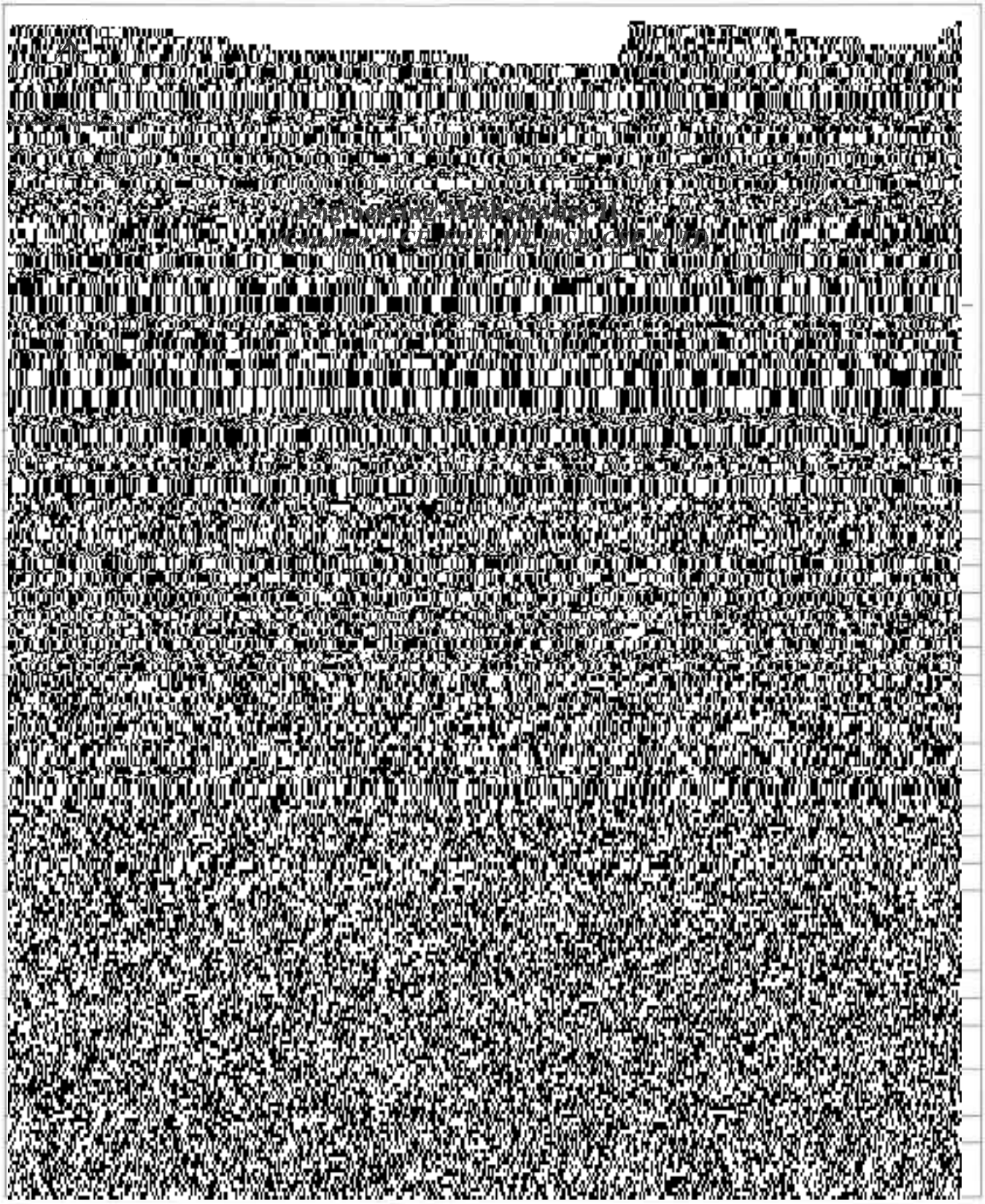

17	(a) Find a unit normal vector to the surface $z = x^2 + y^2$ at (-1,-2,5) (b) If $\bar{f} = xy^2i + 2x^2yzj - 3yz^2k$,find Div $\bar{f}$ at (1,-1,1)	[5M] [5M]
	OR	
18	Show that $\nabla^2[f(r)] = \frac{d^2f}{dr^2} + \frac{2}{r}\frac{df}{dr} = f''(r) + \frac{2}{r}f'(r)$, where r=$\lvert\bar{r}\rvert$	[10M]
19	(a) Find L $\{\frac{cos2t-cos3t}{t}\}$ (b) Find inverse Laplace transform of $\frac{5s-2}{s^2(s+2)(s-1)}$	[5M] [5M]
	OR	
20	Using convolution theorem find $L^{-1}\{\frac{1}{(s^2+a^2)^2}\}$	[10M]