What is Life?

This is surely a debatable question so we will break it up in different sections.

Equation of Life

$$Life = \int_{Birth}^{Death} \frac{Happiness(time)}{time}\, d(time)$$

Explanation: The idea here is happiness is a function of time and it varies person to person and evetually changes according his behaviour in life. $Happiness(time) \in \mathbb{R}$ and $time \geq 0$ as usual. Time in the denominator says if $H(t) > 0$ then when time increases over all happiness has a external decreasing effect it is due to time, whereas if $H(t) < 0$ then as time increases due to that time again overall sadness decreases.\
Here $H(t) > 0 \implies Happiness(time)$ and $H(t) < 0 \implies sadness(time)$. Now finally we integrate all the resulting momentary emotions(either happiness/sadness) and get the total net outcome of life.

Note: This equation may be improved, we can make it optimised for an optimal life. May be denominator is a function of time which is increasing and positive. Many things is on the fly but one important thing to fix is that during birth $time = 0$, so the function above is not defined and also integral near zero may not be convergent, so refine the above integral as,

$$Life = \int_{Birth+\delta}^{Death} \frac{Happiness(time)}{time}\, d(time),\ \delta > 0$$

We have to now, figure out wheter the following inegral is convergent or not,

$$Life = \int_{Birth}^{Birth+\delta} \frac{Happiness(time)}{time}\, d(time),\ \delta > 0$$

For example if $H(t) = t^p,\ p > 0$. Then the above integral converges and life begins. Which is usual as we born happiness increases with time as $p > 0$ but if $p \leq 0$ or in other words happiness decreasing then life doesn't exists and then to keep the integral value finite limits has to be equal or in other words $Birth = Death$.