

2.3 Lettering Practice

Lettering is done on engineering drawings either with or without using stencils. When stencils are used on ink drawings, the thickness of the stem of the letters and numerals is equal to the size of the pen as given by the dimension 'b' in Table 2.1 and 2.2, selected according to the height of the letters. When lettering is done using pencil, the thickness of the stem of the letters and numerals will be equal to that produced by the pencil point. In lettering practice, to bring out the standard recommended shapes for the letters and numerals, it is essential to maintain an appropriate proportion of *width to height* for each of the letters and numerals. The standard forms of the letters and numerals of Type A and Type B of both the vertical and inclined types for pencil and ink drawings are given separately for practice.

2.4 Vertical Letters and Numerals of Type A for Pencil Drawings

Fig. 2.2 and 2.3 show the vertical letters and numerals of Type A for pencil drawings. To draw these letters, two horizontal guide lines are drawn at a distance equal to the height of the letters. The height of the letter is divided into 14 equal parts. Vertical lines are drawn at 1 part spacing. Number of horizontal divisions required for each letter are counted and the letters are drawn freehand as shown in Fig. 2.2 and 2.3.

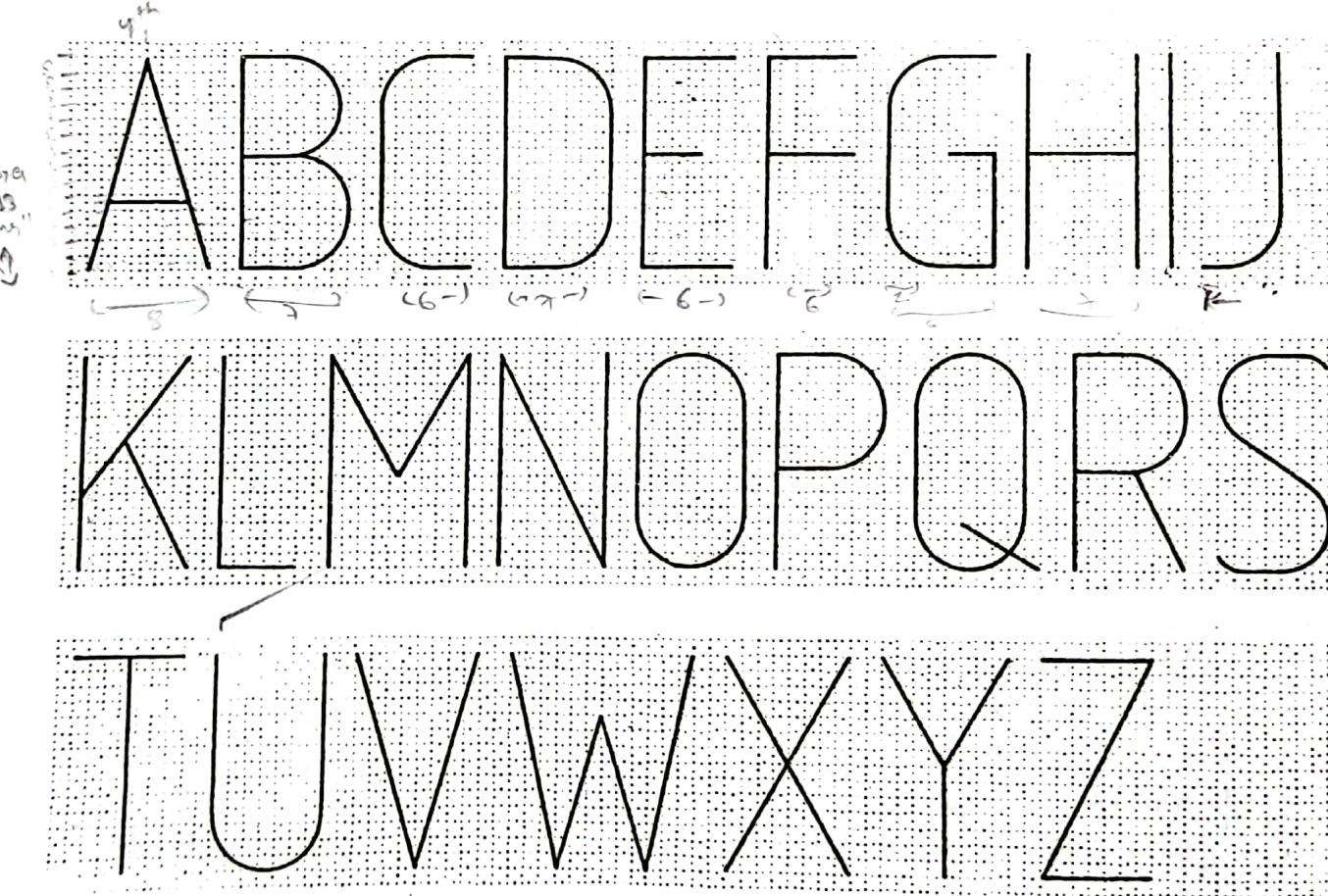


Fig. 2.2 Vertical Letters of Type A for Pencil Drawings

a

b

c

d

e

f

g

h

i

j

k

l

m

n

o

p

q

r

s

t

u

v

w

x

y

z

&

%

0

1

2

3

4

5

6

7

8

9

I

T

V

X

—

+

=

Fig. 2.3 Vertical Lowercase Letters and Numerals of Type A for Pencil Drawings



In type A lettering, all capital letters except A, C, E, F, J, L, M, Q, V, W, X and Y are 7 units wide. The letters J and L are 5 units wide. The letters C, E and F are 6 units wide. The letters A, Q, V, X and Y are .8 units wide. The letter M is 9 units wide. The letter W is 12 units wide. All lowercase letters except c, f, l, j, i, r and t are 6 units wide. The letters i is 1 unit wide. The letter j and l are 3 units wide. The letters f and t are 4 units wide. The letter m is 9 units wide. The letter w is 10 units wide. All numerals except 1, 3, and 5 are 7 units wide. The numeral 1 is 4 units wide. The numerals 3 and 5 are 5 units wide.

2.5 Inclined Letters and Numerals of Type A for Pencil Drawings

For inclined letters and numerals, an inclination of 15° to the vertical on the rightside is recommended by the Bureau of Indian Standards. The inclination of 15° to the vertical may be obtained easily by placing 45° set-square over 30° set-square as shown in Fig. 1.14. Page 13. Fig. 2.4 and Fig. 2.5 show inclined capital and lowercase letters and numerals.

To draw the inclined letters, guide lines are drawn at a distance equal to the height of the letters as before. The vertical height of the letter is divided into 14 equal parts and horizontal lines are drawn through these division points. Step off division points at 1 part spacings on the lowest horizontal guide line. Through these division points, draw lines inclined at 15° to the vertical and prepare the grid as shown in Fig. 2.4 and Fig. 2.5. The proportions of the inclined letters and numerals are same as that of vertical letters and numerals.

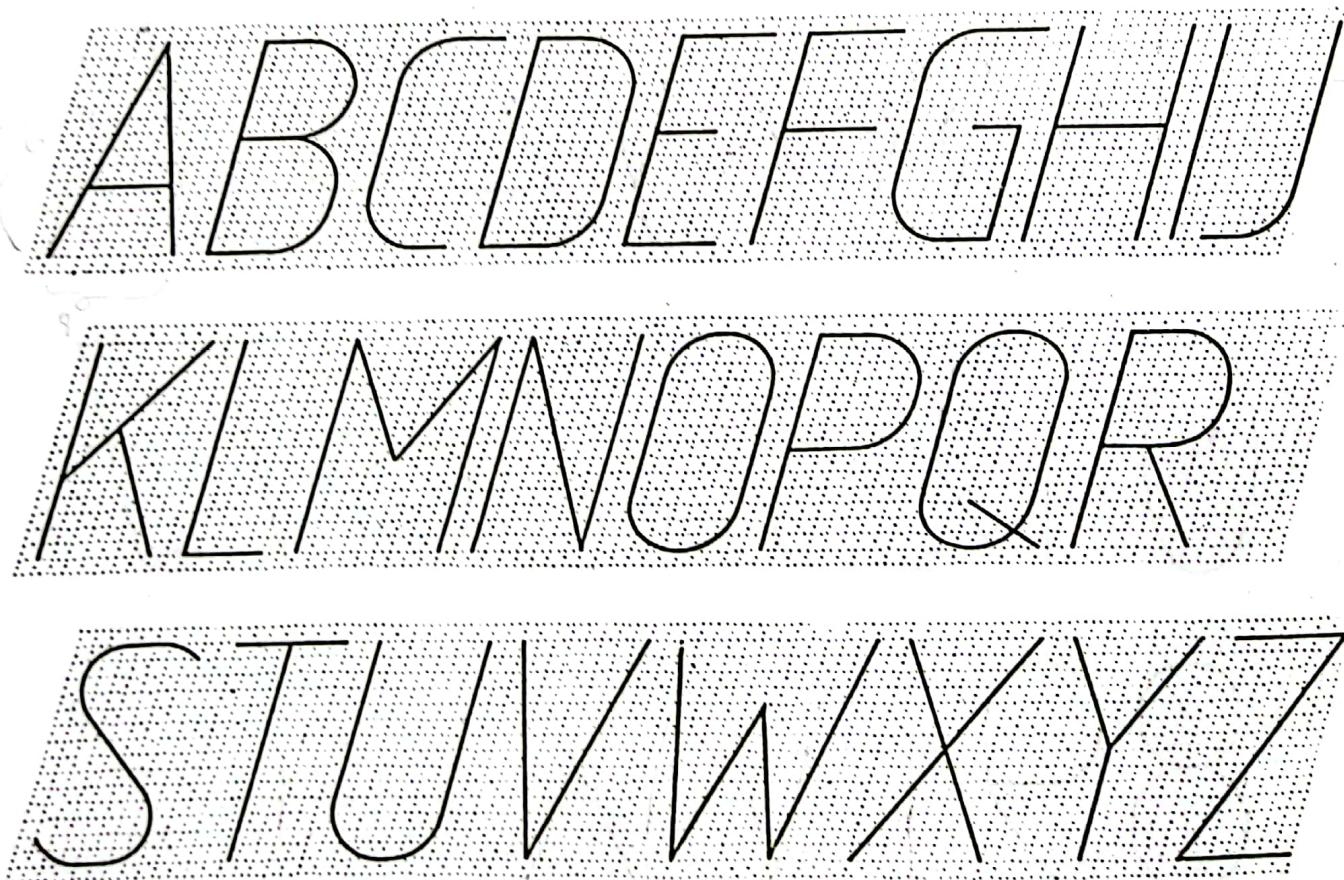


Fig. 2.4 Inclined Capital Letters of Type A for Pencil Drawings



Fig. 2.5 Inclined Lowercase Letters and Numerals of Type A for Pencil Drawings

2.6 Vertical and Inclined Letters and Numerals of Type B for Pencil Drawings

The proportions of letters of Type B are given in Table 2.2. The height of letters and numerals, is divided into 10 equal parts. The letters and numerals of Type B series are wider than that of Type A series, hence for letters and numerals of smaller sizes, Type B will be more suitable. Fig. 2.6 to Fig. 2.9 show the vertical and inclined letters and numerals of Type B.

In Type B style of lettering all capital letters except letters A, C, E, F, I, J, L, M, Q, V, W, X and Y are 6 units wide. The letter J is 4 units wide. The letters C, E, F and L are 5 units wide. The letters A, M, Q, V, X and Y are 7 units wide. W is the widest letter with 9 units width. In lowercase letters, all letters except c, f, i, j, l, m, r, t and w, are 5 units wide. The letter l is 2 units wide. The letters, c, f, r, and t are 4 units wide. The widest letters are m and w with 7 units wide. All numerals except 1 and 4 are 5 units wide. The numeral 1 is 3 units wide. The numeral 4 is 6 units wide.

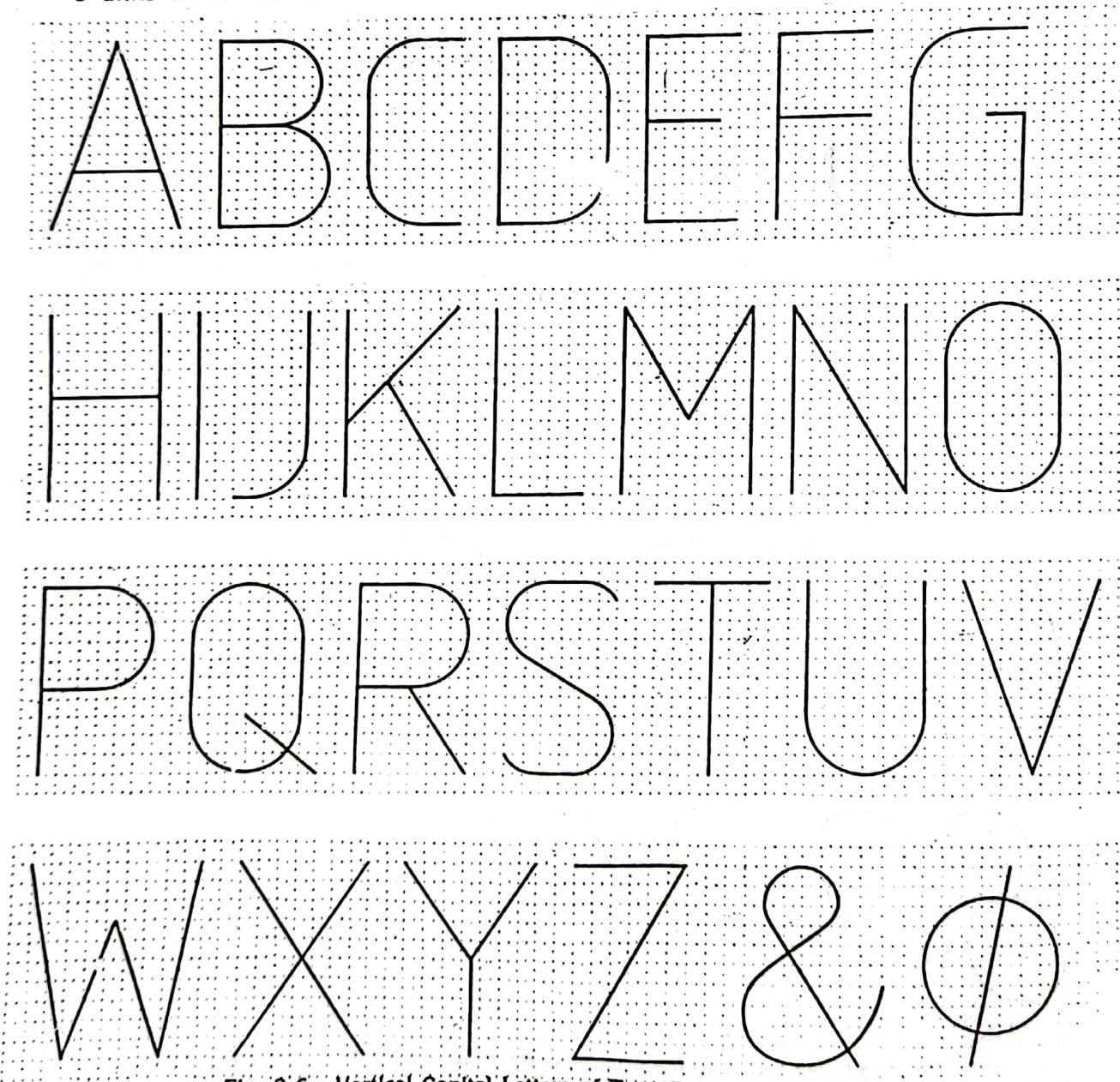


Fig. 2.6 Vertical Capital Letters of Type B for Pencil Drawings



Fig. 2.7 Vertical Lowercase Letters and Numerals of Type B for Pencil Drawings



Fig. 2.8 Inclined Capital Letters and Numerals of Type B for Pencil Drawings

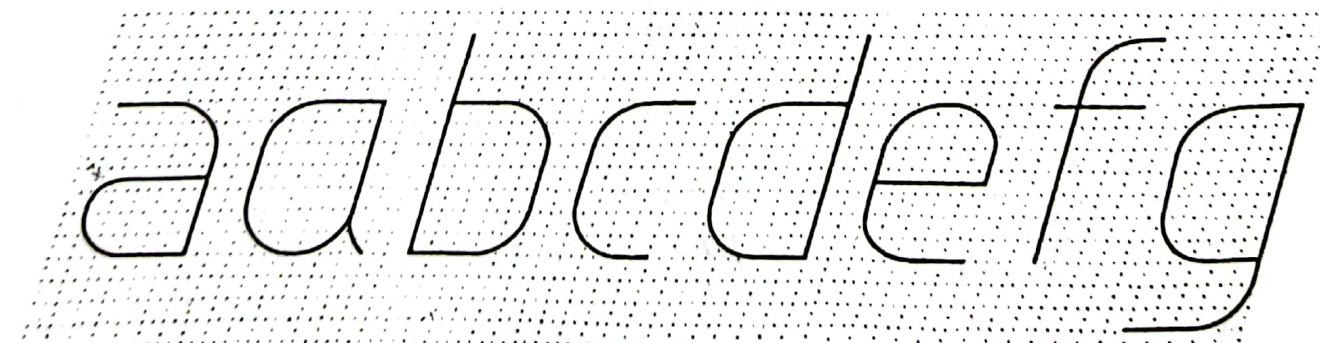


Fig. 2.9 Inclined Lowercase Letters a to g of Type B for Pencil Drawings

(Continued In Page 27)

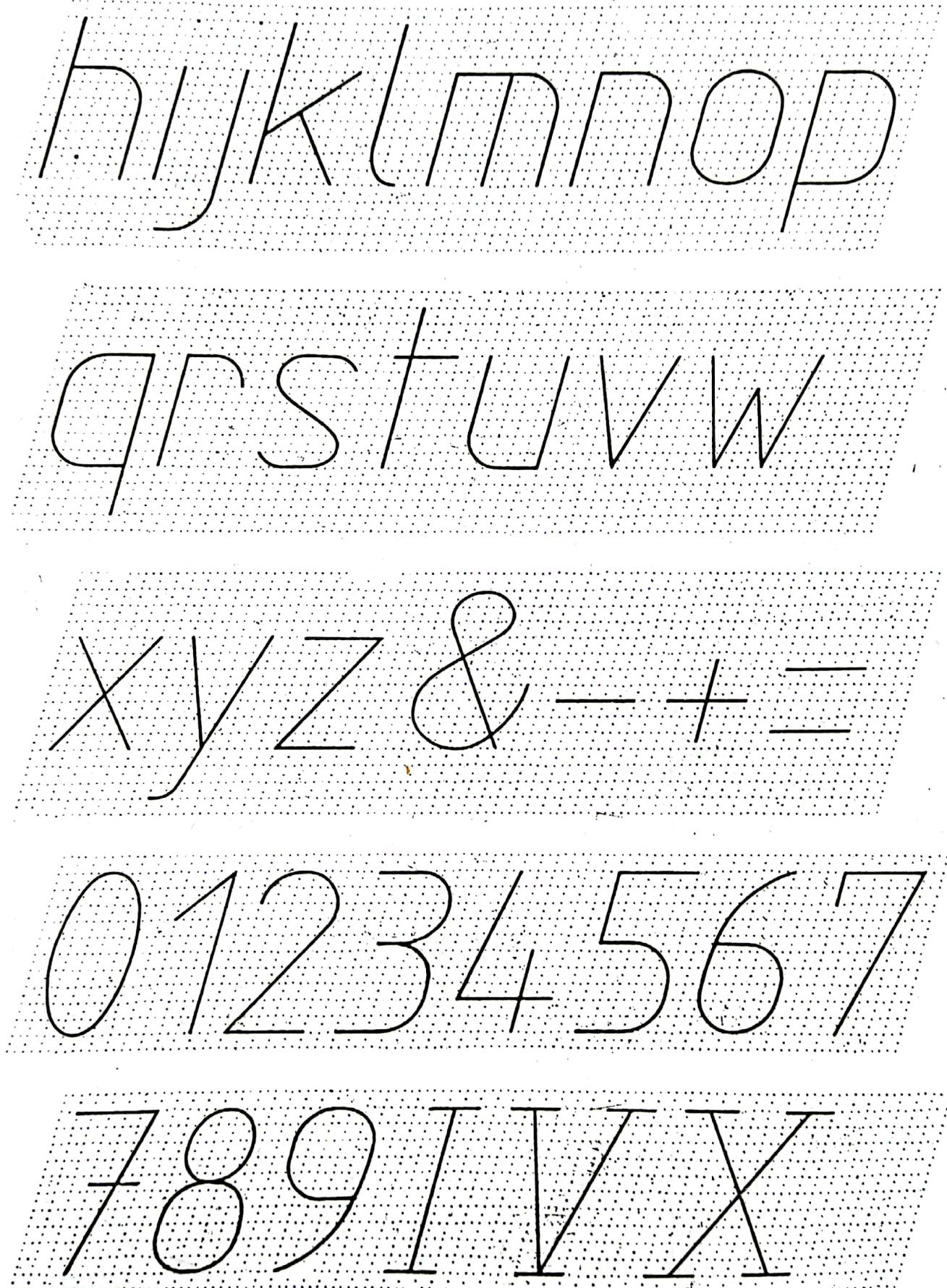


Fig. 2.9 Inclined Lowercase Letters and Numerals of Type B for Pencil Drawings