

333

METRIC MEASURES

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NO-2



51
X: 50, 102, 115, 118 MM.
116, 117, 118
119, 120, 121

metric measures

STATE OF WISCONSIN

DEPARTMENT OF REVENUE



CONVERSION TABLE FOR PRICES (Yard To Metre)

(Conversion Factor used: 1 m = 1.09361 yard)

nP/Yard nP/m	nP/Yard nP/m	nP/Yard nP/m	nP/Yard nP/m	nP/Yard nP/m	nP/Yard nP/m
1	23	41	45	61	81
2	24	42	46	62	82
3	25	43	47	63	83
4	26	44	48	64	84
5	27	45	49	65	85
6	28	46	50	66	86
7	29	47	51	67	87
8	30	48	52	68	88
9	31	49	53	69	89
10	32	50	54	70	90
11	33	51	55	71	91
12	34	52	56	72	92
13	35	53	57	73	93
14	36	54	58	74	94
15	37	55	59	75	95
16	38	56	60	76	96
17	39	57	61	77	97
18	40	58	62	78	98
19	41	59	63	79	99
20	42	60	64	80	100
21	43				
22	44				

NAYE PAISE
PER YARD
TO
NAYE PAISE
PER
METRE

RUPEES
PER YARD
TO
RUPEES
PER
METER

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metric measures

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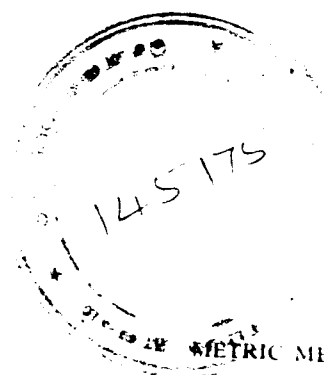
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metric measures

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Metric System in Post-offices

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THE over in post-offices, with effect from 1 February 1961, to the metric system of weights and measures for the important step in the programme of replacement of non-metric units by metric units for various types of work in the country. As a result of the changes now in progress, postage on postal articles which before 1 January 1961, was being charged in terms of weight units in tolas or pounds or ounces, will now be levied in terms of weight units in the metric system. Besides, various specifications relating to postal articles, such as maximum and minimum permissible weights and dimensions have been refixed in terms of metric units. The opportunity has also been taken to streamline the various provisions laid down in this behalf.

Supply and Distribution of Weights

From the beginning, the aim of the Posts and Telegraphs Department was to introduce the change in such a way as to cause the least inconvenience both to the public and to the postal staff. It was realized at the outset that the first essential prerequisite was that all post offices in the country should be equipped with an adequate number of weights in metric units before the change-over was brought about. The magnitude of ensuring this can be gauged when it is

realized that there are more than seven thousand post offices in the country and 80 percent of them are small branch offices in rural and remote areas. The Department took up the question of the manufacture and supply of metric weights three years ago and after ascertaining the requirements of a post office, indents were placed for such weights through the Director General of Supplies and Disposals as early as October 1958. The indents then placed were for about 1 lakh pieces of weights. It naturally took time for the manufacturers to meet the demand for such a large quantity of weights, particularly as, at the same time the metric system of weights and measures was in the process of being introduced in various other spheres and in a number of localities and areas in the country for all commercial transactions. The suppliers also had to surmount difficulties relating to raw materials for manufacturing the weights and transport bottle-necks and in some cases suspension of booking by goods train, after the weights had been manufactured. As a result, extension of time had to be granted to them for completing supplies. That, in spite of these difficulties, supplies against the initial indents could be complete by August 1960 should in the circumstance be regarded as quite satisfactory.

After the weights had been received in the postal stock depots, there was the problem of their further distribution to post offices. In many instances, the work of distribution had to be decentralized by entrusting the task of making supplies to the post offices in their jurisdiction to the various Superintendents of Post Offices. In order to ensure that the work of distribution was proceeding satisfactorily, it was arranged that a fortnightly report should be sent to the Director General to enable him to decide when it would be possible to prescribe the date for the change-over.

Revising Postage Rates

Along with the arrangements for the manufacture and distribution of metric weights, the question of revising the postage rates and the specifications relating to weights and dimensions of postal articles was also taken up. It was apparent from the outset that the postage rates could not be revised in terms of metric weight units by merely replacing the existing weight units in tolas or pounds etc. by their equivalents in grams. It was also considered essential that the use of conversion tables in connection with the day-to-day work of the Department should be avoided as far as possible. The main problem in connection with the refixation of postage rates in terms of metric weight units was, therefore, to devise a rate structure which differed as little as possible from the existing one but which at the same time did not lead to those practical difficulties which cannot be avoided if fractions running into two or three decimal places were included in the rates. Besides, in the case of foreign postal articles, the question had to be considered with due regard to the provisions of the Universal Postal Convention which lays down certain maxima and minima in regard to postage rates, sizes, etc.

Inland Surface Articles

Before the change-over, the postage on inland surface articles (except postcards and letter cards) was being levied in terms of weight units expressed in tolas. (In the case of post-cards and letter cards, postage is not related to weight). The exact equivalent of a tola in terms of metric units is 11.664 grams. In view of the need for fixing the weight unit in grams in convenient figures, such as multiples of 5 or 10, it was decided to change the entire rate structure. Thus in the revised rate structure a weight unit of 1 tola was replaced by a units of 10 grams, 1½ tolas by 15 grams, 2½ tolas by 25 grams and so on.

On the above basis it was decided to refix the postage rates on inland postal articles as below:—

Sl. No.	Category	Rate from 1-2-61
1. (a) Postcard, Ordinary	Single	5 nP.
	Reply paid	10 nP.
(b) Postcard, Local	Single	3 nP.
	Reply paid	6 nP.
2. Letters	Upto 15 grams	15 nP.
	For every additional 15 grams.	10 nP.
3. Letter card		10 nP.
4. Book, Sample and Pattern Packets other than those containing printed books.	Up to 50 grams	8 nP.
	For every additional 25 grams.	3 nP.
5. Book packets containing printed books.	Up to 50 grams	5 nP.
	For every additional 25 grams	3 nP.
6. Registered Newspapers when posted singly.	Upto 100 grams	2 nP.
	100—200 grams	3 nP.
	For every additional 200 grams.	3 nP.
7. Registered Newspapers when posted in packets containing more than one copy.	Up to 100 grams	3 nP.
	For every additional 50 grams.	2 nP.
8. Periodicals registered as Newspapers with the Press Registrar of India.	Up to 100 grams	8 nP.
	For every additional 50 grams	3 nP.
9. Parcels	For every 400 grams.	50 nP.

METRIC SYSTEM IN POST-OFFICES

Before the above rates could be brought into effect, it was necessary to amend the First Schedule to the Indian Post Office Act, 1898, as according to Section 7 of that Act, postage in excess of the rates specified in that Schedule could not be levied on inland postal articles. A Bill (No. 69 of 1960) for this purpose was introduced in the Lok Sabha in September 1960 and was passed into Law by Parliament during the last winter session as Act No. 52 of 1960. According to that enactment, it was left to the Government to decide the date on which the revised rates would come into force. After considering other aspects of the matter such as the necessity for the Indian Post Office Rules, 1933, being suitably amended and for introducing the revised postage rates relating to both inland and foreign postal articles from the same date, it was decided to fix the date of effect as 1 February 1961 (See S.O. 47, dated 2nd January 1961 as amended by S.O. No. 237, dated 19th January, 1961). The revised postage rates were published in a Gazette of India Extraordinary as G.S.R. No. 106 dated 18th January 1961 as part of the Indian Post Office (Amendment) Rules, 1961.

Inland Air Mail Articles

In the case of surcharges on inland postal articles for conveyance by air, the same principle of having units of weights in multiples of 5 or 10 grams has been generally adopted. The air surcharge for book packets and registered newspapers has been revised as 4 nP for each 10 grams or part thereof. The surcharges for limited air conveyance of registered newspapers over certain routes have also been similarly revised.

In the case of parcels for conveyance by air, the opportunity has been taken to revise the basis of levying the air conveyance charges. Before the change-over, a combined postage-cum-air fee was being charged for air parcels

at the rate of 63 nP for each 20 tolas or part thereof. From 1 February 1961 a surcharge is being levied in addition to ordinary surface postage on parcels, the unit of weight for levying the surcharge being 200 grams. The surcharge has been fixed as 35 nP for each weight unit. This amount is approximately equal to the cost incurred in conveying the parcels by air. There are also certain routes over which limited air conveyance for parcels may be availed of by the public. The surcharges for such limited conveyance have been re-fixed on the basis of a uniform weight slab of 400 grams over each route. The result of these modifications in the principles relating to the levy of charges on inland air parcels has been to remove certain anomalies which existed before 1 February 1961, when in a few instances, the total postage (including air surcharge) payable on parcels of certain weight categories was more when carried by air over a limited distance than the postage payable if the parcels were carried by air throughout their journey.

Foreign Surface Correspondence

Before the change-over, the weight unit for charging surface postage on correspondence for foreign countries was 1 oz. in the case of letters and 2 oz. in the case of printed matter (including business papers and samples). These weight units in terms of metric measures have been re-fixed as 20 grams and 50 grams respectively. In this matter the Department really had no other choice because the Universal Postal Convention lays down these units of weight for levying postage on correspondence though, for countries where the British unit are in use, that Convention permits 20 gram being replaced by 1 oz. and 50 grams by 2 oz.

It was also decided that, along with the refixation of the weight units in this manner the postage on foreign correspondence should be fixed at the minimum levels permitted by

the Convention. As a result, it has been possible to reduce by 3 nP the postage on the initial weight unit of letters. The rates of postage in force from 1 February 1961 on the main categories of correspondence are indicated below :

From 1 February 1961			
Letters	First 20 grams		30 nP.
	Each additional 20 grams or part.		20 nP.
Post Cards	Single		20 nP.
	Reply paid		40 nP.
Printed Matter	First 50 grams		12 nP.
	Each additional 50 grams or part.		6 nP.
Minimum Charge	Samples		30 nP.
	Commercial papers		30 nP.

The above rates are strictly in accordance with the provisions of the Universal Postal Convention and are the minimum leviable under that Convention.

Surcharges on Foreign Air Mail Correspondence

In re-fixing the surcharges on foreign air-mail correspondence, the unit for levying the charge was fixed as 10 grams, in place of $\frac{1}{4}$ oz. The corresponding surcharges were calculated *de novo* by keeping in view the stipulation in the Universal Postal Convention that the surcharges should be more or less equal to the actual costs incurred in providing the air conveyance. Thus the charges arrived at in this manner are generally lower per weight unit than the charges per unit in force before 1 February 1961, as the following statement will show :

Destination	Charge per Weight Unit	From 1-2-1961
		Letters nP. Packets nP.
(1) Pakistan & Ceylon		10 5
(2) Afghanistan & Burma		10 5
(3) Various Countries in Asia		30 10
(4) Various Countries in Europe and Africa.		60 15
(5) Various Countries in Oceania		75 20
(6) Various Countries in N and S. America.		100 25

The combined postage-cum-air fee levied on postcards and aerograms has not been changed.

The effect of the above revision of air surcharges, together with the reduction on the postage on letters is that an ordinary member of the public, whose letters to correspondents abroad do not normally weigh more than 10 grams, need now pay only 90 nP for an air-mail letter to the U.K. instead of Rs. 1.03 and Rs. 1.30 for airmail letter to the U.S.A. or Canada instead of Rs. 1.63 as in the past.

Foreign Parcels

The charges on foreign surface parcels have not been changed but the weight categorization for levying postage has been revised to accord with metric weight units. As a matter of fact, in the international post, the postage on surface parcels is generally levied in terms of the weight categories shown below :

- Parcels weighing not over 1 kg;
- Parcels weighing over 1 kg but not over 3 kg;
- Parcels weighing over 3 kg but not over 5 kg;
- Parcels weighing over 5 kg but not over 10 kg;

Before the switch-over to metric weights the equivalents adopted in British units for the metric weights indicated above was as follows :

- 1 kg = 2 lb; 3 kg = 7 lb;
- 5 kg = 11 lb; 10 kg = 22 lb;

From 1 February 1961, the weight categorization is as generally adopted in the international post in terms of kilograms. The corresponding postage has, however, not been changed on this account.

In the case of foreign air parcels, the opportunity has been taken to revise completely the basis on which the postage is levied. Before the switch-over, there was a minimum charge for a weight up to 1 lb. with a uniform

METRIC SYSTEM IN POST-OFFICES

increase for each 4 oz. or fraction thereof in excess of this weight. From 1 February 1961, the method adopted is to levy a minimum charge for a weight not exceeding 250 grams with a uniform increase for each 250 grams or fraction thereof in excess of 250 grams. Care has been taken to ensure that the portion of the postage which represents the charge for conveyance by air is more or less equal to the actual cost incurred in air conveyance.

Maximum and Minimum Limits of Weights and Dimensions.

The Universal Postal Convention and certain other Agreements of the Universal Postal Union already lay down the conditions in metric units in regard to the maximum and minimum dimensions of postal articles and the weight limits up to which they can be accepted for transmission by post. Prior to 1 February 1961 in regard to inland postal articles, many but not all these provisions had been made applicable in India with the only difference that the specification had been laid down in British units. It was decided to avail of the present opportunity to apply, as far as possible, all the specifications found in the International Convention and Agreements to all postal articles, both inland and foreign. With this end in view, not only were existing specifications for inland and foreign articles converted into metric units, but certain new ones were laid down, particularly for inland articles. The important changes made in this respect are as follows :

1. A maximum limit of weight of 2 kg has been fixed for a letter in the inland service. Previously there was no such limit though, in view of the high postage on letters, very few letters weighing 2 kg or above were actually being posted.
2. For postal articles when packed in the form of rolls, no limits of dimen-

sions existed in the inland service. Such limits have now been prescribed and they are :

	Maximum	Minimum
Any single dimension	80 cm	10 cm
Sum of length and twice diameter	100 cm	17 cm

3. In the case of articles (other than post-cards) whose dimensions measure less than the prescribed minima, transmission by post has been permitted subject to the condition that such an article bears a rectangular address label of cardboard or strong paper of which the two adjacent sides together measure not less than 16 cm and the smaller side is not less than 4 cm.
4. The maximum limit of weight for inland parcels was 1,000 tolas. This maximum has now been increased to 20 kg in the case of parcels for and from a head or sub-post office. In the case of parcels for and from branch post offices, the revised limit is 10 kg. A provision has been made that parcels weighing above 10 kg will be delivered through the postmaster. Such parcels will have to be collected by the addressees from the post office of delivery. Registration of a parcel has been made compulsory if it weighs more than 4 kg. The previous limit was 440 tolas.
5. Minimum limits of dimension for inland parcels have been laid down. They are the same as the minimum limits for letters. The maximum

limits have also been slightly changed as follows :

Maximum length = 1 metre, instead of 3 ft. 6 inches.
Maximum sum of length = 1.80 metres, instead of and girth combined. 6 ft.

Publicity and Training

In order to avoid practical difficulties in dealing with the public at the post office counters it was considered essential to train the staff and also to give wide publicity to the metric concepts. The post office comes into close contact with the public in normal day-to-day work and, therefore, its influence in moulding public thought in such matters can hardly be exaggerated. The measures taken to give publicity to the change-over include :

1. Advertisements have been inserted in various newspapers, both in English and Indian languages;

2. Posters in English and Indian languages have been printed and distributed to all post offices;
3. Brochures in English and Indian languages have been printed and are being distributed in large numbers.
4. For the use of postal staff, cards containing ready-reckoners showing the postage leviable on postal articles of various weights are being printed and will be distributed shortly.

It is hoped that the switch-over to the metric system by the post offices will considerably facilitate and hasten the complete replacement of the various systems of weights and measures in use in this country by the internationally recognised and easy-to-work metric system of weights and measures.

Metric Purchasing

METRIC weights have now come into compulsory use in many areas in the country. Certain traders as also consumers have got into difficulties in transacting business in terms of the new units of weights. These difficulties arise mainly out of the desire to adapt the new system to the old, as for example, asking for 1/4, 1/8 or 1/16 of a kilo of a commodity or insisting on using converted values like 58 grams for 1 chhataak and then weighing out 58 grams. Both the methods of using the new system can only lead to endless calculations and irritation.

The simplest way of transacting business in the new metric system is to quote, sell or buy commodities only in terms of rational metric weights using the crutch of conversion tables only to assess the quantity to be purchased. What has to be remembered is that the kilogram or kilo is some 6 tolas more than the 80 tola seer. Having done this it is advisable to forget the old system and its halving technique, because it is not possible to halve the metric units beyond a certain limit and what is worse, the corresponding weight would not be available in the metric

METRIC PURCHASING

series of weights which proceed in steps of 1, 2, 5, 10, 20, 50, 100, 200 and 500. For example, the 1/2 kg weight is available i.e. 500 grams but not 1/4 kg i.e. 250 grams nor 1/8 kg or 125 grams. The 250 grams would have to be made up by 2 weights viz. 200 grams and 50 grams, and 125 grams by adding 3 weights, namely, 100 grams, 20 grams and 5 grams. Many will agree that it is not worthwhile proceeding with our weighing in this manner and then complicating calculations of the amount to be paid. The halving system was perhaps suitable for the rupee of 16 annas and the seer of 16 chhataaks only, but is not suited to metric weights and decimal coinage.

Facility of Metric System

The excellence, simplicity and facility of the metric system lie in its decimal steps. If we do not use this facility we are bound to get into difficult calculations. For example, a dry fruit seller purchased his wares in the wholesale market in terms of kilos and converted the price to the seer units and rupees and annas. Then he sold them to his customers by converting the chhataaks and paos they had asked for into grams and weighing out the requisite quantity with gram weights. This trader got into difficulties when a suspicious customer asked him to pack up 100 grams of cashewnuts. The converted prices did not help him and he got himself and the customer into knots calculating how much 100 grams would cost. How simple would it have been if he had quoted the rate per kilo which was current in the market and then calculated for 100 grams!

Metric system and decimal coinage together afford a facility which was rarely present in the old structure of pricing. But many people get enmeshed into irritating calculations because they still want to convert prices into rupees, annas and pies and the weights into seers, chhataaks and paos.

Metric Purchasing

Let us examine the metric way of transactions. The first step is to price commodities in decimal coinage in terms of metric units. The next is to re-orientate our thinking to metric units. Thus we may ask for a kilo of commodity instead of 1 seer, 2 kilo instead of 2 seers and 40 kilo or 50 kilo instead of a maund. Remember that it is possible to weigh out 1 kilo of any commodity with just one weight but to weigh out 933 grams (1 seer) we require weights of 500, 200, 200, 20, 10, 2 and 1 grams in the pan, i.e. 7 weights. This is a waste of time both for the trader and the purchaser and leads to quarrels over calculations. Similarly, because a maund is 37 kilos, it does not mean that we must purchase 37 kilos. Quickness of transaction and settlement of the bill would lie in purchasing 40 kilos or if so desired 50 kilos, because the price quoted would be per quintal (100 kg).

When we come to fractions of a kilogram, it is preferable to proceed in units of 100 grams. This will simplify calculations because, the cost of 100 grams is 1/10th the cost of a kilo of a commodity. Thus if rice is sold at Rs. 1.20 per kilo, 100 grams would cost 12 nP. Therefore, it will facilitate calculations if we purchase our requirements in terms of 100 gram units.

If further sub-divisions are necessary, we may proceed in 10 gram units. This would be desirable for costly commodities like cloves, cardamoms etc. For even smaller quantities it is, of course, advisable to proceed by 1 gram steps as when we purchase small quantities of gold.

No Quarter Kilo Weight

If this procedure is followed, it would make the use of the quarter unit redundant, which is not such a great loss. It would also mean less chances of your being cheated. Some

traders are known to palm off the 200 gram weight as 1/4 kilo. This is wrong. Remember that 1/4 kilo of a commodity cannot be weighed out with a single metric weight piece. Weight pieces of 200 grams and 50 grams have to be used. Anybody who offers to weigh 1/4 kilo with one weight piece is cheating and should be reported to the nearest Inspector of Weights and Measures.

Capacity Measures

What has been said about weights is also applicable to capacity measures. The series of measures run in the ratio of 1, 2, 5 as in the case of weights. There is no measure of 1/4 litre *i.e.* 250 ml. Only a 200 ml measure or 1/5 litre is available in the series. To give 250 ml of milk the milkman

should pour out 200 ml with one measure and then 50 ml with another measure.

Length Measures

In the case of the length measures, the difficulty of half and quarter would not arise although 1/8 would still be difficult to purchase. The metre measure is divided at every 5 cm and, therefore, it would be preferable to purchase cloth in terms of 5 cm units. There would be 20 such 5 cm units in a metre.

In short, only when we start quoting, purchasing and selling in terms of metric weights and decimal coinage and use both these rationally, shall we realize fully the benefits inherent in both these reforms.

Conversion Tables for Tola and its Fractions

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WITH the enforcement of the metric system and the decimal coinage a number of conversion tables for tolas and higher units have been prepared but none is complete and in a form understandable to the uneducated, and even the educated people in India, mainly on account of certain defects in the tables. For example, the expression one tola=11.6638 grams carries little meaning to anyone except a highly educated person, for neither the seller nor the buyer can make out

anything and does not know what weights to use for weighing out in the metric system. The correct way of presenting it to a common-man would have been 1 tola=1 decagram, 1 gram, 6 decigrams, 6 centigrams, 3 milligrams, 8 decimilligrams in a clear-cut tabular form. But since the nomenclature decagram, decigram etc., is not normally used in practice and an accuracy of 1 milligram is often sufficient it could be written as 11 grams and 664 milligrams.

CONVERSION TABLES FOR TOLA AND ITS FRACTION

Usual Tables Inadequate

The usual tables are graded in tolas *i.e.* 1 tola, 2 tolas, 3 tolas and so on, but do not give fractions of the tola which are so important in many daily transactions. This leaves gaps in the tables, such as equivalents of 1 tola and 1 masha, 1 tola and 2 mashas and so on to be calculated by the persons concerned, ninety nine percent of whom cannot do them, and those who can, do not wish to waste time and energy on them.

There is no conversion table in the market which could give the equivalent of, say, 4 ratis 3 chawals. Such weights are commonly required in many States for trade in pearls, rubies, diamonds, precious stones, precious metals like gold and silver, jewellery and in ayurvedic and yunani medicines. It is towards fulfilling this need that the present attempt has been directed. It

is hoped that it is useful to the trade and customers.

The normal table for subdivisions of the tola is as follows :

8 chawal = 1 ratti
8 ratti = 1 masha
12 masha = 1 tola

This gives the approximate relation
 $8 \times 8 \times 12$ *i.e.* 768 chawal = 1 tola
= 11664 milligrams

$\therefore$ 1 chawal = 15 milligrams approximately

The smallest weight physically available in the metric system is one milligram and weighings of finer accuracy are not likely to be required in the normal commercial transactions involving precision weighing. In order, therefore, to be directly useful the Table that follows has been given correct to the nearest milligram.

TABLE I
CHAWALS, RATIS, MASHAS AND TOLAS TO MILLIGRAMS AND GRAMS
Factor used : 1 tola 0.116638 kilogram.

Tola	Masha	Rati	Chawal	Gram	Milligram
			1		15
			2		30
			3		46
			4		61
			5		76
			6		91
			7		106
		1	—		121
		1	1		137
		1	2		152
		1	3		167
		1	4		182
		1	5		197
		1	6		213
		1	7		228
		2	—		243
		2	1		258
		2	2		273
		2	3		289
		2	4		304
		2	5		319
		2	6		334
		2	7		349
		3	—		364
		3	1		380
		3	2		395
		3	3		410
		3	4		425

TABLE I (contd.)

Tola	Masha	Rati	Chawal	Gram	Milligram
		3	5		440
		3	6		456
		3	7		471
		4	—		486
		4	1		501
		4	2		516
		4	3		532
		4	4		547
		4	5		562
		4	6		577
		4	7		592
		5	—		607
		5	1		623
		5	2		638
		5	3		653
		5	4		668
		5	5		683
		5	6		699
		5	7		714
		6	—		729
		6	1		744
		6	2		759
		6	3		775
		6	4		790
		6	5		805
		6	6		820
		6	7		835
		7	0		850
		7	1		866
		7	2		881
		7	3		896
		7	4		911
		7	5		926
		7	6		942
		7	7		957
1	—	—	—	1	972
2	—	—	—	2	988
3	—	—	—	3	1004
4	—	—	—	4	1020
5	—	—	—	5	1036
6	—	—	—	6	1052
7	—	—	—	7	1068
8	—	—	—	8	1084
9	—	—	—	9	1100
10	—	—	—	10	1116
11	—	—	—	11	1132
1				12	1148
2				13	1164
3				14	1180
4				15	1196
5				16	1212
6				17	1228
7				18	1244
8				19	1260
9				20	1276
10				21	1292

Adoption of Metric System in Education

The metric system is being progressively introduced in various fields in different areas from 1 October 1960. The use of metric weights has already become compulsory in certain areas and in the remaining it will be compulsory from April 1962. Capacity measures are intended to be introduced from April 1961 and length measures shortly thereafter. Already the metric system has come into use in many Government undertakings, industries and commodities, which are daily required by people.

The use of decimal coinage is now universal and only coins of denominations 1 anna and 1 pice remain to be withdrawn from circulation. These are expected to be withdrawn shortly.

As a result of these advances, it was but proper that the practical use of the metric system and decimal coinage should be reflected in the educational field as well. At a Conference recently held in New Delhi and attended by Principals of Technical Colleges and Institutions, a programme of change-over in engineering and technical education was chalked out. According to this programme, the full adoption of the metric system in teaching would commence in the 1st and 2nd year classes for the academic session of the 1962-63 and in 1963-64 in the 3rd or 4th year classes, to be followed by the introduction in the 5th and final year classes in 1964-65 (see also *Metric Measures*, January 1961, pp. 19-21).

In view of these recommendations and to

co-ordinate the programme of adoption of metric system in school education with that for technical education, it was necessary that the syllabus of subjects (for all classes) using units of weights and measures should be revised so that they are taught using mainly the metric system.

At present in most of the States and Union Territories the metric system is taught in addition to all the other prevailing systems and supplements on the metric system have been added to the existing text books. This only means an addition to the burden of education on the children and does not do justice to the metric system in preference to the other systems.

The question of introduction of the metric system in different stages of education was, therefore, referred for consideration to the Central Advisory Board of Education in its meeting on 16-17 January 1961. The Standing Committee of Secondary Education of the Board considered this question earlier and was then discussed by the Central Advisory Board of Education on 17 January 1961. The Board recommended the introduction of the metric system into all text-books at all stages of education.

It is now expected that the State Governments would revise the syllabus for subjects using the metric system and do away as far as possible with the teaching of other systems and bring out suitable text-books reflecting this outlook.

Mathematics Syllabuses for Primary Classes

(The Inter-State Board for Anglo Indian—Education, New Delhi, has recently published its 'Revised Syllabuses in Mathematics' for primary classes which reflect to a considerable extent the actual use of the metric system of weights and measures in preference to other systems.

Reproduced below is the text of the 'Revised Syllabuses in Mathematics' for primary classes.

Editor)

SUPPLEMENT TO A SUGGESTED SCHEME OF STUDIES FOR PRIMARY CLASSES OF ANGLO-INDIAN SCHOOLS

Revised Syllabuses in Mathematics

The following syllabuses are intended to be only a guide to teachers in respect of the norms of achievement. They must not be taken either as prescribing or encouraging the class teaching of arithmetic.

Arithmetic learning is very much a matter of individual interest and pace. Where

large numbers render such individual methods impracticable or when social schemes and projects are to be used the class should be divided into appropriate groups, the individuals in each group being approximately at the same stage of achievement.

In the following list, which is not meant to be exhaustive, are given the titles and publishers of some of the best books on the teaching of the subject. They constitute the minimum requirement for the relevant department of the teacher's library.

Particular attention is called to the works of Schonell and Menzel on the diagnosis of individual difficulties. Much waste of time and much dullness and discouragement entailed by the present prevalent practice of indiscriminate repetition can be avoided by the use of diagnostic tests and the specific remedial teaching indicated by them.

Books on the Teaching of Arithmetic

H. G. Wheat	The Psychology and Teaching of Arithmetic	Heath
Godfrey & Siddons	The Teaching of Elementary Mathematics	Cambridge University Press
Keith & Robertson	The Teaching of Arithmetic	Blackie
A. Monteith	The Teaching of Arithmetic in the Primary School	Harrap
M. Drummond	Learning Arithmetic by the Montessori Method	Harrap

MATHEMATICS SYLLABUSES FOR PRIMARY CLASSES

P. B. Ballard	The Teaching of Arithmetic	University of London
E. V. Staynor	Teacher's Handbook to Modern School Arithmetic Books I-IV	Press Orient Longmans
F. A. G. Lamborn	Reason in Arithmetic	Oxford University Press
C. F. Potter	The Teaching of Arithmetic	Pitman
E. M. Menzel	Suggestions for the Use of New Type Tests in India	Oxford University Press
P. J. Schonell	Diagnosis of Individual Difficulties in Arithmetic	Oliver and Boyd
L. D. Adams	A Background of Primary School Arithmetic	Oxford University Press
D. Williams	A Realistic Approach to Number Teaching	Oxford University Press

CLASS I

1. Number experiences, individual and social activity in

- Reciting, singing and acting nursery rhymes.
- Sorting and counting objects.
- Counting actions.
- Constructive play.
- Use of special toys and individual apparatus.
- Imitative and imaginative play.

2. Counting of objects from 1 to 5, then 5 to 10, and finally 5 to 20. Counting by twos to 20. Writing numbers in figures from 1 to 10, and from 10 to 100.

3. Use of apparatus, such as the abacus and 100-squares board. Rote counting to 100. Counting by tens to 100. Recognition of numbers to 100.

4. Meaning of ordinals—first to fifth.

5. Addition and subtraction facts first to 10, then up to 100 with carrying figure. Number combinations first within the limits of 10. Tables of addition and subtraction up to 10 e.g.

$$\begin{array}{ll} 1+2=3, & 1+3=4 \\ 6-3=3, & 6-2=4. \end{array}$$

6. Recognition of naye paise currency.

7. Simple experiences of position and shape, and comparison of size and quantity, and the use of the words : point, straight, round, square, big, bigger, biggest, short, long, shorter, longer. These may include paper cutting, making flowerbeds of different shapes, simple weighing and measuring, filling cups, jugs, pacing out playing-field, etc.

8. Concrete exercises in addition, comparison, subtraction (of two figure numbers within the limits of 100). Multiplication tables of 2 and 5 (2×10 , 5×10), through concrete experience.

CLASS II

1. Extension of counting beyond 100, Counting in 2s, 10s, 5s, 4s.

2. Reading numbers to 10,000.

3. Extension of addition and subtraction. Mental addition and subtraction of one-figure.

Tables of multiplication and division at least up to 10×10 . (The following order of tables is recommended 2, 5, 10, 3, 6, 4, 8).

Division—Use of the Division Box.

Quotition and partition : Simple problems in both kinds of division.

METRIC MEASURES, VOL. 4, MARCH 1961

[No attempt to make the distinction explicit, however, should be made.]

4. Multiplication and division based on tables learnt above : Answers should not extend to more than four figures.

5. Study of the *standard units of the metric system* (without using the decimal point).

6. Simple shopping sums using Rupees and naye paise only.

7. Measuring experiences with : centimetres and metres.
: litres.

8. Meaning and use of terms : minute, hour, day. Telling the *time*.

9. Simple experiences of position and shape, and comparison of size and quantity, extending scope of work done in Class I e.g. cutting out and covering patterns and designs, making designs with paper, estimations and check measurements of parcels, pails, own height and weight, length of stride etc.

10. Study of lines : straight, curved, bent.

CLASS III

1. Revision and extension of numeration and notation, up to 100,000.

2. Revision and extension of addition and subtraction. "Adding in the head" extended, e.g. from $5+8=13$ to $5+18=23$; $5+28=33$ etc.

Ladder sums—climbing up and climbing down.

Addition up to 3 rows of 5-figured numbers.

Subtraction up to 5-figured numbers.

Simple problems.

Simple problems taken from daily life and "centres of interest".

3. Revision of multiplication and division (by not more than two-figure numbers). Short division by divisors 13 to 19,

by *ad hoc* compilation of multiplication tables required (See Keith and Robertson Chap. V).

Simple problems taken from every day life and centres of interest.

Tables up to 12×12 and 16×12 .

4. Revision of the *standard units of the metric system* in simple problems taken from daily life and "centres of interest".

5. Extension of notions about time: months and days.

6. Ideas of space and simple practical work.

Paper cutting and folding.

Simple design work and colouring.

Squares, rectangles, circles, regular triangles.

Measurement and comparison of lengths—using the centimetre as unit.

CLASS IV

1. Extension of multiplication and division to three-figure multipliers, and divisors Tests of divisibility by 2, 3, 5 and 11.

2. *The decimal system*. Changing of units. The four operations simply.

3. *The metric system*. Changing of units The four operations.

4. *Decimal fractions*. Addition and subtraction. Concrete fractions : $1/2$; $1/4$; $3/4$ introduced through decimals.

5. Problems : Mental management in shopping and similar operations of Rs. 10.

6. Unitary Method. Simple examples in direct proportion drawn from and extending the child's experience.

MATHEMATICS SYLLABUSES FOR PRIMARY CLASSES

7. Space Work Measurement. Revision and extension of the notions of lines and angles.

Use of compasses—Circles. Use of squared paper, comparing areas. Simple design involving the above figures.

The right angle. Drawing squares and rectangles to given measurements with the use of set-square and ruler.

CLASS V

[N.B.—The Indian Metric Units are to be used throughout.]

1. Extension of multiplication and division to more than 3-figure multipliers and divisors. Multiplication and division by factors.

2. Revision and extension of work of Class IV in the Decimal system.

3. Revision and extension of work in units of length and longitudinal measurement (Metric system).

4. Shopping and bills—practical work.

5. Fractions—extension of previous work to

(i) third, fifth, sixth, tenth, sixtieth.

(ii) Equivalences, and comparisons.

Adding and subtracting (with halves, quarters, thirds, fifths, tenths).

Use of ruler for teaching the adding and subtracting of tenths.

Adding and subtracting (proper, improper and mixed) fractions. Use of this process in simple problems based on daily life or "centres of interest."

Meaning and evaluation $3/7$ of, $3/5$ of.

6. Unitary Method, extension of previous work.

7. Prime factors. Divisibility by 3, 4, 6, 8, 9. H.C.F. and L.C.M. by factors.

8. Finding and use of averages.

9. Measure of time (including seconds and year), and simple problems. Com-

pound addition, subtraction; multiplication and division of units of time (days, hours, minutes, seconds).

10. Space work extended to angles and the use of the protractor. The Mariner's Compass—practical work. Construction of perpendiculars.

Simple construction of triangles—3 sides, a side and 2 angles, the regular hexagon, designs.

Circumference of circle, surface of circle, lateral surface of cylinder.

11. Column Graphs—Marks, height, rain-fall, etc.

12. Simple equations. 145175

Codes—using letters for numbers—substitution.

CLASS VI

1. Study of British ~~Units of~~ length, weights and measures and money. Extension of compound addition, etc. to these units.

2. Factors; H.C.F. and L.C.M. by factors—

Extension of work of Class V to divisors 7, 11, 13, 17, 19.

3. (a) Decimals—addition, subtraction, division and multiplication—extension of work done in Class V.

(b) Fraction—equivalences and conversions, addition, subtraction, multiplication and division.

Rules of signs.

(c) Percentages : different expressions (6% , $6/100$, 0.06) : use of a percentage in expressing marks, and profit and loss.

(d) Simple conversion—decimals to vulgar fraction and *vice-versa*.

4. Unitary Method—Extension to fractional method (omitting middle stage of unitary method).

X:5 C 12, 11 58 MM 17

5. Scales of plans and maps. Correspondence of volume, capacity and weight.
6. Areas—rectangle, square, rectangular trapezoid and simple patterns involving these. 8. Construction of prependiculars, perpendicular bisectors, bisector of angle, parallels, triangles, circumscribed circle, inscribed circle, angle-sum property of the triangle.
- Use of graph paper for finding area of irregular shapes.
- Simple solids—box-cube and rectangular solid-sphere. 9. Graphical work—Column graphs.
- Descriptive—Simple measurements. Continuous graphs—Records of height, weight rise of water level in a tank, etc.
- Models with paper cutting and folding. 10. Simple algebraic equations.
- Simple figures into triangles, rectangles, and rectangular trapezoids. Problems leading to the above.
- The lateral surfaces of simple geometrical volumes. Framing of formulae—generalization of simple rules.
7. Volumes (including practical ideas) 1. The cube, the rectangular parallelepiped; the straight prism and the cylinder. Substitution.

RECOMMENDED TEXT BOOKS
Arithmetic

- | | | |
|---------------------------------------|------------------------|----------------------------|
| 1. First Steps in Number Books I-IV. | Dorothy Williams | Oxford University Press |
| 2. Now for Number (Junior Series) | Jean Walker | Chambers |
| 3. Real Arithmetic (Junior Series) | Burniston | Collins Clear Type Press |
| 4. Modern School Arithmetic. | E. V. Staynor | Orient Longmans |
| 5. Fundamental Arithmetic | P. B. Ballard | University of London Press |
| 6. Indian Primary Arithmetics. | L. G. Owen | Macmillan & Co. |
| 7. Four Rules of Number | K. A. Hesse | Longmans, Green |
| 8. Number Picture Books | J. Coupland | Longmans, Green, |
| 9. Lomond Number Books | Low, Murrery and Stott | University of London Press |
| 10. Lomond Arithmetics | Christie and Gibson | University of London Press |
| 11. The Child's Number Books. | P. B. Ballard | University of London Press |
| 12. New Indian Arithmetic | J. T. Best | Orient Longmans |
| 13. Infant Sum Books | | Longmans, Green |
| 14. A School Arithmetic | Channon and Smith | Longmans, Green |
| 15. A General Arithmetic for Schools. | C. V. Durell | Bell |

MATHEMATICS SYLLABUSES FOR PRIMARY CLASSES

- | | Algebra | |
|----------------------------------|---------------------|-----------------|
| 1. Elementary Algebra | Durrell | Bell |
| 2. An Introduction to Algebra. | G. W. Walters | Macmillan & Co. |
| 3. Essentials of School Algebra. | A. B. Mayne | Macmillan & Co. |
| 4. Algebra for Schools | Milne and Roberston | Bell |
| 5. A Modern School Algebra | Wilkinson | Cooper |
| 6. A New Algebra for School. | C. V. Durell | Bell |
| 7. A School Algebra | Channon and Smith | Longmans, Green |

- | | Geometry | |
|--|-------------------|----------------------------|
| 1. Geometry for Juniors—Books I, II, III. | Ridout | Blackie |
| 2. With Ruler and Compasses. | | Nelson |
| 3. Fundamental Geometry | P. B. Ballard | University of London Press |
| 4. Simplified Geometry, Part I. | Durell and Tuckey | Bell |
| 5. Vital Primary Geometry | Williams | Macmillan & Co. |
| 6. Modern School Arithmetic (Relevant Sections). | E. V. Staynor | Orient Longmans |
| 7. A New Geometry for Schools Stage A & B. | C. V. Durell | Bell |
| 8. A School Geometry | Channon and Smith | Longmans, Green |

CORRECTION

In the July 1960 issue of *Metric Measures* the following corrections may be noted in the article 'Indian Geodetic System and Foot-Metre Ratio' by J. C. Bhattacharij.

(1) Page 14, lines 19-20 from top, 'differing in scale by 1.7×10^{-6} in place of 'differing by 1.7×10^{-6} .'

(2) Page 14, line 10 from bottom, by ' 1.7×10^{-6} in scale' in place of 'by 1.7×10^{-6} .'

APPENDIX 1

METRIC SIZES OF PAPER IN MILLIMETRES AND INCH EQUIVALENTS

Designation (1)	Size in mm (2)	Size in inches (3)	Designation (4)	Size in mm (5)	Size in inches (6)
4A O	1682 × 2378	66.22 × 93.62	B O	1000 × 1414	39.37 × 55.67
2A O	1189 × 1682	46.81 × 66.22	B 1	707 × 1000	27.83 × 39.37
A O	841 × 1189	33.11 × 46.81	B 2	500 × 707	19.68 × 27.83
A 1	594 × 841	23.39 × 33.11	B 3	353 × 500	13.90 × 19.68
A 2	420 × 594	16.54 × 23.39	B 4	250 × 353	9.84 × 13.90
A 3	297 × 420	11.69 × 16.54	B 5	176 × 250	6.93 × 9.84
A 4	210 × 297	8.27 × 11.69	B 6	125 × 176	4.92 × 6.93
A 5	148 × 210	5.83 × 8.27	B 7	88 × 125	3.46 × 4.92
A 6	105 × 148	4.13 × 5.83	B 8	62 × 88	2.44 × 3.46
A 7	74 × 105	2.91 × 4.13	B 9	44 × 62	1.73 × 2.44
A 8	52 × 74	2.05 × 2.91	B 10	31 × 44	1.22 × 1.73
A 9	37 × 52	1.46 × 2.05			
A 10	26 × 37	1.02 × 1.46			

APPENDIX 2

Government of India have already standardized several items of manufactured stationery and forms commonly used in all Government Departments and for their manufacture, the existing machinery and equipment already available, will not create any difficulties. The items are as below—

Description of Article	Present Size in Inches	Proposed Size (Designation/Size in mm/Exact Size in Inches).
Blotting white Demy (40 lbs)	17½" × 22½"	= 150 gms
Blotting white Demy (38 lbs)		A-2 i. e. 420 × 594 mm or = 130 gsm
Blotting Pink Demy (40 lbs)		16.54" × 23.39" = 150 gsm
Typewriting (6 lbs)	13" × 16"	= 40 gam
Books Blank Plain Royal (in different quires)	13½" × 19½"	A-3 i. e. 297 × 420 mm or 11.69" × 16.54"
File Books, 250 guards cloth bound.	10½" × 14½"	
Typewriting (3 lbs)	8" × 13"	= 40 gam
Books blank and ruled in different qrs.	8½" × 13"	A-4 i. e. 210 × 297 mm or 8.27" × 11.69"
Draft Continuation Sheet Buff		
Note Sheet Blocks in different varieties		
Draft Sheet pad F' cap folio.		
Books quarto-ruled, cloth bound 6 qrs.	6-3/8" × 8"	
Exercise Books 64 pgs. of different varieties/Note Book.		A-5 i. e. 148 × 210 mm or 5.83" × 8.27"
Shorthand Draft sheet pad F' cap folio.		

Standards of Weights And Measures (Conversion of Land Areas) Rules, 1960

(Recently the Government of India have published Standards of Weights and Measures (Conversion of Land Areas) Rules, 1960 in the Official Gazette. As the Rules may be required for reference often by various authorities, they are being published in 'Metric Measures' in full. The following is the text of the Notification—Editor)

3. Manner of Conversion.—All references in any contract, deed, instruments, record or other document to areas of land expressed in terms of acres and cents shall be construed as references to areas expressed in terms of hectares and ares, converted thereto at the rates specified in the Schedule to these rules.

NOTIFICATION

S.O. 2874 New Delhi, dated the 25th Nov., 1960.

In exercise of the powers conferred by Section 16 and 17 of the Standards of Weights and Measures Act, 1956 (89 of 1956), the Central Government hereby makes the following rules namely:—

1. Short Title.—These rules may be called the Standards of Weights and Measures (Conversion of Land Areas) Rules, 1960.

2. Definitions.—In these rules:—

- 'acre' means 4840 square yards ;
- 'Act' means the Standards of Weights and Measures Act, 1956 (89 of 1956) ;
- 'are' means 100 square metres ;
- 'cent' means 48.4 square yards ;
- 'hectare' means 10,000 square metres.

SCHEDULE

CONVERSION TABLE FOR LAND AREAS.

TABLE I
(Cents to ares)

Cents	Ares
1	0.40
2	0.81
3	1.21
4	1.62
5	2.02
6	2.43
7	2.83
8	3.24
9	3.64

Table

(Acres and Cents to Hectares)

Cents	0		10		20		30		40	
Acres	Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares
0	0	0	0	4.05	0	8.09	0	12.14	0	16.19
1	0	40.47	0	44.52	0	48.56	0	52.61	0	56.66
2	0	80.94	0	84.98	0	89.03	0	93.08	0	97.12
3	1	21.41	1	25.45	1	29.50	1	33.55	1	37.59
4	1	61.87	1	65.92	1	69.97	1	74.01	1	78.06
5	2	2.34	2	6.39	2	10.44	2	14.48	2	18.53
6	2	42.81	2	46.86	2	50.90	2	54.95	2	59.00
7	2	83.28	2	87.33	2	91.37	2	95.42	2	99.47
8	3	23.75	3	27.79	3	31.84	3	35.89	3	39.94
9	3	64.22	3	68.26	3	72.31	3	76.36	3	80.40
10	4	4.68	4	8.73	4	12.78	4	16.83	4	20.87
11	4	45.15	4	49.20	4	53.25	4	57.29	4	61.34
12	4	85.62	4	89.67	4	93.72	4	97.76	5	1.81
13	5	26.09	5	30.14	5	34.18	5	38.23	5	42.28
14	5	66.56	5	70.61	5	74.65	5	78.70	5	82.75
15	6	7.03	6	11.07	6	15.12	6	19.17	6	23.21
16	6	47.50	6	51.54	6	55.59	6	59.64	6	63.68
17	6	87.96	6	92.01	6	96.06	7	0.10	7	4.15
18	7	28.43	7	32.48	7	36.53	7	40.57	7	44.62
19	7	68.90	7	72.95	7	76.99	7	81.04	7	85.09
20	8	9.37	8	13.42	8	17.46	8	21.51	8	25.56
21	8	49.84	8	53.88	8	57.93	8	61.98	8	66.03
22	8	90.31	8	94.35	8	98.40	9	2.45	9	6.49
23	9	30.77	9	34.82	9	38.87	9	42.92	9	46.96
24	9	71.24	9	75.29	9	79.34	9	83.38	9	87.43
25	10	11.71	10	15.76	10	19.81	10	23.85	10	27.90
26	10	52.18	10	56.23	10	60.27	10	64.32	10	68.37
27	10	92.65	10	96.70	11	0.74	11	4.79	11	8.84
28	11	33.12	11	37.16	11	41.21	11	45.26	11	49.30
29	11	73.59	11	77.63	11	81.68	11	85.73	11	89.77
30	12	14.05	12	18.10	12	22.15	12	26.19	12	30.24
31	12	54.52	12	58.57	12	62.62	12	66.66	12	70.71
32	12	94.99	12	99.04	13	3.08	13	7.13	13	11.18
33	13	35.46	13	39.51	13	43.55	13	47.60	13	51.65
34	13	75.93	13	79.97	13	84.02	13	88.07	13	92.12
35	14	16.40	14	20.44	14	24.49	14	28.54	14	32.58
36	14	56.86	14	60.91	14	64.96	14	69.01	14	73.05
37	14	97.33	15	1.38	15	5.43	15	9.47	15	13.52
38	15	37.80	15	41.85	15	45.90	15	49.94	15	53.99
39	15	78.27	15	82.32	15	86.36	15	90.41	15	94.46
40	16	18.74	16	22.79	16	26.83	16	30.88	16	34.93
41	16	59.21	16	63.25	16	67.30	16	71.35	16	75.39
42	16	99.68	17	3.72	17	7.77	17	11.82	17	15.86
43	17	40.14	17	44.19	17	48.24	17	52.28	17	56.33
44	17	80.61	17	84.66	17	88.71	17	92.75	17	96.80
45	18	21.08	18	25.13	18	29.17	18	33.22	18	37.27
46	18	61.55	18	65.60	18	69.64	18	73.69	18	77.74
47	19	2.02	19	6.06	19	10.11	19	14.16	19	18.21
48	19	42.49	19	46.53	19	50.58	19	54.63	19	58.67
49	19	82.95	19	87.00	19	91.05	19	95.10	19	99.14
50	20	23.42	20	27.47	20	31.52	20	35.56	20	39.61
51	20	63.89	20	67.94	20	71.99	20	76.03	20	80.08
52	21	4.36	21	8.41	21	12.45	21	16.50	21	20.55
53	21	44.83	21	48.88	21	52.92	21	56.97	21	61.02
54	21	85.30	21	89.34	21	93.39	21	97.44	22	1.48
55	22	25.77	22	29.81	22	33.86	22	37.91	22	41.95
56	22	66.23	22	70.28	22	74.33	22	78.37	22	82.42
57	23	6.70	23	10.75	23	14.80	23	18.84	23	22.89

II

and Ares upto 100 Acres)

Cents	50		60		70		80		90	
Acres	Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares
0	20.23	0	24.28	0	28.33	0	32.37	0	36.4	0
0	60.70	0	64.75	0	68.80	0	72.84	0	76.8	0
1	1.17	1	5.22	1	9.26	1	13.31	1	17.3	1
1	41.64	1	45.69	1	49.73	1	53.78	1	57.8	1
1	82.11	1	86.15	1	90.20	1	94.25	1	98.3	1
2	22.58	2	26.62	2	30.67	2	34.72	2	38.7	2
2	63.04	2	67.09	2	71.14	2	75.19	2	79.2	2
3	3.51	3	7.56	3	11.61	3	15.65	3	19.7	3
3	43.98	3	48.03	3	52.08	3	56.12	3	60.1	3
3	84.45	3	88.50	3	92.54	3	96.59	3	0.0	4
4	24.92	4	28.97	4	33.01	4	37.06	4	41.1	4
4	65.39	4	69.43	4	73.48	4	77.53	4	81.5	4
5	5.86	5	9.90	5	13.95	5	18.00	5	22.0	5
5	46.32	5	50.37	5	54.42	5	58.46	5	62.5	5
5	86.79	5	90.84	5	94.89	5	98.93	5	0.0	6
6	27.26	6	31.31	6	35.35	6	39.40	6	43.4	6
6	67.73	6	71.78	6	75.82	6	79.87	6	83.9	6
7	8.20	7	12.24	7	16.29	7	20.34	7	24.3	7
7	48.67	7	52.71	7	56.76	7	60.81	7	64.8	7
7	89.13	7	93.18	7	97.23	8	1.28	8	5.3	8
8	29.60	8	33.65	8	37.70	8	41.74	8	45.7	8
8	70.07	8	74.12	8	78.17	8	82.21	8	86.2	8
9	10.54	9	14.59	9	18.63	9	22.68	9	26.7	9
9	51.01	9	55.06	9	59.10	9	63.15	9	67.2	9
9	91.48	9	95.52	9	99.57	10	3.62	10	7.6	10
10	31.95	10	35.99	10	40.04	10	44.09	10	48.1	10
10	72.41	10	76.46	10	80.51	10	84.55	10	88.6	10
11	12.88	11	16.93	11	20.98	11	25.02	11	29.0	11
11	53.35	11	57.40	11	61.44	11	65.49	11	69.5	11
11	93.82	11	97.87	12	1.91	12	5.96	12	10.0	12
12	34.29	12	38.33	12	42.38	12	46.43	12	50.4	12
12	74.76	12	78.80	12	82.85	12	86.90	12	90.9	12
13	15.22	13	19.27	13	23.32	13	27.37	13	31.4	13
13	55.69	13	59.74	13	63.79	13	67.83	13	71.8	13
13	96.16	14	0.21	14	4.26	14	8.30	14	12.3	14
14	36.63	14	40.68	14	44.72	14	48.77	14	52.8	14
14	77.10	14	81.15	14	85.19	14	89.24	14	93.2	14
15	17.57	15	21.61	15	25.66	15	29.71	15	33.7	15
15	58.04	15	62.08	15	66.13	15	70.18	15	74.2	15
15	98.50	16	2.55	16	6.60	16	10.64	16	14.6	16
16	38.97	16	43.02	16	47.07	16	51.11	16	55.1	16
16	79.44	16	83.49	16	87.53	16	91.58	16	95.6	16
17	19.91	17	23.96	17	28.00	17	32.05	17	36.1	17
17	60.38	17	64.42	17	68.47	17	72.52	17	76.5	17
18	0.85	18	4.89	18	8.94	18	12.99	18	17.0	18
18	41.31	18	45.36	18	49.41	18	53.46	18	57.5	18
18	81.78	18	85.83	18	89.88	18	93.92	18	97.9	18
19	22.25	19	26.30	19	30.35	19	34.39	19	38.4	19
19	62.72	19	66.77	19	70.81	19	74.86	19	78.9	19
20	3.19	20	7.24	20	11.28	20	15.33	20	19.3	20
20	43.66	20	47.70	20	51.75	20	55.80	20	59.8	20
20	84.13	20	88.17	20	92.22	20	96.27	20	0.0	21
21	24.59	21	28.64	21	32.69	21	36.73	21	40.7	21
21	65.06	21	69.11	21	73.16	21	77.20	21	81.1	21
22	5.53	22	9.58	22	13.62	22	17.67	22	21.7	22
22	46.00	22	50.05	22	54.09	22	58.14	22	62.1	22
22	86.47	22	90.51	22	94.56	22	98.61	22	0.0	23
23	26.94	23	30.98	23	35.03	23	39.08	23	43.1	23

METRIC MEASURES, VOL. 4, MARCH 1961

Cents	Table									
	0		10		20		30		40	
Acres	Hect-ares	Ares	Hect-ares	Ares	Hect-ares	Ares	Hect-ares	Ares	Hect-ares	Ares
58	23	47.17	23	51.22	23	55.26	23	59.31	23	63.36
59	23	87.64	23	91.69	23	95.73	23	99.78	24	3.83
60	24	28.11	24	32.15	24	36.20	24	40.25	24	44.29
61	24	68.58	24	72.62	24	76.67	24	80.72	24	84.76
62	25	9.04	25	13.09	25	17.14	25	21.19	25	25.23
63	25	49.51	25	53.56	25	57.61	25	61.65	25	65.70
64	25	89.98	25	94.03	25	98.08	26	2.12	26	6.17
65	26	30.45	26	34.50	26	38.54	26	42.59	26	46.64
66	26	70.92	26	74.97	26	79.01	26	83.06	26	87.11
67	27	11.39	27	15.43	27	19.48	27	23.53	27	27.57
68	27	51.86	27	55.90	27	59.95	27	64.00	27	68.04
69	27	92.32	27	96.37	28	0.42	28	4.46	28	8.51
70	28	32.79	28	36.84	28	40.89	28	44.93	28	48.98
71	28	73.26	28	77.31	28	81.35	28	85.40	28	89.45
72	29	13.73	29	17.78	29	21.82	29	25.87	29	29.92
73	29	54.20	29	58.24	29	62.29	29	66.34	29	70.38
74	29	94.67	29	98.71	30	2.76	30	6.81	30	10.85
75	30	35.13	30	39.18	30	43.23	30	47.28	30	51.32
76	30	75.60	30	79.65	30	83.70	30	87.74	30	91.79
77	31	16.07	31	20.12	31	24.17	31	28.21	31	32.26
78	31	56.54	31	60.59	31	64.63	31	68.68	31	72.73
79	31	97.01	32	1.06	32	5.10	32	9.15	32	13.20
80	32	37.48	32	41.52	32	45.57	32	49.62	32	53.66
81	32	77.95	32	81.99	32	86.04	32	90.09	32	94.13
82	33	18.41	33	22.46	33	26.51	33	30.55	33	34.60
83	33	58.88	33	62.93	33	66.98	33	71.02	33	75.07
84	33	99.35	34	3.40	34	7.34	34	11.49	34	15.54
85	34	39.82	34	43.87	34	47.91	34	51.96	34	56.01
86	34	80.29	34	84.33	34	88.38	34	92.43	34	96.47
87	35	20.76	35	24.80	35	28.85	35	32.90	35	36.94
88	35	61.22	35	65.27	35	69.32	35	73.37	35	77.41
89	36	1.69	36	5.74	36	9.79	36	13.83	36	17.88
90	36	42.16	36	46.21	36	50.26	36	54.30	36	58.35
91	36	82.63	36	86.68	36	90.72	36	94.77	36	98.82
92	37	23.10	37	27.15	37	31.19	37	35.24	37	39.29
93	37	63.57	37	67.61	37	71.66	37	75.71	37	79.75
94	38	4.04	38	8.08	38	12.13	38	16.18	38	20.22
95	38	44.50	38	48.55	38	52.60	38	56.64	38	60.69
96	38	84.97	38	89.02	38	93.07	38	97.11	39	1.16
97	39	25.44	39	29.49	39	33.53	39	37.58	39	41.63
98	39	65.91	39	69.96	39	74.00	39	78.05	39	82.10
99	40	6.38	40	10.42	40	14.47	40	18.52	40	22.56
100	40	46.85								

Table (Acres to Hectares & Ares)										
Acres	0		100		200		300		400	
	Hect-ares	Ares	Hect-ares	Ares	Hect-ares	Ares	Hect-ares	Ares	Hect-ares	Ares
1000	0	0	40	46.85	80	93.69	121	40.54	161	87.38
2000	404	68.46	445	15.36	485	62.15	526	9.00	566	55.84
3000	809	36.92	849	83.76	890	30.61	930	77.45	971	24.30
	1,214	5.37	1,254	52.22	1,294	99.07	1,335	45.91	1,375	92.76

STANDARDS OF WEIGHT AND MEASURES CONVERSION OF LAND AREAS RULE 1961

II—contd.

50		60		70		80		90	
Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares
23	67.40	23	71.45	23	75.50	23	79.55	23	83.59
24	7.87	24	11.92	24	15.97	24	20.01	24	24.06
24	48.34	24	52.39	24	56.44	24	60.48	24	64.53
24	88.81	24	92.86	24	96.90	25	0.95	25	5.00
25	29.28	25	33.33	25	37.37	25	41.42	25	45.47
25	69.75	25	73.79	25	77.84	25	81.89	25	85.93
26	10.22	26	14.26	26	18.31	26	22.36	26	26.40
26	50.68	26	54.73	26	58.78	26	62.82	26	66.87
26	91.15	26	95.20	26	99.25	27	3.29	27	7.34
27	31.62	27	35.67	27	39.71	27	43.76	27	47.81
27	72.09	27	76.14	27	80.18	27	84.23	27	88.28
28	12.56	28	16.60	28	20.65	28	24.70	28	28.75
28	53.03	28	57.07	28	61.12	28	65.17	28	69.21
28	93.49	28	97.54	29	1.59	29	5.64	29	9.68
29	33.96	29	38.01	29	42.06	29	46.10	29	50.15
29	74.43	29	78.48	29	82.53	29	86.57	29	90.62
30	14.90	30	18.95	30	22.99	30	27.04	30	31.09
30	55.37	30	59.42	30	63.46	30	67.51	30	71.56
30	95.84	30	99.88	31	3.93	31	7.98	31	12.02
31	36.31	31	40.35	31	44.40	31	48.45	31	52.49
31	76.77	31	80.82	31	84.87	31	88.91	31	92.96
32	17.24	32	21.29	32	25.34	32	29.38	32	33.43
32	57.71	32	61.76	32	65.80	32	69.85	32	73.90
32	98.18	33	2.23	33	6.27	33	10.32	33	14.37
33	38.65	33	42.69	33	46.74	33	50.79	33	54.84
33	79.12	33	83.16	33	87.21	33	91.26	33	95.30
34	19.58	34	23.63	34	27.68	34	31.73	34	35.77
34	60.05	34	64.10	34	68.15	34	72.19	34	76.24
35	0.52	35	4.57	35	8.62	35	12.66	35	16.71
35	40.99	35	45.04	35	49.08	35	53.13	35	57.18
35	81.46	35	85.51	35	89.55	35	93.60	35	97.65
36	21.93	36	25.97	36	30.02	36	34.07	36	38.11
36	62.40	36	66.44	36	70.49	36	74.54	36	78.58
37	2.86	37	6.91	37	10.96	37	15.00	37	19.05
37	43.33	37	47.38	37	51.43	37	55.47	37	59.52
37	83.80	37	87.85	37	91.89	37	95.94	37	99.99
38	24.27	38	28.32	38	32.36	38	36.41	38	40.46
38	64.74	38	68.78	38	72.83	38	76.88	38	80.93
39	5.21	39	9.25	39	13.30	39	17.35	39	21.39
39	45.67	39	49.72	39	53.77	39	57.82	39	61.87
39	86.14	39	90.19	39	94.24	39	98.28	40	2.33
40	26.61	40	30.66	40	34.71	40	38.75	40	42.80

III

Ares upto 10,000 ares)

500		600		700		800		900	
Hect-ares	Ares	Hect-ares	Ares	Hect-ares	Ares	Hect-ares	Ares	Hect-ares	Ares
202	34.23	242	81.07	283	27.92	323	74.77	364	21.61
607	2.69	647	49.53	687	96.38	728	43.22	768	90.01
1011	71.15	1052	17.99	1,092	64.84	1,133	11.68	1,173	58.51
1416	39.60	1,456	86.45	1,497	33.29	1,537	80.14	1,578	26.91

Table III (contd.)

Acres	0		100		200		300		400	
	Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares
4000	1618	73.83	1659	20.68	1699	67.52	1740	14.37	1780	61.22
5000	2023	42.29	2063	89.14	2104	35.98	2144	82.83	2185	29.67
6000	2428	10.75	2468	57.59	2509	4.44	2549	51.29	2589	98.13
7000	2832	79.21	2873	26.05	2913	72.90	2954	19.74	2994	66.59
8000	3237	47.66	3277	94.51	3318	41.36	3358	88.20	3399	35.05
9000	3642	16.12	3682	62.97	3723	9.81	3763	56.66	3804	3.51
10000	4046	84.58								

Acres	500		600		700		800		900	
	Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares	Hectares	Ares
4000	1821	8.06	1861	54.91	1902	1.75	1942	48.60	1982	95.44
5000	2225	76.52	2266	23.36	2306	70.21	2347	17.06	2387	63.90
6000	2630	44.98	2670	91.82	2711	38.67	2751	85.51	2792	32.37
7000	3035	13.44	3075	60.28	3116	7.13	3156	53.97	3197	0.83
8000	3439	81.89	3480	28.74	3520	75.58	3561	22.43	3601	69.28
9000	3844	50.35	3884	97.20	3925	44.04	3965	90.89	4006	37.75

News & Views

Recent Notifications

(1) Motor Transport

No. S.O. 3178, Dated 28th December, 1960.

In exercise of the powers conferred by Sub-section (3) of section 1 of the Standards of Weights and Measures Act, 1956 (89 of 1956), the Central Government hereby appoints the first day of January, 1961 as the date on which the provisions of the said Act, shall come into force in respect of :—

1. motor transport undertakings, in so far as they undertake the transport by road of passengers, animals or goods;

2. undertakings engaged in the manufacture of motor vehicles, or spare parts of motor vehicles in so far as they relate to the purchase or sale of motor vehicles or spare parts thereof;

and

3. transactions involving the sale or purchase of motor vehicles or spare parts thereof.

S.O. No. 3179, Dated 28th December, 1960.

In exercise of the powers conferred by Section 14 of the Standards of Weights and Measures Act, 1956 (89 of 1956), the Central Government hereby permits, in respect

of the classes of undertakings and of transactions referred to in the Notification of the Government of India in the Ministry of Commerce and Industry, S.O. No. 3178, dated the 28th December, 1960, the continuance of the use, for a period of one year from the first day of January, 1961, of any weight or measure which, immediately before that day was in use in respect of, the said classes of undertakings or of transactions.

S.O. No. 3180, Dated 29th December, 1960.

In exercise of the powers conferred by Sub-section (2) of Section 1 of the Motor Vehicles (Second Amendment) Act, 1960, (51 of 1960), the Central Government hereby appoints the first day of January, 1961, as the date on which the said Act, shall come into force.

Ministry of Transport & Communications
Department of Transport
(Transport Wing)

(2) Tobacco Industry

S.O. No. 3115, Dated 22nd December, 1960

In exercise of the powers conferred by Sub-section (3) of section 1 of the Standards of Weights and Measures Act, 1956 (89 of 1956), the Central Government hereby appoints the 1st day of January, 1961, as the date on which the provisions of the said Act shall come into force in respect of undertakings engaged in the processing of tobacco leaf or the manufacture of tobacco, in so far as they undertake the purchase or sale of tobacco leaf or manufactured tobacco.

(3) Payment of Wages (Mines) Amendment Rules, 1960.

S.O. No. 1369 PWA/Mines/Rules/Am, Dated 21st December, 1960.

In exercise of the powers conferred by Sub-sections (2), (3) and (4) of section 26,

read with section 24, of the Payment of Wages Act, 1936 (4 of 1936), the Central Government hereby makes the following rules to further amend the Payment of Wages (Mines) Rules, 1956, the same having been previously published as required by Sub-Section (5) of the said section 26, namely:—

1. These rules may be called the Payment of Wages (Mines) Amendment Rules, 1960.
2. In the Payment of Wages (Mines) Rules, 1956, hereinafter referred to as the said rules, in sub-rule (2) of rule 17 for the words, figures and brackets "the Measures of Length Act, 1889 (2 of 1889) and the Standards of Weights Act, 1939 (9 of 1939)" the words, figures and brackets "The Standards of Weights and Measures Act, 1956 (89 of 1956)" shall be substituted.
3. In the said rules, in rule 22, for the word and figures "17 and 18", the word and figures "17, 18 or 19" shall be substituted.

Ministry of Labour and Employment

(4) Ports & Shipping

S.O. No. 261, Dated the 31st January, 1961.

In exercise of the powers conferred by section 14 of the Standards of Weights and Measures Act, 1956 (89 of 1956), the Central Government hereby makes the following amendment in the Notification of the Government of India in the Ministry of Commerce and Industry No. S.O. 1899, dated the 1st August, 1960, (relating to the permission of the continuance of the use of any weight or measure which, immediately before the 1st August, 1960, was in use in respect of Ports and Shipping industry), namely:—

In the said Notification, for the words "for a period of six months", the

words "for a period of one year" shall be substituted.

(For Notification No. S.O. 1899, dated 1st August, 1960, see *Metric Measures*, September, 1960, p. 23).

(5) *Imports and Exports Control*

On the subject of introduction of metric system of weights and measures in Import and Export Trade Control a reference is invited to Public Notice No. 11-ITC(PN)/60, dated the 18th January, 1960, issued by the Ministry of Commerce and Industry, Government of India, stating that the metric system of weights and measures for the purposes of for Import and Export Trade Control will be adopted from August, 1960.

2. The Customs Duties and Cesses (Conversion to Metric Units) Act, 1960, has come into force from the 1st October, 1960. Public Notice No. 119-ITC(PN)/60, dated 4th October 1960 read with Public Notice No. 119-ITC (PN)/60 dated 27th January, 1961, reads as follows and states that the metric system will, be adopted from this date for the purposes of Import and Export Trade Control also to the extent below :—

(i) All shipping documents relating to imports, exports and re-exports will be in Metric Units. Shippers in foreign countries such as United Kingdom or United States of America, will, however, have the option to use British Units in their shipping documents, invoices etc.

(ii) Where licensing is on the basis of quantity e.g. Raw Jute etc., new quota certificate and licence will be issued in Metric Units; even otherwise quantities in licences will be shown in Metric Units, wherever necessary.

(iii) While applying for licences importers and exporters will indicate quantities in Metric Units.

Movement of Weights by Rail

From October 1, 1960 the use of weights other than metric weights has become illegal in a number of areas. Some of the States

and Union Territories do not have enough manufacturers of weights and measures and have to depend on weights brought from other States for the enforcement of the metric system. One of the difficulties in getting weights from other States was that no priority was accorded on the Railways to the transport of metric weights. The Railway Board have now agreed to raise the priority assigned to the movement of weights and measures, and issued necessary instructions to the General Managers of all Indian Government Railways to arrange movement of weights under the higher priority item 'D' of the Preferential Traffic Schedule, when offered for despatch by the consignors on the respective Railways.

Working Standard Length Measures

The general specifications for the working standards length measures (line standards) were generally approved in the third meeting of the Sub-Committee for Reference, Secondary and Working Standard Weights and Measures (EDC 41:1) of the Indian Standards Institution. The following general characteristics were agreed upon :—

- (1) *Material*: Pure nickel (Cobalt free) 99.0 Percent, min, nickel.
- (2) *Section*: Rectangular 30 mm × 15 mm.
- (3) *Overall Length*: 1 030 mm (Nominal).
- (4) *Graduated Length*: 1 010 mm.
- (5) *Finish*: Bright.
- (6) *Graduations*: —10 mm to +10mm graduated in millimetres, and +10 mm to 1 000 mm graduated every 5 millimetres.
- (7) *Thickness of Graduation Marks*: Thickness of graduation marks to be normally 60 to 70 microns. No lines to be less than 50 microns or more than 80 microns.
- (8) *Length of Graduation Marks*:
cm marks=8 mm.
5mm marks=5 mm.
mm marks=3 mm.

NEWS & VIEWS

- (9) *Tolerance*: Overall length (0 to 1 000 mm) ± 0.1 mm.
Between any two consecutive mm, 5 mm, cm and 10 cm marks = ± 0.05 mm.
- (10) *Figuring*: Height of numerals and letters = 3 mm approximately.
- (11) *Identification Marks*: Ashok Chakra and other identification marks to be put along centre line of the top surface.
- (12) *Hole for Stamping Plug*: Approximately 5 mm in diameter and 3 mm in depth (with slight taper).
- (13) *Stop for Aligning the End of the Metre Bar under Test*: This is to be provided only on 1 000 mm side.
- (14) *Cursor*: To be made from 'Perspex' or any other suitable plastic material of 3 mm thickness and suitable size, with 3 lines, right through, on the under side, 1mm apart.
- (15) *Magnifier*: This shall have ×3 to ×4 magnification.
- (16) *Box*: Suitable teak wood box with lock, carrying handle and a name plate.

The Mint at Bombay has already started production of the measures to the above specifications.

Pakistan Change-over to Decimal Currency

From 1 January 1961, Pakistan has switched over to decimal coinage.

Under the new system the rupee is divided into 100 paisa instead of 16 annas or 64 pice or 192 pies as in the old system. Between the

rupee and the paisa there are 4 intermediate coins of the value of 50, 25, 10 and 5 paisa.

Only three new coins of the denominations of 1 paisa, 5 paisa and 10 paisa were introduced on 1 January. The new rupee, 50 paisa and 25 paisa coins would be introduced later. Till then, the existing rupee, 1/2 rupee and 1/4 rupee coins would continue to be common to both the present and the new coinage systems as they are the exact equivalents of 100 paisa, 50 paisa and 25 paisa respectively.

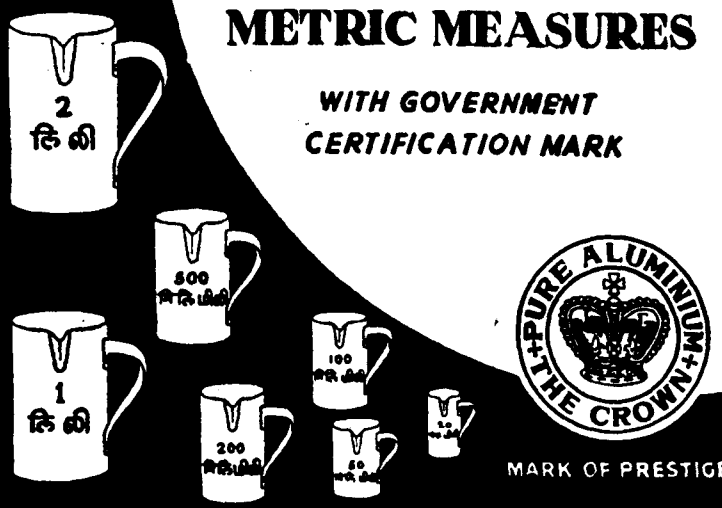
The present 2 anna, 1 anna, 1/2 anna, 1 pice and pie coins would not have exact equivalents in the new coins but their place would be taken by 10 paisa, 5 paisa and 1 paisa. The existing coins, along with the new coins, would continue to be legal for 3 years. The principle of rounding off is that 1/2 paisa and less will be ignored and more than 1/2 paisa will be treated as 1 paisa.

All Government accounts would be maintained in terms of the new currency from 1 January, 1961. The banks and commercial houses have been advised to switch over to the new currency from 1 January 1961.

It has already been announced that the metric system of weights and measures will be introduced in Pakistan from 1 January 1962.

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Book Review

A HANDBOOK OF METRIC WEIGHTS AND MEASURES : (English)—Joginder Singh Bakshi, Weights and Measures Department, 455—Model Town, Yamuna Nagar, (Ambala), Punjab—Published by the Author, 1960, pp60, Price Rs. 1.50

The Inspector of Weights and Measures is the person who is most intimately and directly connected with the enforcement of metric weights and measures. And since the enforcement of weights and measures is being carried out with great persuasiveness, the onus of finding out the difficulties and solving them in practice falls on the Inspector. He, therefore, has wide knowledge of the problems of various types of trades and consumer interests. As such the 'Handbook of Metric Weights and Measures' written by Shri Bakshi, himself a weights and measures Inspector, reflects the field experience of the Weights and Measures Department and has turned out to be a valuable, handy guide which will help everybody.

The author has divided the book into 4 parts. The first part—why and wherefore—is treated in a question-answer fashion, in which questions like what is the metric system, why has India adopted it inspite of involving the expenditure of a few crores of rupees, what is its superiority and the nature of change-over have been briefly but directly answered. The second part deals with curiosities like the number of weights required for the change-over, weights of new coins, conversion of temperature and so on. The third part concerns

'Metric Weights and You'. In this again the author reverts to the question-answer form and answers precisely and to the point problems like how one can familiarize oneself with the new weights, the effect on prices, international names, the various types of metric weights for use, the relation between weights and measures, the prefixes and abbreviations, simple conversions and conversion factors. In the fourth part various types of tables needed in every day transactions are given with explanatory notes on how to use them. There are some 24 tables, some of which relate to conversion of prices, while others deal with conversion of weights and measures.

The Handbook is undoubtedly an excellent reference book and anybody who refers to it will find answers for most of the questions that arise when one is carrying out a transaction in metric units. It is particularly useful for the common man and being handy can be easily carried about for reference.

At present, however, the Handbook is available in English only. Its utility will be multiplied many times if it comes out in the Indian regional languages. It may be too much to expect the author who is also the publisher, to bring out these editions himself. The Government of Punjab may perhaps consider its translation and publication at least in Hindi and Punjabi. The Handbook is highly recommended to those who wish to keep themselves abreast of the reform.

Licensed Manufacturers, Dealers and Repairers of Weights and Measures(12)

Metric Measures has been publishing a series of lists of manufacturers, dealers and repairers of weights and measures, weighing and measuring instruments licensed by the Governments in the various States and Union Territories under their Weights and Measures (Enforcement) Act in their respective jurisdiction. This is the twelfth issue. The first list appeared in the March 1959 issue.

Progressively steps are being taken for licensing manufacturers, dealers and repairers in all States and further lists of licensees would be published in *Metric Measures* as this work progresses.

The number in brackets against the name of the State or Union Territory indicates the particular instalment number of the list of that State or Union Territory. The issues of *Metric Measures* in which previous lists appear are also shown suitably.

An analysis of the licensees, including the present list, shows that the total number of licensees in 14 States and 3 Union Territories is 540 manufacturers, 1653 dealers, and 484 repairers. The details of published information are as follows :

Sl. No.	State/Union Territory	Licensees		
		Manu- fac- turers	Dealers	Re- pairers
(1)	Andhra Pradesh	44	67	37
(2)	Assam	10	17	7
(3)	Bihar	20	69	34
(4)	Delhi	22	76	19
(5)	Gujarat	45	226	55
(6)	Himachal Pradesh	1	7	1
(7)	Kerala	9	219	12
(8)	Madhya Pradesh	3	160	4
(9)	Madras	79	210	37
(10)	Maharashtra	60	162	106
(11)	Mysore	37	232	27
(12)	Orissa	10	15	0
(13)	Punjab	27	92	21
(14)	Rajasthan	16	69	18
(15)	Tripura	0	10	0
(16)	Uttar Pradesh	92	222	51
(17)	West Bengal	65	200	55
		540	1,653	484

LICENSED MANUFACTURERS, DEALERS & REPAIRERS OF WEIGHTS & MEASURES (12)

ASSAM (I)

The following is a list of manufacturers, dealers Measures (Enforcement) (Amendment) Act, 1960 and and repairers licensed under the Assam Weights and Rules framed thereunder.

Manufacturers

Sl. No.	Name and Address of Manufacturer	Details of Articles Manufactured
(1)	Agarwal & Agarwal, Private Ltd., Dibrugarh	Weights
(2)	Alluminium Industries (Assam) Private Ltd., Tinsukia	Weighing and Measuring Instruments
(3)	Annapurna Rice & Oil Mills, Gauhati	Weights, Measures, Weighing and Measuring Instruments.
(4)	Assam Steel & Wire Products, Tinsukia	Weights, Measures, Weighing and Measuring Instruments.
(5)	Hanuman Industries, Fancy Bazar, Gauhati	Weights, Weighing & Measuring Instruments
(6)	R. B. Industries, Fancy Bazar, Gauhati	Weights
(7)	Jayshree Assam Engineering Company, Dhubri	Weights
(8)	More Industrial Corporation, Nowgong	Weights and Measures
(9)	Siotia Steel Trunk and Bucket Factory, Fancy Bazar, Gauhati	Measures
(10)	K. C. Trunk and Bucket Factory, Gauhati	Measures

Dealers

Serial No.	Name and Address of Dealer	Details of Articles Sold
(1)	Annapurna Rice & Oil Mills, Gauhati.	(Weights, Measures, Weighing and Measuring Instruments)
(2)	Dhing Pioneer, Multipurpose Co-operative, Dhing, Nowgong.	
(3)	Durga-Trunk, Bucket & Ridging Works, Haibargaon, Nowgong.	
(4)	Ganeshlal Bagri, Poona Bazar, Imphal.	
(5)	Hariprasad, Goswami, B. Com., Bongaigaon Town.	
(6)	R. B. Industries, Fancy Bazar, Gauhati.	
(7)	Jayshree (Assam), Engineering Co., Dubri.	
(8)	Kayaliram Tarachand, Haibargaon, Nowgong.	
(9)	Khetulal Todi, Haibargaon, Nowgong.	
(10)	Nandalal Bhawarlal, Haibargaon, Nowgong.	
(11)	Rangalal Bagarie & Others, Haibargaon, Nowgong.	
(12)	Shantilal Jain & Co., Fancy Bazar, Gauhati.	
(13)	Steelnagar Hardware Stores, Tinsukia.	
(14)	Sundaram Gaurishankar, G. S. Road, Shillong.	
(15)	Sundaram Gaurishankar, Fancy Bazar, Gauhati.	
(16)	Todi Motor & Cycle Co., Tinsukia.	
(17)	K. C. Trunk & Bucket Factory, Fancy Bazar, Gauhati.	

Repairers

Sl. No.	Name and Address of Repairer	Details of Article Repaired
(1)	Alilur Rahman, C/o B. O. C. (I.T.) Ltd., Digboi	Weighing and Measuring Instruments
(2)	Annapurna Rice & Oil Mills, Gauhati	Weights, Measures, Weighing and Measuring Instruments
(3)	J. C. Bhattacharjee, C/o, B. O. C. (I.T.) Ltd., Digboi, Assam	Weighing and Measuring Instruments
(4)	D. C. Choudhury, Marketing Engineer, C/o, B. O. C. (I.T.) Ltd., Digboi.	Weighing and Measuring Instruments
(5)	C. E. De Mello, Asst. Marketing Engineer, C/o, B. O. C. (I.T.) Ltd., Digboi.	Weights and Measuring Instruments
(6)	B. S. Gill & Co., Namrup, Lakhimpur Dist.	Weighing and Measuring Instruments
(7)	Standard Vacuum Oil Company, Station Road, Gauhati	Weights and Measures

GUJERAT (I)

List of licensed Manufacturers, dealers and repairers licensed under the Bombay Weights and Measures (Enforcement) Act, 1958.

Manufacturers

Serial No.	Name and Address of Manufacturer	Details of Articles Manufactured
(1)	Adler Sewing Machine Works Near Matar Bhavani Vav, Asarwa, Ahmedabad.	Weights
(2)	Amin Engineering and Moulding Company Saraspur, Kadiawad, Ahmedabad-2.	Weights
(3)	Anantrai Hirachand Doshi, Amratwel Zampa, Savarkundla	Beam Scales Class C & D
(4)	Arjan Valji & Sons, Nadi Kantha, Savarkundla	Beam Scales
(5)	Associated Scales Industries Hathibhai Street, Savarkundla	Beam Scales
(6)	V. K. Engineering Works, Shahpur Panjra Poles, Dariapur Garden Road, Shop No. 3396/1, Ahmedabad.	Weights
(7)	M. M. Esmailji, Prop. Modern Measuring Equipment, House No. 4/4623, Tayebi Mohalla, Surat.	Beam Scales
(8)	Gandhi Scale Manufacturing Co., Sheth Street, Savarkundla	Beam Scales
(9)	Gujarat Engineering Works, Lal Gin, Station Road, Broach	Weights
(10)	Hari Metal Works, Mandavi Bazar, Lunawada	Weights
(11)	K. C. Industries, Near Bethak, Behind Anand Ice Factory, Anand	Weights
(12)	Jahwar Engineering Works and Casting Co., Bhakti Nagar Station Road, Rajkot.	Weights
(13)	Jeram Trikam Ravji & Brothers, Nadi Kantha, Savarkundla	Beam Scale Class C
(14)	Jewellery Scales Works, Lehipura, New Road Golvad Gali, Krishna Kunj, Baroda.	Beam Scales Class C & D
(15)	Jivan Nanji & Sons, Nadi Kantha, Savarkundla.	Beam Scales
(16)	Kansara Brothers, Gujarat Hosiery Mill Compound, Rakhial Road, Ahmedabad.	Weights
(17)	Khoda Natha, Nadi Kantha, Savarkundla	Beam & Scales Class C & D
(18)	Lotus Brass Works, Opp: Udyog Bazar, Bhaktinagar, Station Road, Rajkot.	Weights
(19)	Luhar Bhavan Mulji, Dhobi Sberi, Savarkundla	Beam Scales Class C & D
(20)	Luhar Govind Mulji, Nadi Kantha, Odwado, Savarkundla	Beam Scales Class C & D
(21)	Luhar Govind Vira, Manibhai Road, Savarkundla	Beam Scales Class C & D
(22)	Luhar Hakabhai Kanji, Manibhai Road, Savarkundla	Beam Scales Class C & D
(23)	Luhar Jiva Gopal & Co., Amratwel Gate, Savarkundla	Beam Scales Class C & D
(24)	Luhar Karsan Ramji & Sons, Popat Bogha Street, Savarkundla	Beam Scales Class C & D
(25)	Luhar Mavji Dadwa, Mota Bhamodra, Via, Savarkundla	Counter Scales
(26)	Luhar Mulji Naran, Manibhai Road, Savarkundla	Beam Scale Class C & D
(27)	Luhar Ramji Velji Keshav, Nadi Kantha, Savarkundla	Beam Scale Class C & D
(28)	Luhar Mavji Velji, Devla Gate, Savarkundla	Beam Scale Class C & D
(29)	Madha Mavji & Company, Nadi Kantha, Savarkundla	Beam Scales Class C & D
(30)	Manubhai Dvadhbhai Outside Raipur Gate, Kankaria Road, Trimbak Dehla Shop No. 431/4, Ahmedabad	Beam Scales Class C & B
(31)	Morarji Dhanji & Brother, Zinzuda Gate, Savarkundla	Beam Scales Class C & D
(32)	Luhar Mulji Trikam Ravji Co., Nadi Kantha, Savarkundla	Beam Scales Class C & D
(33)	Narsi Giga & Co., Nadi Kantha, Savarkundla	Weights
(34)	Noble Scale Repairing Works, Gheekanta Road, Bhutni Ambli, Ahmedabad.	Weights
(35)	Pioneer Engineering Works Naroda Road, Ahmedabad	Weights
(36)	Raja Gordhan & Co., Nadi Kantha, Savarkundla	Beam Scale Class C & D
(37)	Ranchhodebhai Fakirbhai Panchal, Lal Akhoda, Near Sarasia Tank, Fatepura, Baroda.	Weights
(38)	Sarvodaya Khadi Saranjam Sangh, Harijan Ashram, Sabarmati, Ahmedabad.	Weights
(39)	Shah Moulding Works, Sir Chinubhai Baronet Compound, Shahpur, Ahmedabad.	Weights
(40)	Shreyas Engineering Corporation, Station Road, Anand	Weights
(41)	Sidhapura Scale Industries, Jamadar Pada, Savarkundla	Beam Scales Class C & D.
(42)	Sinroja Brass Works, Lakhajiraj Para, Street No. 2, Rajkot	Brass Bullion Weights
(43)	Vasant Engineering Limited, Pratap Nagar, Baroda	Weights
(44)	Vithaldas Dahyabhai Panchal, 1341/2, Khadia, Madan Gopal's Haveli, Near Pipla Pole, Ahmedabad.	Weights
(45)	Yadav Brass Works, Bhaktinagar Station Plot, Near Vithal Chhagan Factory, Rajkot.	Weights

LICENSED MANUFACTURERS, DEALERS & REPAIRERS OF WEIGHTS & MEASURES (12)

Dealers

Sl. No.	Name and Address of Dealer	Details of Articles Sold
(1)	A. Dinkarrai and Bros., Lokhand Bazar, Bhavnagar	Weights and Beam Scales.
(2)	A. Salehbhai & Co., Outside Golwadi Gate, Viramgaum, Dist. Ahmedabad.	Weights, Weighing and Measuring Instruments.
(3)	Abbasbhai Esmailji, Lokhand Bazar, Station Road, Viramgaum	Weights, Weighing and Measuring Instruments
(4)	Abdulbhai Sakurbhai, Dabhad Taluka Kheralu, Dist. Mehsana	Weights, Weighing and Measuring Instruments
(5)	Abdulkadar Abdulhusein, Rangwala, 1166, Bangadi Bazar, Pankore Naka, Ahmedabad.	Weights, Weighing and Measuring Instruments
(6)	Abdulrasul Amibhai Zaiwala Vohorwad, Bazar, Prantij, District Sabarkantha.	Weights, Weighing and Measuring Instruments.
(7)	Abdulali Bodalbhai & Sons, Mahatma Gandhi Road, Rajkot	Weights and Beam Scales
(8)	Abdulrahim Firmohamad Memon, Sadar Bazar, New Deesa	Weights, Weighing and Measuring Instruments
(9)	Abdulhusein Valibhai Lokhandwala, Near Sharda School, Station Road, Anand.	Weights, Weighing and Measuring Instruments
(10)	Adamji Pirbhai & Sons, Garedia Kuva Road, Rajkot	Weights & Beam Scales
(11)	Ahmed Shujaidain & Sons, Nava Bazar, Miyagam	Weights, Weighing and Measuring Instruments
(12)	Ahamadalli Adamji Gujar Bazar, Rajkot	Weights and Beam Scales.
(13)	Akbarali Abdulali Lokhandwala, Chhoti Bazar, Palanpur	Weights, Weighing and Measuring Instruments
(14)	Akbarali Abdulali Vadgamwala Near Vohra Musafirkhana Library, Deesa, Dist. Banaskantha.	Weights, Weighing and Measuring Instruments
(15)	Akbaralli Mohamadalli Gujar Bazar, Rajkot	Weights and Beam Scales
(16)	Alexandra Scale Co., H.O. 115/1, Pankore Nakak, Ahmedabad-1	Weights, Weighing and Measuring Instruments
(17)	Ambalal Damodardas Shah, Bazar, Thasra, Dist. Kaira	Weights, Weighing and Measuring Instruments
(18)	Ambalal Shamaldas Shah, Pattayya Bazar, Kanadwani, Dist. Kaira	Weights, Weighing and Measuring Instruments
(19)	Amin Engineering and Moulding Co., Saraspur, Kadiwad, Ahmedabad	Weights, Weighing and Measuring Instruments
(20)	Amirbhai Miyabhai Patel, Kapad Bazar, Viramgam	Weights, Weighing and Measuring Instruments
(21)	Aminbhai Hajirahimbhai, Bazar, Harli, Dist. Mehsana	Weights, Weighing and Measuring Instruments
(22)	Amratlal Arjunbhai & Bros., Sardar Patel Road, Junagadh	Weights and Beam Scales
(23)	Amthalal M. Prajapati, Kheda-Falia, Vejalpur, Dist. Panchmahals	Weights, Weighing and Measuring Instruments
(24)	Amulakhdas Hargovandas Shah, Luhar Chakla, Unjha, Dist. Mehsana	Weights, Weighing and Measuring Instruments
(25)	Anantrai Hirachand Doshi, Amratwal Zampa, Savarkundla	Weights and Beam Scales
(26)	Arjan Valji and Sons, Nadi Kantha, Savarkundla	Weights and Beam Scales
(27)	S. Asgarali, Umreth	Weights, Weighing and Measuring Instruments
(28)	Asgaralli Kamruddin, Kadia-Lane, Gondal	Weights, Weighing and Measuring Instruments
(29)	Ashabhai Nathabhai Desai, Station Road, Petlad	Weights, Weighing and Measuring Instruments
(30)	Associated Scale Industries, Station Road, Savarkundla	Beam Scales
(31)	Avery Co. of India Private Ltd., 2069 Raikhand, Ahmedabad.	Weights, Weighing and Measuring Instruments
(32)	Azarali Zafarali, Nava Bazar, Baroda	Weights, Weighing and Measuring Instruments
(33)	Babubhai N. Mistry, Mahidharpura Opp: Manirasheri Narshi Mandir Chawl, Surat.	Weights, Weighing and Measuring Instruments
(34)	Baaji Laxmidas, P. O. Vanda, Via Savarkundla	Beam Scales
(35)	Becharadas and Bros. Bhayavadar	Weights and Beam Sales
(36)	Bhaichand Maganal Panchal, Talod, Dist. Sabarkantha	Weights, Weighing and Measuring Instruments
(37)	Bharat Cane and Hardware Mart, Kapadia Bazar, Ahmedabad-2	Weights, Weighing and Measuring Instruments.
(38)	R.A. Bhayane & Co., Iron Bazar, Bhavnagar	Weights & Beam Scales.
(39)	Bhogilal Mathuradas & Co., Outside Three Gate, Patan	Weights, Weighing and Measuring Instruments.
(40)	C. AND G. Chokshi, Haveli Street, Rajkot	Weights and Beam Scales.
(41)	Chandbhai Rajebhai Sheth, Kansara Bazar, Dabhoi	Weights, Weighing and Measuring Instruments.
(42)	Chandrakant Taralal Soni, Padipole Ambaji Mata's Corner, Baroda	Weights, Weighing and Measuring Instruments.
(43)	Chandulal Garbaldas Solwala, New Station Road, Rajpipla	Weights, Weighing and Measuring Instruments.
(44)	Chandulal Mohanlal Shah, Jhagadia	Weights, Weighing and Measuring Instruments.
(45)	Chaturbhai N. Patel, Kandav, Kapadwanj	Weights, Weighing and Measuring Instruments.
(46)	Chemdyes Corporation, Kotharia Naka, Rajkot	Weights and Beam Scales.
(47)	Chhotalal Ramchand Panchal, Amla Chauta, Mehsana	Weights, Weighing and Measuring Instruments.
(48)	Chimanlal Parshottamdas, Lal Bazar, Sanand, District Ahmedabad	Weights, Weighing and Measuring Instruments.
(49)	Choksee Bros. Mandi Bazar, Sidhpur, District Mehsana	Weights, Weighing and Measuring Instruments.
(50)	Dahyabhai Punjabhai Oza, Near Post Office, Kalol (N.G.)	Weights, Weighing and Measuring Instruments.
(51)	Damjibhai Narayanbhai Luhar, Manilal Chunilal's Madh, Kothariwada, Idar Distt. S.K.	Weights, Weighing and Measuring Instruments.
(52)	Dhirajlal Chunilal Soni, Near Champaner Darwaja, Baroda	Weights, Weighing and Measuring Instruments.
(53)	Dhulalal Amolakh Patwa, Simla Gate, Palanpur	Weights, Weighing and Measuring Instruments.
(54)	Dodia Scale Co., Bhanbhivas Corner, Idar	Weights, Weighing and Measuring Instruments.
(55)	Durlabhji Devshi & Bros., Gujar Bazar, Rajkot	Weights and Beam Scale.

Dealers (Contd.)

Sl. No.	Name and Address of Dealer	Details of Articles Sold
(56)	V.K. Engineering Works, 35, Masketi Market, Ahmedabad ..	Weights, Weighing and Measuring Instruments.
(57)	Fakirchand Vahajibhai, Nava Bazar, Baroda (Contractor) ..	Weights, Weighing and Measuring Instruments.
(58)	F. Jamaludeen & Bros., Wadgamwala, Bazar, New Deesa ..	Weights, Weighing and Measuring Instruments.
(59)	Gandhi & Sons, Rajkot ..	Weights, and Beam Scales.
(60)	Gordhandas Dharamshi, Jamjodhpur ..	Weights, and Beam Scales.
(61)	Govindlal Haribhai, Makwana Falia, Station Road, Dabhoi ..	Weights, Weighing and Measuring Instruments.
(62)	Gujarat Hardware Stores, Dhansura, District Sabarkantha ..	Weights, Weighing and Measuring Instruments.
(63)	Gujarat Scale Mart, 1119, Pankore Naka, Ahmedabad ..	Weights, Weighing and Measuring Instruments.
(64)	Gujarat Scale Repairing Works, Hansla Chachar, Patan ..	Weights, Weighing and Measuring Instruments.
(65)	Gulabdas V. Mehta, Kansara Bazar, Rajkot ..	Weights and Beam Scales.
(66)	Gulamohammad Ganibhai Malekji, Modasa, Distt. Sabarkantha ..	Weights, Weighing and Measuring Instruments.
(67)	Gulamabbas Valibhai Vohra, Vorvad, Station Road, Umreth ..	Weights, Weighing and Measuring Instruments.
(68)	H.R. Sajapoorwala, Saiphy Mohalla, Surat ..	Weights, Weighing and Measuring Instruments.
(69)	Haji Nabibhai Aminhai Malekji, Modasa, District Sabarkantha ..	Weights, Weighing and Measuring Instruments.
(70)	Haji Umarbhai Jivabhai Bhurawala, Bazar, Prantij, District Sabarkantha ..	Weights, Weighing and Measuring Instruments.
(71)	Haribhai Bavabhai, Jamnagar ..	Weights and Beam Scales.
(72)	Harilal Maganlal Shah, Kansara Bazar, Dholka ..	Weights, Weighing and Measuring Instruments.
(73)	Hasanali Amiji & Bros., Gujar Bazar, Rajkot ..	Weights and Beam Scales.
(74)	Hasanali Sulemanji Lokhandwala, 286, Limda Chowk, Surat ..	Weights, Weighing and Measuring Instruments.
(75)	J. Himatlal & Co., Lokhand Bazar, Bhavnagar ..	Weights and Beam Scales.
(76)	Himatlal Ujamshi, Zaveri, Mandvi Chowk, Rajkot ..	Weights and Beam Scales.
(77)	Hiptulabhai Mulla Abdulhusein, Lokhandwala & Co., Char Rasta, Broach ..	Weights, Weighing and Measuring Instruments.
(78)	Hiralal Bhurabhai, Mandvi Chowk, Rajkot ..	Weights and Beam Scales.
(79)	Hiralal Lakhamshi, Shroff Bazar, Bhuj (Kutch) ..	Weights and Beam Scales.
(80)	I.G. Patel, 1147/1, Pankore Naka, Ahmedabad-I ..	Weights, Weighing and Measuring Instruments.
(81)	Ibrahim Abdul Kayum, Lokhand, Bazar, Bhavnagar ..	Weights and Beam Scales.
(82)	Ibrahim Alibhai Memon, Bazar, Bhabhar ..	Weights, Weighing and Measuring Instruments.
(83)	Ibrahim Hamidbhai Malekji, Bazar, Modasa ..	Weights, Weighing and Measuring Instruments.
(84)	Ibrahim Noorbhai Makati & Bros., Sanghadia Bazar, Jamnagar ..	Weights, Beam Scales.
(85)	Ideal Agency, Gandhidham ..	Weights, Weighing and Measuring Instruments.
(86)	K.C. Industries, Near Mahaprabhuji's Bethak, Anand ..	Weights, Weighing and Measuring Instruments.
(87)	G.M. Imajli, Kanpith, Chhakapir gali, Surat ..	Weights, Weighing and Measuring Instruments.
(88)	Isvarlal Gopalji, Bhujwala, Rajkot ..	Weights and Beam Scales.
(89)	Jagdish Industries, Pathak & Co., Bodeli ..	Weights, Weighing & Measuring Instruments.
(90)	Jaihind Iron Works, Bazar, Dehgam ..	Weights, Weighing & Measuring Instruments.
(91)	Jainulbhai Abdulkhadar & Co., Mota Bazar, Navsari ..	Weights, Weighing & Measuring Instruments.
(92)	Janta Stores, Ranjit Road, Jamnagar ..	Weights and Beam Scales.
(93)	Jashabhai Chaturbhai Patel, Manrodi Sani Khadki, Nadiad ..	Weights and Measuring Instruments.
(94)	Jayantilal Nandlal Patel, Khar Gate, Bhavnagar ..	Weights and Beam Scales.
(95)	Jeram Trikam Ravji & Bros., Savarkundla ..	Beam Scales.
(96)	Jethalal Somalal Mistry, Kansara Bazar, Dholka ..	Weights, Weighing and Measuring Instruments.
(97)	Jethalal Shivram, Bazar, Chansma, District Mehsana ..	Weights, Weighing and Measuring Instruments.
(98)	Jivan Nagji & Sons, River Bank, Savarkundla ..	Beam Scales.
(99)	Jwellery Scale Works, Laheripura, New Road, Golvad Naka, Krishna Kunj, Baroda ..	Weights, Weighing and Measuring Instruments.
(100)	Kamlesh Iron and Steel Works, Bharatkhand Cotton Mills Compound, Naroda Road, Block No. 3512, Ahmedabad-II ..	Weights, Weighing & Measuring Instruments.
(101)	Kamruddin Haji Maulabh & Sons, 1178/1, Pankore Naka, Ahmedabad ..	Weights, Weighing & Measuring Instruments.
(102)	Kansara Brothers, Gujarat Hosiery Mills Compound, Rakhial Road, Ahmedabad ..	Weights, Weighing & Measuring Instruments.
(103)	Kantilal Bhogilal & Co., Near Kundvav, Kapadwanj ..	Weights, Weighing and Measuring Instruments.
(104)	Kantilal Manilal Shah, Sathamba, District Sabarkantha ..	Weights, Weighing and Measuring Instruments.
(105)	Kantilal Sonabhai Patel, 26, Lokhand Bazar, Ahmedabad-I ..	Weights, Weighing and Measuring Instruments.
(106)	Kapurchand Panchand Mehta, Para Bazar, Rajkot ..	Weights, & Beam Scale.
(107)	Karanchi Hardware Stores, Gujar Bazar, Rajkot ..	Weights & Beam Scales.
(108)	Karsan Ramji & Sons, Savarkundla ..	Beam Scales.
(109)	Keshavlal Gordhandas Bhatt, Near Kot Darwaja, Dakor ..	Weights, Measures, Weighing and Measuring Instruments.
(110)	Krishnalal Chaturbhai Patel, Hardware Merchant, Harij ..	Weights, Measures, Weighing and Measuring Instruments.

Dealers (Contd.)

Serial No.	Name and Address of Dealer	Details of Articles Sold
(111)	Krishna Hardware Stores, Dhansura, District Sabarkantha ..	Weights, Measures, Weighing and Measuring Instruments.
(112)	Kumar Stores, Hinglanchanhar, Patan ..	Weights, Measures, Weighing and Measuring Instruments.
(113)	Kurbhusen Ibrahimibhai, Bazar, Borsad ..	Weights, Measures, Weighing and Measuring Instruments.
(114)	Lalibhai Samjibhai Luhar, City Danapith, Opp. Municipal Shop No. G.2/2924, Ahmedabad ..	Weights, Weighing and Measuring Instruments.
(115)	Laxmanbhai Purshottamdas & Co., Lal Darwaja, Visnagar ..	Weights, Measuring and Weighing Instruments.
(116)	Luhar Bhimji Devraj, Nava Naka, Main Road, Palitana ..	Beam Scales.
(117)	Luhar Chhaganlal Haribhai, P.O. Vanda ..	Beam Scales.
(118)	D.S. Lahar & Bros. Co., Opp. Padsha Pole Relief Road, Ahmedabad ..	Weights, Weighing and Measuring Instruments.
(119)	Luhar Iswarlal Maganlal & Bros., Vallabhbhai Patel Road, Junagadh ..	Weights and Beam Scales.
(120)	Luhar Kanji Jethabhai, Burdhan Chowk, Jamnagar ..	Weights and Beam Scales.
(121)	Luhar Khoda Natha, Near River Bank, Savarkundla ..	Beam Scales.
(122)	Luhar Manji Dadva, Mota Bhamodra, Via Savarkundla ..	Beam Scales.
(123)	Luhar Meghaji Chhagan, Devla Gate, Savarkundla ..	Beam Scales.
(124)	Luhar Mulji Trikam Ravji & Co., Nadi Kantha, Savarkundla ..	Beam Scales.
(125)	Luhar Nanji Mulji, Chital ..	Beam Scales.
(126)	Luhar Narayan Devraj, Nava Naka, Main Road, Palitana ..	Beam Scales.
(127)	Luhar Narshi Giga & Co., Nadi Kantha, Savarkundla ..	Beam Scales.
(128)	Luhar Nanji Purshottam, Chital ..	Beam Scales.
(129)	Luhar Nanji Velji, Devla Gate, Savarkundla ..	Beam Scales.
(130)	Luhar Narshidas Purshottam & Sons, Opp. Kabutarkhana, Chital ..	Beam Scales.
(131)	Luhar Ranchhod Punja, Savarkundla ..	Beam Scales.
(132)	Luhar Ravji Madhavji, Luhar Sar, Jamkhambhali ..	Beam Scales.
(133)	Luhar Valji Ramji Makwana, Savarkundla ..	Beam Scales.
(134)	Madha Manji & Co., Nadi Kantha, Savarkundla ..	Beam Scales.
(135)	Madhu Home Industries, Sardar Patel, Road, Mandvi (Kutch) ..	Beam Scales.
(136)	Maganlal Agtharam Patel, 1177, Pankore Naka, Ahmedabad-I ..	Weights, Weighing and Measuring Instruments.
(137)	Maganlal Madhubhai Mistry, Nagarsheri, Mahichpura, Surat ..	Weights, Weighing and Measuring Instruments.
(138)	Mahakali Sewing Machines & Iron Works, Station Road, Nandol Dehgam, District Ahmedabad ..	Weights, Measuring and Weighing Instruments.
(139)	J.J. Makwara & Bros., Opp. Mirajini Medi, Jetpur ..	Weights and Beam Scales.
(140)	Manilal Jamnadas Shah, Behind Vegetable Market, New Deesa ..	Weights, Weighing and Measuring Instruments.
(141)	Mansukhbhai Jethabhai Sukhadia & Co., Bazar, Borsad ..	Weights, Weighing and Measuring Instruments.
(142)	Mechanical Supplying Syndicate, Panchal Blocks, Gheekanta Road, Ahmedabad ..	Weights, Weighing and Measuring Instruments.
(143)	Mehsana Iron and Brass Works, Choksi Bazar, Mehsana ..	Weights, Weighing and Measuring Instruments.
(144)	Mistry Jivraj Karamshi & Bros., Savarkundla ..	Beam Scales.
(145)	Modern Measuring Equipments, House No. 4/4623, Tayabi Mohalla, Surat ..	Weights, Weighing and Measuring Instruments.
(146)	Mohanlal Amratlal Shah, Devgad-Baria, District Panchmahals ..	Weights, Weighing and Measuring Instruments.
(147)	Mohanlal Babulal Thakkar, Surendranagar ..	Weights and Beam Scales.
(148)	Mohmadali Allibhai & Sons, Para Bazar, Rajkot ..	Weights and Beam Scales.
(149)	Mohmadhusen Dosabhai, Vohrawad, Umreth ..	Weights, Weighing and Measuring Instruments.
(150)	Mohmadali F. Kalawala, Nichwas Bazar, Godhra ..	Weights, Weighing and Measuring Instruments.
(151)	Mohanlal Hargovandas Mistry, Jaihind Kanta Bhandar, Station Road, Anand ..	Weights, Weighing and Measuring Instruments.
(152)	Mohmadally Sultanally Lokhandwala, Katopora Bazar, Broach ..	Weights, Weighing and Measuring Instruments.
(153)	S.K. Moiz & Co., Tower Road, Surat ..	Weights, Weighing and Measuring Instruments.
(154)	Motabhai Alibhai & Co., Lohkand Bazar, Viramgam ..	Weights, Weighing and Measuring Instruments.
(155)	Musaji Allibhai Bharmal & Sons, Garedia Kuva Road, Rajkot ..	Weights and Beam Scales.
(156)	Naginlal Dahyabhai Shah, Nava Bazar, Baroda ..	Weights, Weighing & Measuring Instruments.
(157)	Nandlal Damodardas Mistry, Near River Bank, Botad ..	Weights and Beam Scale.
(158)	Narayanji Purshottam Jodhani, Gokaldas Tejibhai Road, Mandvi ..	Weights and Beam Scale.
(159)	Narendrabhai Mangaldas Shah, Station Road, Unjha ..	Weights, Weighing and Measuring Instruments.
(160)	Nanalal Kuberdas & Sons, Station Road, Godhra ..	Weight, Weighing and Measuring Instruments.
(161)	Naradas Rannhoddas Patel, Pankore Naka, Ahmedabad-I ..	Weight, Weighing and Measuring Instruments.
(162)	National Hardware & Electric Stores, Chitari Bazar, Bombay ..	Weight, Weighing and Measuring Instruments.
(163)	National Metal and Measures Stores, 2760, Pankore Naka, Ahmedabad ..	Weight, Weighing and Measuring Instruments.

Dealers (Contd.)

Sl. No.	Name and Address of Dealer	Details of Articles Sold
(164)	Natvarlal Jivanlal Shah, Station Road, Halol, Dist. Panchmahals.	Weights, Weighing and Measuring Instruments.
(165)	Natvarlal L. Kantawala, Pirmashah Roja, Near Regal Cinema, Ahmedabad.	Weights, Weighing and Measuring Instruments.
(166)	Noble Scale Repairing Works, Gheokanta Road, Bhutni Ambali, Ahmedabad.	Weights, Weighing and measuring Instruments.
(167)	Oriental Industries, Gol Sheri, Patna	Weights, Weighing and measuring Instruments.
(168)	P. Keshavalal & Co., Dhrangadhra Utara, Surendranagar.	Weights, and Beam Scales.
(169)	Patel Bros & Co., Patna	Weights, Weighing and Measuring Instruments.
(170)	M.K. Patel & Co., 1169/1, Pankore Naka, Ahmedabad-1.	Weights, Weighing and Measuring Instruments.
(171)	Patel Kacharabhai Mohanlal 1169/1, Pankore Naka, Ahmedabad.	Weights, Weighing and Measuring Instruments.
(172)	R. F. Panchal, Opp. Bhadra Kacheri, Baroda	Weights & Weighing and Measuring Instruments.
(173)	Parshottamdas Pitambardas, Bhabhar, Distt. Banaskantha	Weights & Weighing and Measuring Instruments.
(174)	Poiner Engineering Works, Naroda Road, Ahmedabad.	Weights & Weighing and Measuring Instruments.
(175)	M.G. Poonawala Limda Chowk, Surat	Weights & Weighing and Measuring Instruments.
(176)	Popatlal Laxmichand Doshi, Vadali, Dist. Sabarkantha	Weights & Weighing and Measuring Instruments.
(177)	Prabhat Scale Works, Paththar Sadak, Palanpur	Weights & Weighing and Measuring Instruments.
(178)	Prakash Industries, Rajkot	Weights and Beam Scale.
(179)	Purshottam Ghelebbhai Gandhi, Porbandar	Weights and Beam Scales.
(180)	Purshottam Shivram Panchal Bazar, Chansma	Weights, Weighing and Measuring Instruments.
(181)	Pushpakant Jayantilal & Co., New Station Road, Rajpipla	Weights, Weighing and Measuring Instruments.
(182)	Raj Metal Depot, Kalupur Chaklali, Near Tower, Opp. Haji Ahmed's Pole, Ahmedabad.	Weights, Weighing and Measuring Instruments.
(183)	Raja Gordhan & Co., Savarkundla	Beam Scales.
(184)	Rajabali Bhujibhai Station Road, Botad	Weights and Beam Scales.
(185)	Rajnikant Mafatal Parikh, Near Kadi Masjid, Kapadvanj	Weights, Weighing and Measuring Instruments.
(186)	Ramanlal Keshavalal Shah, Juna Bazar, Idar	Weights, Weighing and Measuring Instruments.
(187)	Ratanlal Nanalal Kansara, Kansara Bazar, Umreth	Weights, Weighing and Measuring Instruments.
(188)	Ratilal Mohanlal Choksi, Kapad Bazar, Sidhpur	Weights, Weighing and Measuring Instruments.
(189)	Rudabhai Kanjibhai, Sardar Patel Road, Junagadh	Weights and Beam Scale.
(190)	Sabbir Bros, Botad	Weights and Beam Scale.
(191)	Sakarchand Bhikhabhai & Co., Bazar, Vijapur (N.G.)	Weights and Beam Scale.
(192)	Salebhai Abdulhusen Lokhandwala, 3749, Pankore Naka, Ahmedabad	Weights and Beam Scale.
(193)	Sankalchand K. Gandhi, Dholka	Weights and Beam Scale.
(194)	Saundin Rajabali, Bazar, Dehgam	Weights and Beam Scale.
(195)	Saurashtra Paints & Hardware Mart, Garedia Kuva Road, Rajkot	Weights and Beam Scale.
(196)	Shah Amarshi Pranjivan, Vallabbhai Patel Road, Junagadh	Weights and Beam Scale.
(197)	Shah Danmal Swami, Sadar Bazar, Deesa	Weights, Weighing and Measuring Instruments.
(198)	Shah Engineering Stores, Main Bazar, Nakhatrana (Kutch)	Weights and Beam Scales.
(199)	Shah Kantilal & Bros., Mangrol	Weights and Beam Scale.
(200)	Shah Bhogilal Devchand, New Vasan Market, Manek Chowk, Ahmedabad-1.	Weights, Weighing and Measuring Instruments.
(201)	Shah Moulding Works, Sir Chinubhai Baronet Compound, Shahpur, Ahmedabad.	Weights, Weighing and Measuring Instruments.
(202)	Shah Takurilal Bapulal, Gawara Road, Cambay	Weights, Weighing and Measuring Instruments.
(203)	Shanta Vijay Chain Factory, Savarkundla	Beam Scales.
(204)	Sinroja Brass Works, Gundavadi, Rajkot	Weights and Beam Scales.
(205)	Somalal D. Shah, Bazar, Jambusar	Weights, Weighing and Measuring Instruments.
(206)	Shankarlal Shivlal Thakkar, Talod	Weights, Weighing and Measuring Instruments.
(207)	Shantilal Jethalal Shah, Dholka	Weights, Weighing and Measuring Instruments.
(208)	Sheth Haji Usmanbhai Ahmedbhai Juna Bazar, Himatnagar	Weights, Weighing and Measuring Instruments.
(209)	Sheth Jayantilal Manilal, Jogidas Vithaldas Pole, Raopura, Baroda	Weights, Weighing and Measuring Instruments.
(210)	Standard Mechanical & Iron Works, Nava Bazar, Baroda	Weights, Weighing and Measuring Instruments.
(211)	T.C. Bors., Veraval	Weights and Beam Scale.
(212)	Tarmohmad Ibrahim Memon, Kansara Bazar, Petlad	Weights, Weighing and Measuring Instruments.
(213)	Tayabhai & Fidahusein & Co., Limda Chowk, Surat	Weights, Weighing and Measuring Instruments.
(214)	Trikamlal Manchharam Mistry, Three Gate, Patan	Weights, Weighing and Measuring Instruments.
(215)	Umedram Ranchhodas Patel, 1167, Pankore Naka, Ahmedabad	Weights, Weighing and Measuring Instruments.
(216)	Unjha Consumer Co-operative Store Ltd., Unjha	Weights, Weighing and Measuring Instruments.
(217)	Usmanbhai & Jamalbhai Vadnagri Azad Chowk, Juna Bazar, Himatnagar.	Weights, Weighing and Measuring Instruments.
(218)	V.K. Makwana & Co., Nava Bazar, Baroda	Weights, Weighing and Measuring Instruments.

Dealers (Contd.)

Sl. No.	Name and Address of Dealer	Details of Articles Sold
(219)	Vasant Engineering Ltd., Pratapnagar, Baroda	Weights, Weighing and Measuring Instruments.
(220)	Vipinchandra Ramanlal Shah, Juna Bazar, Himatnagar	Weights, Weighing and Measuring Instruments.
(221)	Vithaldas Dahyabhai Panchal, Madan Gopal's Haveli, Near Pipla, Pole, Khadia, Ahmedabad.	Weights, Weighing and Measuring Instruments.
(222)	Vithaldas Venichand Panchal, Station Road, Dehgam	Weights, Weighing and Measuring Instruments.
(223)	Yakubbbhai Talyabali Bardawala, Katopore Darwaza, Broach	Weights, Weighing and Measuring Instruments.
(224)	Yusufali Kadibhai, Green Lodge, Rajkot	Weights and Beam Scale.
(225)	Z. & H. Co., Limda Chowk, Surat	Weights
(226)	Zaver Motiram Mistry, Sidhraj Road, Tripolie, Patan	Weights, Weighing and Measuring Instruments.

Repairers

Sl. No.	Name and Address of Repairer	Details of Articles Repaired
(1)	Akbarli Nuruddin Bambawala, Nava Bazar, Baroda	Weights, Measures, Weighing and Measuring Instruments.
(2)	Alexandra Scale Co., 1115/4, Pankore Naka, Ahmedabad-1	Weights, Measures, Weighing and Measuring Instruments.
(3)	Ambica Engineering Works, Kalupur, 3/2532, Near Regal Talkies, Pirmshah Road, Ahmedabad.	Weights, Measures, Weighing and Measuring Instruments.
(4)	Avery Company of India Private Ltd., 2059, Raikhad, Ahmedabad.	Weights, Measures, Weighing and Measuring Instruments.
(5)	Avery Co. of India Pvt. Ltd., 16, Dougall Road, Ballard Estate, Bombay.	Weights, Measures, Weighing and Measuring Instruments.
(6)	Babubhai N. Mistry, Mahidharpura, Opp. Maniara Sheri, Narshi Mandir Chawl, Surat.	Weights, Measures, Weighing and Measuring Instruments.
(7)	Bhagvanji Damodar Kansara, Kaji Chaklo, Jamnagar	Weights, Measures, Weighing and Measuring Instruments.
(8)	Bhaichand Maganlal Panchal, Talod	Weights, Measures, Weighing and Measuring Instruments.
(9)	Chaturbhai N. Patel, Kandavav, Kapadwanj	Weights, Measures, Weighing and Measuring Instruments.
(10)	Chandrakant Teralal Soni, Padipole, Near Ambamata, Mandvi Road, Baroda.	Weights, Measures, Weighing and Measuring Instruments.
(11)	Chhotalal Ramchand Panchal, Aml Chauta, Mehsana	Weights, Measures, Weighing and Measuring Instruments.
(12)	F.V. Contractor, F/1/23015, Nava Bazar, Baroda	Weights, Measures, Weighing and Measuring Instruments.
(13)	Dhirajlal Chuniilal Soni, Near Champaner Darwaza, Baroda.	Weights, Measures, Weighing and Measuring Instruments.
(14)	Dhuralal Amulakh Patwa, Simla Gate, Palanpur	Weights, Measures, Weighing and Measuring Instruments.
(15)	Dodia Scale Works, Bhambhivas Corner, Idar	Weights, Measures, Weighing and Measuring Instruments.
(16)	G.M. Esmailji, Kanpith Chhakapar Gali, Surat	Weights, Measures, Weighing and Measuring Instruments.
(17)	Gandhi Mechanical Works, Taiyabi Mohalla, Zampa Bazar, Surat	Weights, Measures, Weighing and Measuring Instruments.
(18)	Hasanalli Amiji & Bros., Gujar Bazar, Rajkot	Weights and Weighing Instruments.
(19)	B.R. Herman & Mohatta (India) Private Ltd., People's Building, Sir P.M. Road, Bombay-1.	Weights and Weighing Instruments.
(20)	Hiptullabhai Mulla Abdulhusen Lokhandwala & Co., Mohmadpura, Broach.	Weights, Measures, Weighing and Measuring Instruments.
(21)	Ibrahim Najumuddin Vohra, Nava Bazar, Baroda	Weights, Measures, Weighing and Measuring Instruments.
(22)	Isvarlal Gopalji Bhujwalla, Panchnath Road, Rajkot	Weights, Measures, Weighing and Measuring Instruments.
(23)	Ishwarlal Narottamdas Mistry, Opp: Parsi's Chawl, Vyara	Weights, Measures, Weighing and Measuring Instruments.
(24)	Jaihind Kanta Bhandar, Station Road, Anand	Weights, Measures, Weighing and Measuring Instruments.
(25)	Jainulbhai Abdulkadar & Co., Mota Bazar, Navsari	Weights, Measures, Weighing and Measuring Instruments.
(26)	Jashbhai Chaturbhai Patel, Kisha Bapa's Daheli, Dhaban Bhagol, Nadiad.	Weights, Measures, Weighing and Measuring Instruments.

Repairers (contd.)

Sl. No.	Name and Address of Repairer	Details of Articles Repaired
(27)	Jivarj Karamshi & Bros., Hothibhai Street, Savarkundla	Scales
(28)	Jewellery Scale Works, Krishna Kunj, Golwad Naka, Laheripura, New Road, Baroda.	Weights and Measures, Weighing and Measuring Instruments.
(29)	Laljiibhai Samjiibhai Luhar, City Danapith, Opp. Municipality shop No. G. 2/924, Ahmedabad.	Weights and Measures, Weighing and Measuring Instruments.
(30)	Luhar Bhimji Devraj, Palitana	Weighing Instruments.
(31)	D.S. Luhar & Bros. Co., Opp. Padsha Pole Relief Road, Ahmedabad	Weights, Measures, Weighing and Measuring Instruments.
(32)	Luhar Khoda Natha, Savarkundla	Weighing Instruments.
(33)	Luhar Mulji Trikam Ravji & Co., Nadi Kantha, Savarkundla	Weights, Measures, Weighing and Measuring Instruments.
(34)	Luhar Mulji Velji, Devla Gate, Savarkundla	Weights, Measures, Weighing and Measuring Instruments.
(35)	Luhar Nanji Mulji, Beside River Bank, Chital	Weights, Measures, Weighing and Measuring Instruments.
(36)	Luhar Madha Manji & Co., Nadi Kantha, Savarkundla	Weights, Measures, Weighing and Measuring Instruments.
(37)	Luhar Meghaji Chhagan, Devla Gate, Savarkundla	Weighing Instruments.
(38)	Maganlal Madhubhai Mistry, Nagarsheri Mahidharpura, Surat	Weights and Measures, Weighing and Measuring Instruments.
(39)	V.K. Makwana & Co., Nava Bazar, Baroda	Weights and Measures, Weighing and Measuring Instruments.
(40)	Modern Measuring Equipments, House No. 4/4632, Tayabi Mohalla, Surat.	Weights and Measures Weighing and Measuring Instruments.
(41)	Natvarlal L. Kantawala, K-3, 10931, Piramshah Roja, Near Regal Cinema, Ahmedabad.	Weights and Measures, Weighing and Measuring Instruments.
(42)	Noble Scale Repairing Works, Gheekanta Road, Bhutni Ambli, Ahmedabad.	Weights and Measures, Weighing and Measuring Instruments.
(43)	Patani Scale Repairing Works, Sidharji Road, Tripolia, Patan.	Weights and Measures, Weighing and Measuring Instruments.
(44)	M.G. Poonawala, Chhakapir Gali, Surat	Weights and Measures, Weighing and Measuring Instruments.
(45)	R.F. Panchal, Opp. Bhadra Kachari, Surat	Weights and Measures, Weighing and Measuring Instruments.
(46)	Prabhat Scale Works, Pathathar Sadak, Palanpur	Weights and Measures, Weighing and Measuring Instruments.
(47)	Raja Gordhan & Co., Rival Bank, Savarkundla	Weighing Instruments.
(48)	Ratanlal Nanalal Kansara, Kansara Bazar, Umreth	Weights and Measures, Weighing and Measuring Instruments.
(49)	Ratilal Mohanlal Choksi, Mandi Bazar, Mahaja Nivala, Sidhpur	Weights and Measures, Weighing and Measuring Instruments.
(50)	Saif Scale Works, Dhalvas, Palanpur	Weights and Measures, Weighing and Measuring Instruments.
(51)	H.R. Sajapoorwala, Saify Mohalla, Surat	Weights and Measures, Weighing and Measuring Instruments.
(52)	Shankertal Shival Thakkar, Talod	Weights, Measures, Weighing and Measuring Instruments.
(53)	Trikamlal Manchharam, Three Gate, Patan	Weights, Measures, Weighing and Measuring Instruments.
(54)	Vithaldas Dahyabhai Panchal, Madan Gopalni Haveli, Near Pipla Pole, Ahmedabad.	Weights, Measures, Weighing and Measuring Instruments.
(55)	Vakubali Abdultaiyab Bardenwala, Katopora Darwaja, Broach	Weights, Measures, Weighing and Measuring Instruments.

LICENSED MANUFACTURERS, DEALERS, REPAIRERS OF WEIGHTS & MEASURES (12)

HIMACHAL PRADESH (2)

In November 1960 issue of Metric Measures a list of licensed manufacturers and dealers in Himachal Pradesh Administration was published. The following is a list of dealers and repairers subsequently licensed under the Rajasthan Weights and Measures (Enforcement) Act, 1958 as extended to the Union Territory of Himachal Pradesh and Rules framed thereunder.

Dealers

Sl. No.	Name and Address of Dealer	Details of Articles Sold
(1)	Avery Company of India, Private Ltd., 255 Court Road, Amritsar	Weights, Measures, Weighing and Measuring Instruments.
(2)	Megh Singh Thakur Dass, Gandhi Chowk, Mandi	Cast iron Weights (50 kg to 100g) Brass Weights (50g to 1g).
(3)	Nand Kumar & Sons, Gandhi Chowk, Mandi	Cast iron Weights.
(4)	Param Dev Tej Singh, Gandhi Chowk, Mandi	(i) Cast iron weights (50 kg to 100g). (ii) Brass Weights (1 kg. to 1g). (iii) Bullion weights (500 mg, 200 mg, 100 mg, 50 mg and 20 mg.) (iv) Beam Scales Class 'C' (upto 100 kg capacity). Beam Scale Class 'D' (upto 5 kg capacity). Beam Scales Class 'B' (upto 200 g capacity).

Repairers

Sl. No.	Name and Address of Repairer	Details of Articles Repaired
(1)	Avery Company of India, Private Ltd., 255 Court Road, Amritsar	Weights, Measures, Weighing and Measuring Instruments.

ORISSA (4)

In the March, July and November issue of Metric Measures lists of licensed manufacturers, dealers and repairers of weights and measures in Orissa State were published. The following is a list of manufacturers and dealers subsequently licensed by the Government of Orissa under the Orissa Weights and Measures (Enforcement) Act, 1958.

Manufacturer

Sl. No.	Name and Address of Manufacturer	Details of Articles Manufactured
(1)	Avery Co., of India Private Ltd., Avery House, 28/2 Waterloo Street, P.B. No. 377, Calcutta-1.	Weights, Measures, Weighing and Measuring Instruments.
(2)	Satish Chandra Das & Co., Rutton Babu's Road, Cossipur, Calcutta	Brass Bullion and Brass Weights.

Dealers

Sl. No.	Name and Address of Dealer	Details of Articles Sold
(1)	B.K. Ghose, Station Road, Puri	Cast Iron Weights.
(2)	Khuburam Ashram, At/P.O. Bolangir, Distt. Bolangir	Cast Iron Weights.

PUNJAB (8)

In the July and September, 1959, March, May, July, September and November 1960 issues of 'Metric Measures' lists of Manufacturers, dealers and repairers of Weights and Measures in Punjab State were published. The following is a list of manufacturers, dealers and repairers subsequently licensed by the Government of Punjab under the Punjab Weights and Measures (Enforcement) Act, 1958.

Manufacturers

Serial No.	Name and Address of Manufacturer	Details of Articles Manufactured
(1)	Ambala Metal Industries, Ambala Cantt.	Brass Weights 50g, 20g, 10g.
(2)	Naryana Foundry, Private Ltd., Rohtak	Cast Iron Weights 100g to 50kg.
(3)	National Metal Works, Ambala	Cast Iron Weights 100g to 50kg. Brass Weights 10g to 50g.
(4)	Singla Engineering Works, Gurgaon	Cast Iron Weights 100g to 50 kg.

Dealers (contd.)

Sl. No.	Name and Address of Dealer	Details of Articles Sold
(1)	Amir Chand Bansi Lal, Saddar Bazar, Dalhousie	Weights, Measures and beamscales.
(3)	Chhabil Dass Ram Kumar, Iron & Hardware Merchants, Moti Bazar, Hissar.	Weights, Measures, Weighing and Measuring Instruments.
(2)	Balm Ram Pawan Kumar, Jaita	Weights, Measures, Weighing and Measuring Instruments.
(4)	Ghasi Ram Panna Lal, Gurgaon	Weights, Measures, Weighing and Measuring Instruments.
(5)	Gopal Krishan Gupta & Sons, Gopal Bhawan, Nicholson Road, Ambala Cantt.	Weights, Measures, Weighing and Measuring Instruments.
(6)	Harnam Dass Sheekan Dass, Iron Merchants, Barwala Mandi Dist. Hissar.	Weights, Measures, Weighing and Measuring Instruments.
(7)	Inder Singh Daram Singh, Iron & Hardware Merchants, Samrala	Weights, Measures and beamscales.
(8)	Mahabir General Store, Ellenabad, Distt. Hissar	Weights, Measures, and beamscales.
(9)	Ramesh Chand Mahash Chand, Ghar Bazar	Weights, Measures and beamscales.
(10)	Ravi Engineering Company, Kacha Bazar, Ambala Cantt	Heavy weighing machines for which they are licensed as manufacturer, repairing verification ex-state.
(11)	Salig Ram & Sons, Kasauli	Weights, Measures and Beamscales.

Repairers

Sl. No.	Name and Address of Repairer	Details of Articles Repaired
(1)	Avery Company of India, Private Limited, Amritsar	Weights, Weighing and Measuring Instruments.
(2)	Bedi Oil Company, G.T. Road, Batala	Weights, Measures of length and capacity.

TRIPURA (3)

In the March and November 1960 issues of 'Metric Measures' lists of licensed dealers of weights and measures in the Union Territory of Tripura were published. The following is a list of dealers subsequently licensed by the Tripura Administration under the Rajasthan Weights and Measures (Enforcement) Act, 1958, as extended to the Union Territory of Tripura.

Dealers

Sl. No.	Name and Address of Dealer	Details of Articles Sold
(1)	P.N. Dev & Co (P) Ltd., 7, Jagannathbari Road, Agartala	Weights
(2)	Kamal Stores Supply, Sakuntala Road, Agartala	Weights and Measures.

Dealers (contd.)

Sl. No.	Name and Address of Dealer	Details of Articles Sold
The following list of dealers which has appeared in the March 1960 issue of Metric Measures may be deleted from the list of Tripura.		
(1)	Banerjee & Co., Motor Stand Road and Central Road Junction, Agartala.	Weights
(2)	Bhandar, Central Road Agartala	Weights
(3)	Durga Bhandar, 99, Bat-tala, Agartala	Weights
(4)	Tripura Paint & Hardware Store, 58/2, Central Road, Agartala	Weights

UTTAR PRADESH (5)

In the July, September, November 1960 and January 1961 issues of 'Metric Measures' lists of licensed manufacturers, dealers and repairers of weights and measures in Uttar Pradesh were published. The following is a list of manufacturers, dealers and repairers subsequently licensed by Government of Uttar Pradesh under the Uttar Pradesh Weights and Measures (Enforcement) Act, 1959.

Manufacturers

Serial No.	Name and Address of Manufacturer	Details of Articles Manufactured
(1)	Dina Nath Faquir Chand, Khairula Street, Bareilly	Weights, Measures, Weighing and Measuring Instruments.
(2)	J.P. Engineering Works, 76/574, Collie Bazar, Kanpur	Cast Iron and Brass Weights, Measures and Beam Scales.
(3)	Hari Singh & Sons, Gwalior Road, Jhansi	Metal Weights of Cast Iron and Brass.
(4)	Hind Udyog, 906 Civil lines, Jhansi	Cast Iron Weights, and Small Brass Weights.
(5)	Indian Iron Industries, Langre-Ki-Chowki, Agra	Cast iron Weights 50 Kg, 20 Kg, 10Kg, 5 Kg, 2Kg, 1Kg, 500g, 200g and 100g.
(6)	Jhansi Iron & Steel Rolling Mills, Civil Lines, Jhansi	Weights.
(7)	Jitendra Oil Mills, Farrukabad	Weights.
(8)	Kanpur Iron & Steel Industries, 59/39, Birhana Road, Kanpur	Weights Measures and Measuring Instruments.
(9)	E.S. Koomar & Company, Chukukapul, Katranaj, Moradabad	Bullion Weights.
(10)	Kumar Foundry, 128/10 C, Kidwai Nagar, Kanpur	Weights and Measures.
(11)	Mazdoor Balance Works, CK-42/68, Chah-Mahema, Varanasi	Weights and Weighing Instruments.
(12)	Moradabad Iron & Steel Industries, Gulshaheed, Moradabad	Weights.
(13)	Nathu Lal Bulkidas Iron & Hardware Merchants, Nainital Road, Bareilly.	Weights and Measures.
(14)	A.K. Neogy Industries, 89/209, Sir Iqbal Library Road, Kanpur	Weights and Weighing Instrments.
(15)	Roop Kamal Industries, 91/139, Delalpurwa, Gurdwara Road, Kanpur.	Brass and Sheets Metal Weights of all denominations, Measures, Weighing and Measuring Instruments.
(16)	Nathu Lal Bulkidas Iron & Hardware Merchants, Nainital Road, Bareilly.	Weights and Measures.

Dealers licensed for Weights, Measures, Weighing and Measuring Instruments

No.	Dealers licensed for Weights, Measures, Weighing and Measuring Instruments	No.	Dealers licensed for Weights, Measures, Weighing and Measuring Instruments.
(1)	Ambika Mills Stores, C.K. 52/15, Raja Darwaza, Varanasi.	(13)	Dug Ram Gupta, Hardware & Brass Merchants, Fateganj, Lucknow.
(2)	Balm Ram Prakash Chand, Iron Merchants, Kabari Bazar, Meerut.	(14)	Gurdas Mal Tikamdas, 104/A/212 P. Road, Kanpur.
(3)	Balm Ram Sukhbir Singh, Meerut Iron Merchants, Naya Bazar, Baraut, District Meerut.	(15)	Gauri Mal Raghunandan Prasad, Iron and Steel Merchants, Bareilly.
(4)	Bansal Hardware Stores, (Budhist Temple), Gautam Budh Marg, Lucknow.	(16)	Girja Shanker Ved Prakash, 20 Hatia Market, Kanpur.
(5)	Bhanamal & Co. (P) Ltd., Baraganesh, Varanasi.	(17)	Gopal Prasad and Sons, 887, Bara Bhai Street, Belanganj, Agra.
(6)	Bhanamal Gulzarimal (P) Ltd., Bara Bazar, Bareilly.	(18)	Gulzari Lal Kanthi Ram, Iron Merchants, Bara Bazar, Bareilly.
(7)	Bholanath Sita Ram, 9 Aminabad Park, Lucknow.	(19)	Gaya Prasad Kishore Lal, Iron Merchants, Pratapgarh.
(8)	Bulmukund Hanumant Ram, 57 Sri Ram Road, Lucknow.	(20)	Hafizuddin Jallaluddin Hardware Merchant, K-62/122, Saifasagar, Varanasi.
(9)	Chandrika Prasad, K. 58/11, Baraganesh, Lohatia Varanasi.	(21)	Hind Udyog, 906 Civil Lines Jhansi.
(10)	Chhotey Lal Rameshwar Dayal, Yahiyaganj, Lucknow.	(22)	Jagdish Prasad Prakash Chand, Iron Merchants, Naya Bazar, Baraut, District Meerut.
(11)	K.T. Company, Daliganj, Lucknow.	(23)	Jaiswal Brothers, P.O. Siswa Bazar, Gorakhpur.
(12)	Dharam Chand Davarka Das Agrawal, 76/574, Cooli Bazar, Kanpur.		

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Dealers Licensed for Weights, Measures, Weighing and Measuring Instruments	
Sl. No.	
(24)	Kalika Prasad, Kerana and Iron Merchants, P.O. Chughli, Gorakhpur.
(25)	Kanpur Iron and Steel Industries 59/39 Birhara Road, Kanpur.
(26)	Kashi Nath Singh, Mohalla Bazar Sadanand, P.O. Rampura, Varanasi.
(27)	Kishore Machinery Stores, Pathwari, Belanganj, Agra.
(28)	Kumar Foundry, 128/10C, Kidwai Nagar, Kanpur.
(29)	Lajja Ram Jagdish Prasad, 73/7 Collectorganj, 52 Dukan, Kanpur.
(30)	Mahabir Prasad Sham Lal Jain, Naya Bazar, Baraut, District Meerut.
(31)	Mehrotra Bros., Bara Bazar, Bareilly.
(32)	Modern Machinery Stores, Golghar, Gorakhpur.
(33)	Mukund Lal Gupta, Iron Merchants, Basantpur, Gorakhpur.
(34)	Munna Lal Badri Prasad, Baraganesh, Varanasi-1.
(35)	Nathu Lal Bulakidas Iron and Hardware Merchants, Bara Bazar, Bareilly.
(36)	Panna Lal Gupta, Pipraich, Gorakhpur.
(37)	Panchayati Dharam Kanta, Chowk, Moradabad.
(38)	Phool Chand Har Narain, Bhadwarganj, Ujhani, Budaun.
(39)	Prem Chand Agarwal, Sadar Bazar, Jhansi.
(40)	Ram Chandra Prasad, Agrawal, Vill. and P.O. Bansgaon, Gorakhpur.
(41)	Ram Chandra Prasad, VII. P.O. Kauri Ram, Tehsil Bansgaon, Gorakhpur.
(42)	Ram Lal Gupta, K/77/71, Narhenpura, Lohatia, Varanasi.
(43)	Ram Lal Roshan Lal Shyamganj, Bareilly.
(44)	Ram Lal Roshan Lal Chaumukha Pul, Moradabad.
(45)	Ramji Jaiswal, D 50/111, Quazi Pura Kalan, Varanasi.
(46)	Rishi Prasad Gupta, Tyne Road Lucknow.
(47)	R.K. Sharma Iron Foundry, Pathwari, Belanganj, Agra.
(48)	Sheo Nath Ram Nand Kishore Lal, Shahabganj, Gorakhpur.
(49)	Tirbeni Sahai Ram, Bharose Lal Bhadwarganj, Ujhani.
(50)	Shyam Lal Bala Prasad Arti, Rishikesh, Distt. Dehadun.
(51)	Uma Shanker Prasad and Co., Bindu Bazar, Gorakhpur.
(52)	Vibhuti Ram, Village and P.O. Barhalganj, District Gorakhpur.

II

Dealers Licensed for Weights	
Sl. No.	
(1)	Babu Lal and Sons, Coolie Bazar, Kanpur.
(2)	Bareilly Sarrafa Mandal (Regd.), Bareilly.
(3)	Calcutta Hardware Stores, Baraganesh, Varanasi.
(4)	Jain Traders, 46/45 Rajaddi, Batia, Kanpur.
(5)	Gupta Metal Stores, 24, Gautam Budh Marg, Lucknow.
(6)	Indian Engineering Company, Maldahia, Varanasi-2.
(7)	Jitendra Oil Mills, Farrukhabad.
(8)	Kashi and Sons, Village & P.O. Pipraich, Distt. Gorakhpur.
(9)	Kumar and Compnay, 71/180, Canal Road, Kanpur.
(10)	Kumayu Madhu Bhandar P.O. Karan Ghanta, Varanasi.
(11)	Mills-Ko Iron and Steel Foundry, 359, Civil Lines, Jhansi.
(12)	New Bat Stores, Sahabganj, Gorakhpur.

III.

Dealers Licensed for Weights and Measures	
Sl. No.	
(1)	Bakshi Ram Ram Hori Lal, Iron-Merchants, Choumukha-phul, Moradabad.
(2)	Bareilly Iron Syndicate, Bareilly.
(3)	Bhanamal Guljarimal (P) Ltd., Sahabganj, Gorakhpur.
(4)	Brahm Autar Abhimanu Kumar, Husaini Bazar, Chandaulsi, District Moradabad.
(5)	Devi Sahai Narain Lal, Spri Bazar, Jhansi.
(6)	Durga Prasad Agrawal, Pulia No. 9, Jhansi.
(7)	Janeswar Das Jain Kishore Kumar Jain, Baraut District Meerut.
(8)	Gamma Distributors Private Ltd., Latence Road, Kanpur.
(9)	Jugal Kishore Nani Chand Jain, Jharna Gate, Jhansi.
(10)	Kashi Prasad and Sons, Loha Bazar, Rakabganj, Lucknow.
(11)	Katachi Hardware Stores, Mithai Bazar, Jhansi.
(12)	Luxmi Narain Ram Sewak Gupta, Iron Merchants, Subhasganj, Jhansi.
(13)	Matholal Ram Nath, Bara Bazar, Jhansi.
(14)	Nihal Chand Prakash Chand Jain, Iron Merchant, Gandhi Road, Jhansi.
(15)	Om Prakash Agrawal Industries 209, West End Road, Meerut Cantt.
(16)	Ram Charan Ram Narain, Iron Merchants, Bara Bazar, Jhansi.
(17)	Ramdin Ram Kumar, Spri Bazar, Jhansi.

IV. Dealers Licensed for Weights, Measures and Weighing Instruments

Sl. No.	
(1)	Ahmed Yar Khan, Hardware Merchants, Bazar Englishganj, Qila, Bareilly.
(2)	Aruma Iron Stores, Iron and Hardware Merchants, Rakabganj, Loha Bazar, Lucknow.
(3)	Narain Das, H.No. 60, Ganesh Bazar, Jhansi.
(4)	Om Prakash and Company, Ohatia, Varanasi.

V. Dealers Licensed for Weights, Weighing and Measuring Instruments

Sl. No.	
(1)	Nandram Rameshwar Das, Iron Merchants, Bara Bazar, Jhansi.

VI. Dealers Licensed for Weights and Weighing Instruments

Sl. No.	
(1)	Banaras Iron Hardware and General Trading Co., Baraganesh, Varanasi.
(2)	Behari Lal Jai Ram Dass, 76/157, Halsey Road, Kanpur.
(3)	Moti Ram Manohar Lal, Aminabad Road, Lucknow.
(4)	National Iron Foundry, Motilal Nehru Road, Agra.
(5)	Ram Sunder Raja Ram, Baraganesh, Varanasi.
(6)	Sushil Kumar Satish Kumar, Kothi Shukul Ji, Yohiagan, Lucknow.

VII. Dealers Licensed for Weights and Measuring Instruments

Sl. No.	
(1)	Brij Basi Lal Bhusan Saran Iron Merchants, Loha Bazar, Pilibhit.
(2)	Muni Lal Moti Lal Golghar, Gorakhpur.

LICENSED MANUFACTURERS, DEALERS & REPAIRERS OF WEIGHTS & MEASURES (12)

VIII. Dealers licensed for Weights, Weighing and Measuring Instruments

Sl. No.	
(1)	Nandram Rameshwar Das, Iron Merchants, Bara Bazar, Jhansi.

IX. Dealers Licensed for Weights, Measures and Measuring Instruments

Sl. No.	
(1)	Surya Prasad and Company, Baraganesh, Varanasi.

Repairers

(1)	J.P. Engineering Works, 76/574, Coolie Bazar, Kanpur.
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(2)	Jitendra Oil Mills, Farrukhabad.
(3)	Kumar Foundry, 128/10 C, Kidwai Nagar, Kanpur.
(4)	Moradabad Iron and Steel Industries, Gulshahed, Moradabad.
(5)	National Iron Foundry Moti Lal Nehru Road, Agra.
(6)	Punchayati Dharam Kanta, Chawk, Moradabad.
(7)	Ram Saran S/o Sri Phali Ram, 24 New Punjabi Market, Bareilly.
(8)	K.R. Sharma Iron Foundry, Pathwari, Belanganj, Agra.
(9)	Subol Chand Dass, Shree Bhawan, Narhi, Lucknow.

WEST BENGAL (4)

In the March, July and November, 1960 issues of 'Metric Measures' lists of licensed manufacturers, dealers and repairers, of Weights and Measures in West Bengal were published. The following is a list of manufacturers, dealers and repairers subsequently licensed by the Government of West Bengal under the West Bengal Weights and Measures (Enforcement) Act, 1958.

Manufacturers

Sl. No.	Name and Address of Manufacturer	Details of Articles Manufactured
(1)	Dalmia Iron & Steel Ltd., P.O. Sukehar, 24-Prags., West Bengal	Cast Iron Weights.
(2)	H.P. Das & Co., 22, Sri Gopal Mullick Road, Ariadha, 24, Parganas	Beam scales and Cast Iron Weights.
(3)	Das Iron & Steel Co., 38/1F Manik Tolia Main Road, Calcutta-11	Iron Beam Scales.
(4)	Dhirendra Nath Ghose, 3, Hem Dey Lane, Calcutta-4	Beam Scales.
(5)	Dey's Weighing Scales & Eng. Works, 233, Belitious Road, Howrah	Weighing instruments excluding Beam Scales.
(6)	Gopal Chandra Das, 98/H/B Charakdanga Road	Beam Scales.
(7)	Nagendra Nath Karmakar, S/o Wooma Charan Karmakar, 213, Harrison Road, Calcutta-7.	Beam Scales and Counter Scales.
(8)	Indian Weighing Scales & Eng. Co. P. Ltd., 53, Ashu Bose Lane, Howrah.	All types of weighing instruments and C.I. Weights.
(9)	Sankar Iron Eng. Works Private Ltd., 1, Kali Mazumdar Road, Howrah.	Cast Iron Weights.
(10)	Rampada Sen Taraprasad Sen, 157, Netaji Subhas, Road, Calcutta-1.	Capacity Measures.
(11)	Pioneer Engineering & Scales Co., Anandakaman, Hattikari, Howrah	Cast Iron Weights.
(12)	Shalimar Iron & Steel Industries, P-34, Benaras Road, Belgachia, P.O. Dassnagar, Howrah.	Cast Iron Weights.
(13)	Spun Casting & Eng. Co. P. Ltd., 21/1, Ezra Mansion, 10 Govt. Place, East, 1st floor, Calcutta-1.	Cast Iron Weights.
(14)	Tulsi Charan Karmakar, Barisba, Kamarpara, Calcutta-8	Iron Beam Scales.
(15)	Venus Eng. Co., 16A, Halderpara Lane, P.O. Santragachi, Howrah	Weights.

Sl. No.	Dealers Licensed for Weights.
(1)	Asiatic Machinery Corporation (P) Ltd., 10/1, Kailash Ch. Chandra Lane, Howrah.
(2)	Dey & Co., 225, Harrison Road, Calcutta-8.
(3)	Kanai Lal Sahu, 88, Market Street, Calcutta-13.
(4)	Krishandhan Sury & Bros., 58, Clive St., 1st Floor, Calcutta-19.
(5)	Sinha & Singha, 85, Netaji Subhas Road, Calcutta-1.

Sl. No.	Dealers Licensed for Beam Scales and Weights.
(1)	Amrita Lal Singha, 78, Netaji Subhas Road, Calcutta-7.
(2)	Bankim Ch. Chinya, 57, Clive Street, Calcutta-7.

Sl. No.	Dealers licensed for Beam Scales and Weights
(3)	Basanta Kumar Paul & Co., 23, R.G. Kar Road, Calcutta-4.
(4)	Bebhuti Bhusan Nandy, 57, Clive Street, Calcutta-7.
(5)	Bishnu Pada Atta, 55A, Clive Street, Calcutta-7.
(6)	Continental Commercial Co. P. Ltd., 8/1, Dalhousie Sqr., East., Calcutta-1.
(7)	Dilip Kumar Mittra, 23/1, Maharshi Debendra Road, Calcutta.
(8)	Dulal Chandra Paul & Bros., 57, Clive Street, Calcutta-7.
(9)	Durga Pada Singh, 56, Clive Street, Calcutta-7.
(10)	Durga Paint Shop, 93, Feeder Road, Belgachia, 24, Parganas.
(11)	Eastern Hardware Co., 58, Clive Street, Calcutta-7.
(12)	Gagadananda Singha, 161, Netaji Subhas Road, Calcutta-1

Sl. No. Dealers licensed for Beam Scales and Weights

- (13) Gaur Chandra Mitra & Bros., 49, Mirbahar Ghat-Street, Calcutta-7.
- (14) D.K. Hardware, 231, Ram Krishnapary Lane, Howrah.
- (15) Jagdish Prasad, 119, Upper Chitpur Road, Stall No. 14, Calcutta.
- (16) K.C. Jana, 113, Manohar Das Chowk, Calcutta-7.
- (17) Kishori Mohon Singha, 56, Clive Street, Calcutta-7.
- (18) Lalit Mohon Singha, 58, Clive Street, Calcutta-7.
- (19) Madan Mohon Das Nurkar, 5, Chadi Ghosh Road, Calcutta-4.
- (20) Madan Mohon Singha, 225, Mahatma Gandhi Road, Calcutta.
- (21) Madan Gopal Singha (P) Ltd., 58, Clive Street, Calcutta.
- (22) Mukharjee Laha & Co., 213, Mahatma Gandhi Road, Calcutta-7.
- (23) D.C. Nath & Sons, 58, Clive Street, Calcutta-7.
- (24) New Hardware Stores, 58, Clive Street, Calcutta-7.
- (25) Nilmony Dey & Co., 213, Mahatma Gandhi Road, Calcutta-7.
- (26) Nirod Baran, Mrinal Kanti Dey & Co., 58, Clive Street, Calcutta-7.
- (27) Paris Hardware Stores, 78, Netaji Subhash Road, Calcutta-7.
- (28) Rati Ranjan Dey & Co., 23, R.G. Kar Road, Calcutta-4.
- (29) Santosh Kumar Mullick, D/5, Jaganath Ghat, Calcutta-7.
- (30) D.N. Singh & Co., 58, Clive Street, Calcutta-7.
- (31) Sett. & Co., 57, Clive Street, Raja Kutra, Calcutta.
- (32) Singha Hardware Stores, 58, Clive Street, Calcutta-7.
- (33) Sudhir Chandra Das & Sons India (P) Ltd., 57, Civil Street, Calcutta-7.
- (34) Surondva Chandra Banik, 5, Tollyganj Circular Road, Calcutta-31.
- (35) Subal Chandra Dey & Co., 23, R.G. Kar Road, Calcutta-4.

Sl. No. Dealers licensed for Beam Scales and Weights

- (36) Tara Choran Dey & Co., 56, Clive Street, Calcutta-7.
- (37) Tarak Nath Mitra & Bros., 23, R.G. Kar Road, Calcutta-4.
- (38) Thakurda Sureka, 213, Harrison Road, Calcutta-7.
- (39) Tincori Chakrabarty, 5, Jadunandan Goswami Lane, Calcutta-6.
- (40) Tulsi Charan Karmakar, 94, Harrison Road, Calcutta-6.
- (41) Vora Trading Co., 56, Netaji Subhas Road, Calcutta-7.
- (42) Woona Charan Karmakar, Prop Tarak Ch. Karmakar & others, 225, Mahatma Gandhi Road, Calcutta-7.

Sl. No. Dealers Licensed for Weights, Measures, Weighing and Measuring Instruments

- (1) Kailash Chandra Paul & Sons, Parulia Chak-Bazar, Kallitolla Lane, Purulia.

Sl. No. Dealers Licensed for Weights and Weighing Instruments

- (1) General Stores Supply Co., 2A, Ramjidas Jatin Lane, Calcutta-7.
- (2) R.K. Kundu & Sons, Main Road, Purulia.
- (3) Mihari Co., 12, Lower Chitpur Road, Room No. 195, Calcutta-1.
- (4) Satish Chandra Das, 113, Khenjrapatti Street, Calcutta-7.
- (5) Universal Trading Co., 167, Old China Bazar St., Calcutta-7.

Sl. No. Dealers Licensed for Weights, Measures and Weighing Instruments

- (1) Gobinda Chandra Kundu, Purulia, Chawak Bazar, Purulia.

Repairer

Sl. No.	Name and Address of Repairer	Details of Articles Repaired
(1)	H.P. Das, 22, Srigopal Mullick Road, Ariadaha, 24, Parganas	Brass Beam Scales.
(2)	Dinesh Ch. Karmakar, 225, Mahatma Gandhi Road, Calcutta-7	Beam Scales.
(3)	Hindusthan Scales Corpn., 58, Netaji Subhas Road, Howrah	Weighing instruments including Beam Scales & Counters Scales.
(4)	Tulsi Charan Karmakar, 92, Diamond Harbour Road, Barisha, Calcutta-8.	Iron Beam Scales.



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Gram: MANMUL

OUR SMALL WEIGHTS
from 1 gram. to 50 grams
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PRICE CONVERSION TABLE (Maunds to Quintals)

TABLE A

Conversion of Prices from Maund to Quintal (100 kg)

(Factor used : 1 quintal = 2.6792269 maunds)

Naye Paise per maund to Rupees and Naye Paise per quintal

nP/Md	0	1	2	3	4	5	6	7	8	9
	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q
0	0	0.03	0.05	0.08	0.11	0.13	0.16	0.19	0.21	0.24
10	0.27	0.29	0.32	0.35	0.38	0.40	0.43	0.46	0.48	0.51
20	0.54	0.56	0.59	0.62	0.64	0.67	0.70	0.72	0.75	0.78
30	0.80	0.83	0.86	0.88	0.91	0.94	0.96	0.99	1.02	1.04
40	1.07	1.10	1.13	1.15	1.18	1.21	1.23	1.26	1.29	1.31
50	1.34	1.37	1.39	1.42	1.45	1.47	1.50	1.53	1.55	1.58
60	1.61	1.63	1.66	1.69	1.71	1.74	1.77	1.80	1.82	1.85
70	1.88	1.90	1.93	1.96	1.98	2.01	2.04	2.06	2.09	2.12
80	2.14	2.17	2.20	2.22	2.25	2.28	2.30	2.33	2.36	2.38
90	2.41	2.44	2.46	2.49	2.52	2.55	2.57	2.60	2.63	2.65
100	2.68	..	..	..	..	..	..	..	..	..

TABLE B

(Factor used : 1 quintal = 2.6792269 maunds)

Rupees per maund to Rupees and Naye Paise per quintal (q)

Rs/Md	0	1	2	3	4	5	6	7	8	9
	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q	Rs/q
0	0	2.68	5.36	8.04	10.72	13.40	16.08	18.75	21.43	24.11
10	26.79	29.47	32.15	34.83	37.51	40.19	42.87	45.55	48.23	50.91
20	53.58	56.26	58.94	61.62	64.30	66.98	69.66	72.34	75.02	77.70
30	80.38	83.06	85.74	88.41	91.09	93.77	96.45	99.13	101.81	104.49
40	107.17	109.85	112.53	115.21	117.89	120.57	123.24	125.92	128.60	131.28
50	133.96	136.64	139.32	142.00	144.68	147.36	150.04	152.72	155.40	158.07
60	160.75	163.43	166.11	168.79	171.47	174.15	176.83	179.51	182.19	184.87
70	187.55	190.23	192.90	195.58	198.26	200.94	203.62	206.30	208.98	211.66
80	214.34	217.02	219.70	222.38	225.06	227.73	230.41	233.09	235.77	238.45
90	241.13	243.81	246.49	249.17	251.85	254.53	257.21	259.89	262.56	265.24
100	267.92	..	..	..	..	..	..	..	..	..

How to use the Tables :

Suppose a commodity is priced at Rs. 30.50 per maund. To find the price per quintal look up Table B against Rs. 30/maund. The value is Rs. 80.38/(q). Look up Table A against 50 nP/maund. The value is 1.34/(q). Add up the two (Rs. 80.38 + 1.34 = Rs. 81.72). The price per quintal (q) is, therefore, Rs. 81.72.

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