The text is written in a script that is not clearly legible. It appears to be a page from a document with mathematical and possibly scientific content. The text is not in a standard script that can be easily transcribed into a readable format. Due to the illegibility, it is challenging to provide an accurate transcription of the content.
\[
P \sigma^2|\sigma_0^2 > 0 \quad \text{and} \quad \sigma_0^2 > 0
\]

\[
\sigma^2 \sim \text{Gamma} \left( \frac{\alpha}{2}, \frac{\beta}{2} \right)
\]

\[
\alpha \sim \text{Gamma}(a, b) \quad \beta \sim \text{Gamma}(c, d)
\]

\[
P \sigma^2|\sigma_0^2 > 0 \quad \text{and} \quad \sigma_0^2 > 0
\]