According to Professor Gustavo:

1 Q1

For $\nu(x, dy)$, we could neglect x, just see it as $\nu(dy)$

And we have:

$$\nu(dy) = \lambda f(y)dy$$

$f(y)$ is the density(pdf) of y.

In Table 2: Comparing the second factor the last four equations with $G_J f(x)$ in the upper left corner on Page 544, we notice that:

$$y = e^{y'} - 1$$

where y' is the y in Table 2.

In this way, assume that the pdf of y is $f(y)$, and the pdf of y' is $g(y')$, then we have:

$$p(y < k) = p((e^{y'} - 1) < k)$$

$$f(y) = \frac{1}{y+1} g(ln(y+1))$$

where g(y) is given in the notes of Table 2.

2 Q2

For the upper and lower bounds of the integral in Λ_J, we can just draw a random variable from a uniform distribution with the range of $(\frac{x_j}{x_i} - 1, \frac{x_{j+1}}{x_i} - 1)$.