Nombre del alumno: Olaguez Ramírez Brenda Leticia

Nombre del profesor: Albores Aguilar Jorge Enrique

Nombre del trabajo: Muestreo

Materia: Estadística inferencial en nutrición

Grado: 4°A

Grupo: LNU

Comitán de Domínguez Chiapas a 15 de Octubre de 2021.

① $N = 18000$

$P_1 = 65.7 = 0.657$

$q_1 = 1 - 0.657 = 0.343$

$B_1 = 2\% \ 0.02$

$n_1 =$

$D = \dfrac{(0.02)^2}{4} = 0.0001$

$n = \dfrac{(18000)(0.657)(0.343)}{(17999)(0.0001) + (0.657)(0.343)}$ $\underline{n_1 = 2003}$

$N = 18000$

$q_2 = 1 - 0.77 = 0.23$

$P_2 = 77\% = 0.77$

$B_2 = 4\% = 0.04$

$D = \dfrac{(0.04)^2}{4} = 0.0004$

$n = \dfrac{(18000)(0.77)(0.23)}{(17999)(0.0004) + (0.77)(0.23)}$ $\underline{n_2 = 433}$

② $N = 55000$

$P_1 = 55.8\% = 0.558$

$q_1 = 1 - 0.558 = 0.442$

$B_1 = 2\% = 0.02$

$D = \dfrac{(0.02)^2}{4} = 0.0001$

$n = \dfrac{(55000)(0.558)(0.442)}{(54999)(0.0001) + (0.558)(0.442)}$ $\underline{n = 2361}$

$N = 55000$

$P_2 = 62.5\% = 0.625$

$q_2 = 1 - 0.625 = 0.375$

$B_2 = 3\% = 0.03$

$D = \dfrac{(0.03)^2}{4} = .000225$

$n = \dfrac{(55000)(0.625)(0.375)}{(54999)(0.000225) + (0.625)(0.375)}$ $= \underline{n_2 = 1023}$

③ $N = 50000$

$P_1 = 56.7\% = 0.567$

$q_1 = 1 - 0.567 = 0.433$

$B_1 = 2\% = 0.02$

$D = \dfrac{(0.02)^2}{4} = 0.0001$

$n = \dfrac{(50000)(0.567)(0.433)}{(49999)(0.0001) + (0.567)(0.433)}$ $\underline{n_1 = 2341}$

$N = 50000$

$P_2 = 50\% = 0.5$

$q_2 = 1 - 0.5 = 0.5$

$B_2 = 4\% = 0.04$

$D = \dfrac{(0.04)^2}{4} = 0.0004$

$n = \dfrac{(50000)(0.5)(0.5)}{(49999)(0.0004) + (0.5)(0.5)}$ $\underline{n_2 = 618}$

Brenda Leticia Olaguez Ramirez

4° A

LNU

④ $N = 35200$

$P_1 = 72.5\% = 0.725$

$q_1 = 1 - 0.725 = 0.275$

$B_1 = 2\% = 0.02$

$D = \dfrac{(0.02)^2}{4} = 0.0001$

$n = \dfrac{(35200)(0.725)(0.275)}{(35199)(0.0001) + (0.725)(0.275)}$ $n_1 = 1887$

$N = 35200$

$P_2 = 50\% = 0.5$

$q_2 = 1 - 0.5 = 0.5$

$B_2 = 1\% = 0.01$

$D = \dfrac{(0.01)^2}{4} = 0.000025$

$n = \dfrac{(35200)(0.5)(0.5)}{(35199)(0.000025) + (0.5)(0.5)}$ $n_2 = 7788$

⑤ $N = 58000$

$P_1 = 50\% = 0.5$

$q_1 = 1 - 0.5 = 0.5$

$B_1 = 5\% = 0.05$

$D = \dfrac{(0.05)^2}{4} = 0.000625$

$n = \dfrac{(58000)(0.5)(0.5)}{(57999)(0.000625) + (0.5)(0.5)} = n_1 = 398$

$N = 58000$

$P_2 = 74\% = 0.74$

$q_2 = 1 - 0.74 = 0.26$

$B_2 = 2\% = 0.02$

$D = \dfrac{(0.02)^2}{4} = 0.0001$

$n = \dfrac{(58000)(0.74)(0.26)}{(57999)(0.0001) + (0.74)(0.26)}$ $n_2 = 1863$

⑥ $N = 17000$

$P_1 = 65.7\% = 0.657$

$q_1 = 1 - 0.657 = 0.343$

$B_1 = 2\% = 0.02$

$D = \dfrac{(0.02)^2}{4} = 0.0001$

$n = \dfrac{(17000)(0.657)(0.343)}{(16999)(0.0001) + (0.657)(0.343)}$ $n_1 = 1990$

$N = 170000$

$P_2 = 77\% = 0.77$

$q_2 = 1 - 0.77 = 0.23$

$B_2 = 4\% = 0.04$

$D = \dfrac{(0.04)^2}{4} = 0.0004$

$n = \dfrac{(17000)(0.77)(0.23)}{(16999)(0.0004) + (0.77)(0.23)}$ $n_2 = 432$

Brenda Leticia Olaguez Ramirez 4° A LNU