a statutory requirement as per _____ of Legal Metrology Act, 2009?
 (A) Sec 23 (B) Sec 24
 (C) Sec 25 (D) Sec 26
11. _____ of Legal Metrology Packaged Commodities Rules, 2011 insists that every packer or Importer of packaged commodities should register themselves with Legal Metrology Department ?
 (A) Rule 24 (B) Rule 25
 (C) Rule 26 (D) Rule 27
12. The declaration of net quantity of which of the following commodities may be qualified by the words "When packed" as per Legal Metrology (Packaged Commodities) Rules, 2011?
 (A) Rice (B) Butter
 (C) Camphor (D) All of the above
13. What is the maximum permissible error in deficiency on net quantity of a 5 kg rice packet as per First schedule of Legal Metrology (Packaged Commodities) Rules, 2011?
 (A) 4.5 g (B) 9 g
 (C) 1.5% (D) 3%
14. What is the maximum permissible error on net quantity declared by number, of a packed commodity?
 (A) 1% (B) 2%
 (C) 3% (D) 4%
15. Which of the following weights shall be used for the trade of precious metals?
 (A) Bullion weights (B) Brass weights
 (C) Iron Weights (D) Steel weights

16. Which of the following biscuit package is not a standard package as per Second schedule of Legal Metrology (Packaged Commodities) Rules, 2011?
 (A) 500 g (B) 250 g
 (C) 550 g (D) 600 g
17. Base unit of mass as per Legal Metrology (National Standards) Rule 2011 is?
 (A) Pound (B) Kilogram
 (C) Mole (D) Ton
18. Additional fee to be paid for in-situ verification of storage tank of 100001 is?
 (A) 50% of fee (B) 100% of fee
 (C) Nil (D) None of the above
19. Provisions of chapter 11 of Legal Metrology (Packaged Commodities) Rules, 2011 intended for retail sale shall not apply to packages of commodities containing quantity of more than :
 (A) 25 kg (B) 20 kg
 (C) 22 kg (D) 50 kg
20. No person shall import any Weight or Measure unless he is registered with :
 (A) Director of Legal Metrology (B) Controller of Legal Metrology
 (C) Deputy Controller of Legal Metrology (D) State Government
21. Legal Metrology (Packaged Commodities) Rules, 2011 shall not apply to :
 (A) any package containing a commodity if the net weight or measure of the commodity is 10 g or 10 ml or less.
 (B) any package containing fast food items packed by restaurants.
 (C) any package containing scheduled formulations and non- scheduled formulations covered under the Drug (Price Control) Order 1995.
 (D) all of the above
22. Which of the following commodities shall be packed in specified quantities as per Rule 5 and Second Schedule of Legal Metrology Packaged Commodities Rules, 2011?
 (A) Soaps (B) Salt
 (C) Milk Powder (D) all of the above
23. No person shall manufacture, repair or sale any Weight or Measure unless he holds a licence issued by the :
 (A) Director of Legal Metrology (B) Controller of Legal Metrology
 (C) Deputy Controller of Legal Metrology (D) State Government
24. Every weight used in any transaction or for protection shall conform, as regards physical characteristics, configuration, constructional details, to the corresponding specifications laid down for such weight in _____ Schedule of the Legal Metrology (General) Rule, 2011?
 (A) First (B) Second
 (C) Fifth (D) Sixth

25. What is the maximum permissible error for a 60 ml liquor measure?
 (A) 3 ml (B) 1 ml
 (C) 2 ml (D) 0.5 ml
26. After the verification of a liquor measure the Legal Metrology officer's seal shall be affixed:
 (A) Just below the indication of the denomination mark
 (B) Just above the indication of the denomination mark
 (C) Left side of the indication of the denomination mark
 (D) Right side of the indication of the denomination mark
27. What is the highest denomination prescribed for a wooden length measure?
 (A) 2 m (B) 1 m
 (C) 3 m (D) 0.5 m
28. What is the re-verification period prescribed for a storage tank?
 (A) 12 months (B) 24 months
 (C) 60 months (D) 36 months
29. What is the highest denomination prescribed for working standard weight?
 (A) 10 kg (B) 5 kg
 (C) 50 kg (D) 20 kg
30. What is the maximum permissible error for a 2 kg hexagonal iron weight during verification?
 (A) 300 mg (B) 200 mg
 (C) 100 mg (D) 50 mg
31. What is the highest denomination prescribed for conical measure?
 (A) 5 l (B) 10 l
 (C) 20 l (D) 50 l
32. What is the maximum permissible error for a 5 litre conical measure during verification?
 (A) 10 ml (B) 15 ml
 (C) 30 ml (D) 50 ml
33. If the verification scale interval of a given non automatic weighing instrument is 2g and its maximum capacity is 20 kg, what shall be its accuracy class?
 (A) Special accuracy (B) High accuracy
 (C) Medium accuracy (D) Ordinary accuracy
34. Which of the following package shall bear at the top of the display panel a green dot?
 (A) Oil packages of vegetarian origin (B) Sugar packages
 (C) Packages of vegetables (D) Soaps packages of vegetarian origin
35. For a non-automatic weighing instrument there shall be no indication above :
 (A) Maximum capacity + 5e (B) Maximum capacity + 10e
 (C) Maximum capacity + 9e (D) Maximum capacity + 7e

36. Which of the following is not a compulsory marking for a non-automatic weighing instrument in all cases?
(A) Manufacture's mark or name (B) Indication of accuracy class
(C) Maximum capacity (D) Maximum safe load
37. What is the sample size for determination of the net quantity for any commodity contained in a package for a lot of less than 4000?
(A) 42 (B) 60
(C) 32 (D) 80
38. What is the base unit of electric current?
(A) Ampere (B) Weber
(C) Second (D) Degree
39. Which of the following standard weights are used for the verification of working standard weights?
(A) Reference standard weights (B) Working standard weights
(C) Secondary standard weights (D) National standard weights
40. The unit of force shall be :
(A) Newton meter (B) Newton per second
(C) Newton (D) Joule
41. The unit of weight or measure to be based on :
(A) CGS system (B) FBS system
(C) Metric system (D) None of the above
42. Every secondary standard shall be verified against the appropriate reference standard in a period _____ years?
(A) Two (B) Three
(C) Five (D) Ten
43. What is the maximum permissible error for 500g bullion weight during verification?
(A) 25 mg (B) 50 mg
(C) 100 mg (D) 150 mg
44. What is the maximum permissible error for 5 litre conical working standard capacity measure?
(A) 3 ml (B) 4 ml
(C) 5 ml (D) 7 ml
45. The maximum nominal length of fabric or plastic tape shall not exceed _____ metres?
(A) 5 m (B) 10 m
(C) 50 m (D) 100 m

46. The maximum nominal length of steel tape shall not exceed _____ metres?
 (A) 500 m (B) 300 m
 (C) 200 m (D) 100 m
47. What is the maximum permissible error for 30 m surveying chain for verification?
 (A) ± 5 mm (B) ± 8 mm
 (C) ± 10 mm (D) ± 12 mm
48. In which institution the national prototype of the kilogram and other standards are kept?
 (A) Central lab, Ernakulam
 (B) MINT Mumbai
 (C) RRSL Bangalore
 (D) National Physical Laboratory, New Delhi
49. Which of the following statements are TRUE?
 1. The power of inspection and seizure to any Legal Metrology Officer is provided under Section 15 of Legal Metrology Act 2009.
 2. Every such search or seizure made under Legal Metrology Act 2009 shall be carried out in accordance of the provisions of the Code of Criminal procedure.
 3. Every non-standard weight or measure seized under Section 15 of the local Metrology Act 2009 shall be liable to be forfeited to the State Government.
 (A) 1 and 3
 (B) 2 and 3
 (C) all statements
 (D) None of the statements
50. Which of the following symbol is wrong?
 (A) m – metre (B) s – second
 (C) Wb – weber (D) a – Ampere
51. Every numeration shall be made in accordance with which of the following system?
 (A) Hexa-decimal system (B) Decimal system
 (C) Binary system (D) Tera decimal system
52. While writing in accordance with Indian terminology, which of the following is in the correct form?
 (A) 23 14 345.732 2350 (B) 23 14 345.732 23 50
 (C) 23 14,345.732,23 50 (D) 23 14 345.7322350
53. What type of metal shall be used to make working standard capacity measures?
 (A) Nickel (B) Steel
 (C) Iron (D) Copper

54. Which of the following statement is not true for an electronic non-automatic weighing instrument?
- (A) Discrimination is the ability of an instrument to react to small variation of load.
 - (B) Warm-up time is the time between the moment powers is applied to the moment at which the instrument is capable of complying with requirements.
 - (C) Durability is the ability of an instrument to maintain its performance characteristics over a period of time.
 - (D) None of the above
55. Before whom an application for registration of pre-packing or importing packaged commodity shall be applied?
- (A) Deputy Director of legal metrology
 - (B) Controller of legal metrology
 - (C) State government
 - (D) None one of the above
56. What is actual scale interval (d) for a weighing instrument?
- (A) It is the difference between the values corresponding to two consecutive scale mark
 - (B) It is the verification scale interval
 - (C) It is the value used for the classification and verification of an instrument
 - (D) All of the above
57. Determine the accuracy class of a non- automatic weighing instrument having maximum capacity of 30 kg, minimum capacity of 50 g and $e = 1g$?
- (A) Special accuracy
 - (B) High accuracy
 - (C) Medium accuracy
 - (D) Ordinary accuracy
58. All retailer covered under VAT / TOT and dealing packaged commodity whose net content is by weight shall maintain an electronic weighing instrument of the following type?
- (A) at least accuracy class II with smallest division of atleast 1m g
 - (B) at least accuracy class III with smallest division of atleast 2 g
 - (C) at least accuracy class III with smallest division of atleast 5 g
 - (D) at least accuracy class III with smallest division of atleast 1 g
59. All manufacturer, packer, distributor of Liquefied Petroleum Gas cylinders shall maintain a check weigher or non-automatic weighing instrument of the following type?
- (A) Accuracy class III (Max.500kg, $e=50g$)
 - (B) Accuracy class III (Max.50kg, $e=10g$)
 - (C) Accuracy class III (Max.100kg, $e=20g$)
 - (D) Accuracy class III (Max.300kg, $e=50g$)
60. Which of the following Legal Metrology licence holder shall furnish a security deposit to the Government?
- (A) Manufacture
 - (B) Repair
 - (C) Dealer
 - (D) All of the above
61. Who shall provide lead and twisted wire at the time of presenting weight and measure for re-verification?
- (A) Manufacturer
 - (B) Repairer
 - (C) Dealer
 - (D) User

62. Which of the following Legal Metrology Act and Rule insist that a Legal Metrology Office may visit, as frequently as possible, every premise within the local limit of his jurisdiction to inspect and test any weight or measure intended to be used for any transaction or protection?
- (A) Rule 14 of Kerala Legal Metrology (Enforcement Rule) 2012
 (B) Rule 24 of Kerala Legal Metrology (Enforcement Rule) 2012
 (C) Section 23 of Legal Metrology Act 2009
 (D) Section 27 of Legal Metrology Act 2009
63. Within how many days a weight or measure which is rejected on verification shall be re-submitted to verify with fifty percent of the fee?
- (A) 10 (B) 7
 (C) 5 (D) 3
64. What fee shall be accompanied with an application for appeal to Controller of Legal Metrology?
- (A) Rs. 500 (B) Rs. 200
 (C) Rs. 100 (D) Nil
65. Which of the following packaged commodity may be qualified by the words 'WHEN PACKED'?
- (A) Edible oils (B) Liquid chemicals
 (C) Paste paints (D) Camphor
66. Packages of curd may be sold by:
- (A) Weight (B) Weight or volume
 (C) Volume (D) Number
67. LPG cylinders may be sold by:
- (A) Weight (B) Weight or volume
 (C) Volume (D) Number
68. Which of the following packages commodities shall bear the declaration with regard to the number of usable sheets?
- (A) Aluminium foil (B) Facial tissues
 (C) Waxed paper (D) All of the above
69. LPG dispensers for motor vehicles shall come under _____ accuracy class.
- (A) 0.3 (B) 0.5
 (C) 1.5 (D) 1
70. Fuel dispensers for motor vehicles other than LPG dispensers shall come under _____ accuracy classes.
- (A) 0.3 (B) 0.5
 (C) 1 (D) 1.5

71. Which of the following is the classification of water metres?
 (A) Class A and Class B
 (B) Class I, Class II, Class III
 (C) High Class, Medium Class, Low Class
 (D) Special Class, Ordinary Class, Medium class
72. Measuring system on road tankers for liquid of low viscosity shall come under _____ accuracy classes.
 (A) 0.3 (B) 0.5
 (C) 1 (D) 1.5
73. What is the maximum permissible error for a 5 litre delivery from a fuel dispenser having MMQ (Minimum Measured Quantity) of 5 litre?
 (A) 25 ml (B) 30 ml
 (C) 50 ml (D) 15 ml
74. What is the Absolute error of measurement?
 (A) The extreme values permitted by the specification
 (B) The result of a measurement minus the (conventional) true value of the measurand
 (C) The result of a measurement divided by the true value of the measurand
 (D) None of the above
75. What is the intrinsic error of measurement?
 (A) The extreme values of error permitted by the specification
 (B) The result of a measurement minus the (conventional) true value of the measurand
 (C) The error of a measuring system used under reference conditions.
 (D) None of the above
76. The ratio between the maximum flow rate and the minimum flow rate for fuel dispensers shall be at least _____ on site.
 (A) 5 (B) 3
 (C) 2 (D) 6
77. Volumetric container type liquid measuring device is generally used for measuring the quantity of:
 (A) milk at milk purchasing centre
 (B) kerosene at kerosene distribution centre
 (C) furnace oil
 (D) fuel dispensing outlets
78. Solid stem type clinical thermometer shall have a temperature range of _____ degree Celsius.
 (A) 35 to 43 (B) 30 to 45
 (C) 27 to 47 (D) 32 to 42

79. What is Cuff of a sphygmomanometer?
- (A) It is the component of a sphygmomanometer, comprising a bladder and a sleeve, which wrapped around the limb of the patient
 - (B) It refers to the analogue scale unit of the sphygmomanometer
 - (C) It refers to the mercury tube of the sphygmomanometer
 - (D) It is the metal vessel of the sphygmomanometer
80. The blood pressure in a sphygmomanometer shall be indicated in:
- (A) mmHg or kPa
 - (B) Newton
 - (C) N-m
 - (D) Pa
81. Constant 'k' of the taximeter is expressed in:
- (A) revolution
 - (B) rev/km or imp/km
 - (C) kilometre
 - (D) rev/s
82. During drive by distance the maximum dispersion of the indications of a taximeter for distance succeeding the initial distance shall not exceed _____ percent of the true value.
- (A) 1.5
 - (B) 2
 - (C) 2.5
 - (D) 3
83. Which of the following statement is true?
- (A) In the CNG measuring system for vehicles the fuel flows in liquid state
 - (B) Maximum permissible relative error on mass indication on-site for a CNG measuring system is 2% of the measured quantity
 - (C) In the LPG measuring system for vehicles the fuel flows in gaseous state
 - (D) Maximum permissible relative error on mass indication on-site for a CNG measuring system is 1% of the measured quantity
84. What is proof level of a vehicle tank for petroleum products?
- (A) It is the total height of the tank
 - (B) It is the total length of the dip stick
 - (C) It is the reference level to which all depth measurement shall be related
 - (D) It is the maximum level of oil that could be filled in the tank
85. Maximum permissible error for vehicle tank compartment shall be _____ % in excess of the marked capacity of the compartment.
- (A) 0.2
 - (B) 0.1
 - (C) 0.05
 - (D) 0.03
86. A 2000 litre proving measure using for the calibration of vehicle tanks for petroleum products shall be adjusted with in the maximum permissible error of _____ millilitres.
- (A) 500
 - (B) 1000
 - (C) 1500
 - (D) 2000
87. The registration of a person as an importer of weights and measures shall remain effective for a period of _____ years.
- (A) 2
 - (B) 3
 - (C) 5
 - (D) 10

88. Every person intending to manufacture any non-standard weight or measure for the purpose of export shall make an application for permission to the:
- (A) Controller of Legal Metrology (B) Director of Legal Metrology
(C) State Government (D) Central Government
89. A person who needed any non-standard weight or measure for scientific investigation or research shall make an application for permission to get such nonstandard weight or measure manufactured by such manufacturer as he may think fit, shall make an application for permission to the:
- (A) Controller of Legal Metrology (B) Director of Legal Metrology
(C) State Government (D) Central Government
90. The goods seized by a legal metrology officer are contained in a package and the package is false and the goods are subjected to speedy decay, then which of the following statement are true for the disposal of the seized goods?
- (A) The legal metrology officer may dispose of the goods in such packages in accordance with the provisions of Rule 22 (1) of Legal metrology (General) Rules 2011
(B) The legal metrology officer may measure the quantity of the goods with a verified instrument available with him, and enter the measure in a form specified for the purpose, and shall obtain the signature of the trader, and thereafter the goods shall returned to the trader
(C) The legal metrology officer may obtain the signature of not less than two persons, if the trader refuses to sign the above form
(D) All of the above
91. No unverified weight or measure, seized under section 15 of Legal Metrology Act, shall be forfeited if the person, from whom the weight or measure was seized agrees to get the same verified and stamped with in a period of _____ days.
- (A) 10 (B) 7
(C) 15 (D) 30
92. What is the period for re-verification of a tank lorry?
- (A) 24 months (B) 12 months
(C) 60 months (D) 36 months
93. Nomination of director by a company, to be in charge of, and responsible to the company for the conduct of the business of the company, shall be permitted under which section of the legal metrology Act 2009.
- (A) Section 40 (B) Section 43
(C) Section 49 (D) Section 50

94. An appeal shall preferred within _____ days for every decision under sections 15 to 20, 22, 25, 27 to 39, 41 or any rule made under section 52(3) by the legal metrology officer to the director.
- (A) 60 (B) 30
(C) 45 (D) 90
95. Which of the following statements are true?
- (A) Every weight or measure shall be used in a clean condition and in proper lighting
(B) To ensure proper delivery of petrol / diesel through fuel dispenser, the retail dealer of the pump shall keep a verified 5 litre / 10 litre capacity measure in his premises and check the delivery every day
(C) Where a sale bill / invoice is issued in a transaction involving the use of weight or measure, the correct weighment or measurement shall be entered in such bill / invoice
(D) All of the above
96. To ensure a proper check of the accuracy of a weighing instrument of one tone and above the user shall keep at the site of each weighing instrument duly verified and stamped weight equal to _____ of the capacity of the instrument subjected to a maximum of one tonne.
- (A) two-third (B) one-tenth
(C) one-fourth (D) one-fifth
97. Every person applying for a licence to repair should have passed at least:
- (A) Tenth standard or equivalent
(B) Diploma in engineering
(C) Metric trade in ITI/VHSC or equivalent
(D) Eighth standard
98. A fee at the full rate as specified in schedule IV of Kerala Legal Metrology (En-forcement) Rule 2012 shall be additionally payable by the applicant if he is permitted by the Controller to make an application for the renewal of a license with in a period of _____ months from the date of expiry of the license.
- (A) two (B) one
(C) three (D) four
99. What fee shall be paid for the issue of a duplicate licence?
- (A) Rs. 150 (B) Rs. 250
(C) Rs. 100 (D) Rs. 500
100. Whoever contravenes any provision of Kerala Legal Metrology (Enforcement) Rule 2012, for the contravention of which no punishment has been separately provided in the Act, shall be punished with fine, which may extend to Rs.?
- (A) 5000 (B) 1000
(C) 2000 (D) 2500

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK