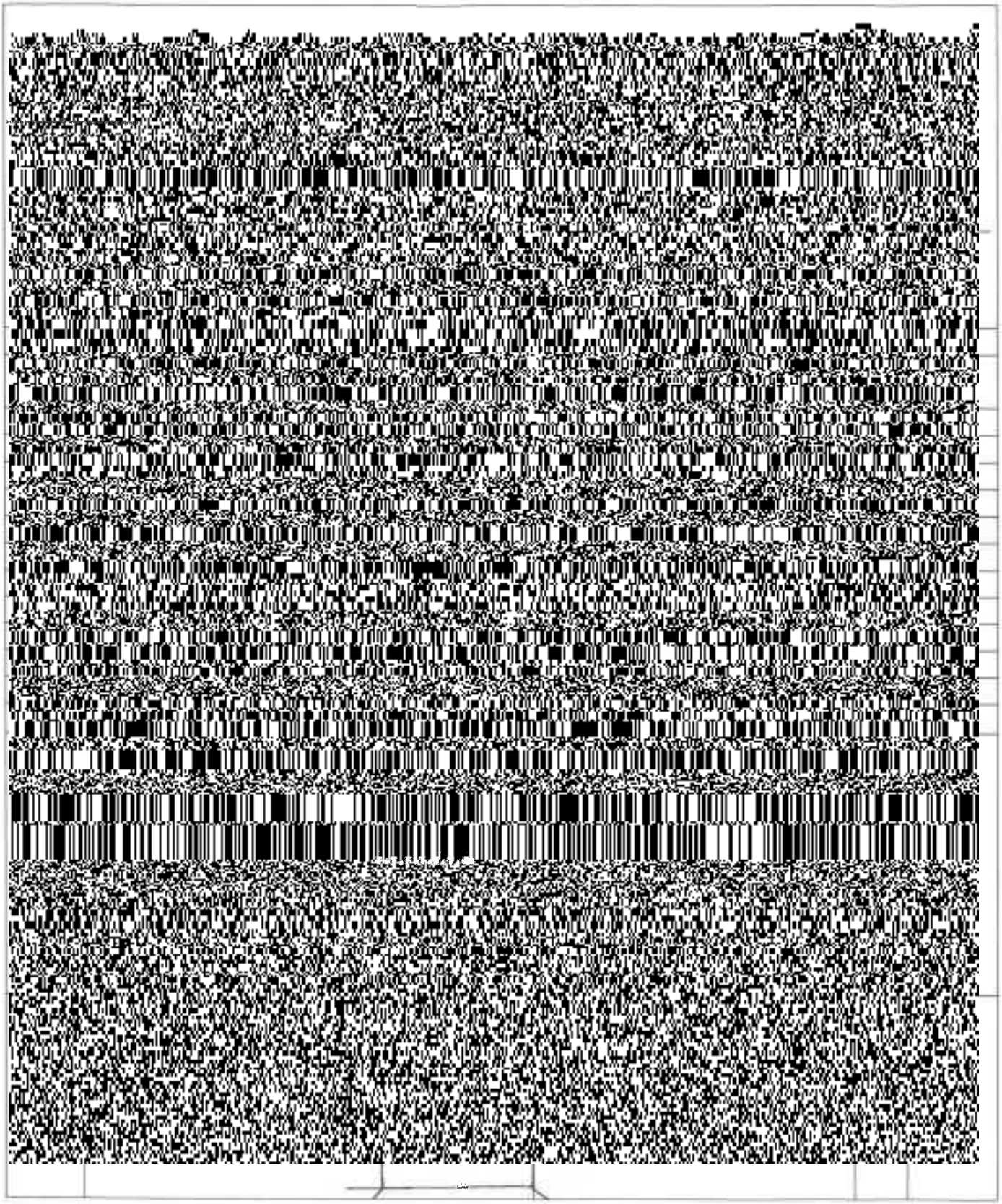

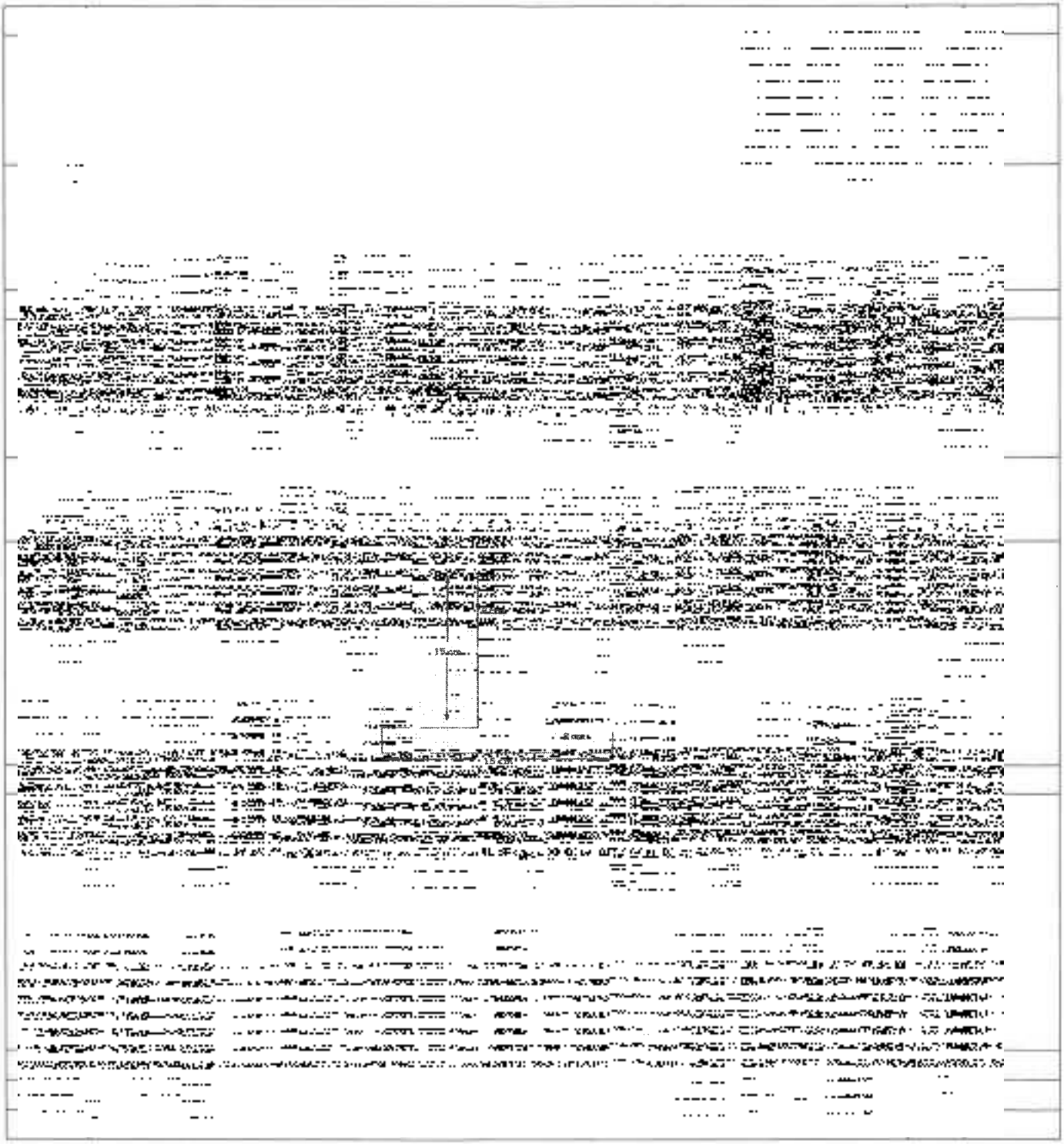

18.	A 20 Kg block starting from rest slides up a 30^0 inclined plane under the action of a 175 N force directed along the inclined plane. The coefficient of kinetic friction between the block and the plane is 0.2. Determine the (i) speed of the block after it slides 4.5 m and (ii) the distance travelled by the block when its speed becomes 4.5 m/s. [10M]	4	L4
19.	The amplitude of a particle in simple harmonic motion is 0.75m and the period is 1.2sec. Determine: [10M] (a)maximum velocity (b) maximum acceleration. (c) displacement (d) frequency	5	L4
	OR		
20.(a)	A body moving with simple harmonic motion has amplitude of 1 m and a period of oscillation of 2 seconds. What will be its velocity and acceleration 0.4 seconds after passing an extreme position? [5M]	5	L4
(b)	Mention the forces which are generally omitted while applying the principle of virtual work. [5M]	5	L3