Ans. to the Q.No-01

for the vociable 'Taske the initial entropy is given belove - 10.11:6 beau Herre, total 5 nample in simple in and total 5 sample is will from your and the total sample is 10. Entropy = $-\frac{5}{10}\log(\frac{5}{10}) - \frac{5}{10}\log(\frac{5}{10})$ [240, 18] .. froises roiformitel jo = rottoupo och mont word aco (11-)H=(+)H=(+)H=(+)DE. 1000 It (Tanto (Viewa) do tool := 'Somo') (8) polo (8) polo (8) (onoll == bo) & hund / otat) 2 log () = 2 log ()

Am to the Q. No-2

From the datard have can see that the 'Visual deffect' variable has 10 namples. Visual deffect variance sorte namples as Jostal Athèric aric 3 types of namples as "Some "mul" None" "Many" i lobel to S some = [0+, 3+1] do tot it to S None = [24,270] & = Monton] 5 many = [3+, 0+-] We know from the equation of Information Frain IG (1) - H(1) = 1+(1) - H(1/x) H (Tarster | Visual defect == 'Some') $= -\frac{3}{3}\log(\frac{3}{3}) - \frac{0}{3}\log(\frac{0}{3})$ = 0H (Taste / Visual defect = = 'None') = - = loge (=) - = log (=)

H(Taske | Visual defect == 'Many')

=
$$-\frac{0}{3}\log_2\left(\frac{0}{3}\right) - \frac{0}{3}\log_2\left(\frac{0}{3}\right)$$

= 0

I Gr (Visual Defect) = $1 - \left[\frac{4}{10} \times 1 + \frac{3}{10} \times 0 + \frac{3}{10} \times 0\right]$

= $1 - 0.4$

= 0.6

Ans. to the Q. No - 3

From the converse of Gres. 2 we can see that Fore the samples of 'Some', among 3 total items 3 is "Yummy' and 0 is "Meh".

And for the samples of 'None' \Rightarrow 2 are

"I ummy" and other 2 are "Meh".

"I ummy" and other 2 are "Meh".

H (Taske | Visual defect == 'Some')

H (Taske | Visual defect == 'None')

 $= -\frac{2}{4}\log_2(\frac{2}{4}) - \frac{2}{4}\log_2(\frac{2}{4}) = 1$ (Amo.)