एनटीपीसी NTPC

Assignment 16.31287

Total no. of students in the class = 100.

Total no. of students passed in the class = 80 (in all subjects)

Probability of pass in all subjects $P(\text{pass all}) = 80/100 = 0.8$.

No. of students failed in one subject = 10.

Probability of failure in one subject ($P_{\text{fail one}}$) $= \frac{10}{100} = 0.1$.

No. of students failed in two subjects = 7.

Probability of failure in two subjects ($P_{\text{fail two}}$) $= \frac{7}{100} = 0.07$.

No. of students failed in three subjects = 3.

Probability of failure in three subjects ($P_{\text{fail three}}$) $= \frac{3}{100} = 0.03$

From the above, if we consider variable "x" as failing in a subject then

The probability of failing in 0 subjects, $P(x=0) = 0.8$.

The probability of failing in 1 subject, $P(x=1) = 0.1$

The probability of failing in 2 subjects, $P(x=2) = 0.07$

The probability of failing in 3 subjects, $P(x=3) = 0.03$.

The probability distribution can be shown as :

x	0	1	2	3
P(x)	0.8	0.1	0.07	0.03

हिन्दी की प्रगति से देश की सभी भाषाओं की प्रगति होगी।
–डॉ. जाकिर हुसैन