We may let the tensions in the segments of the cord be $F_1$, $F_2$, and $F_3$, as indicated.

The equations are:

1. For block $B$:
   \[ T_1 + U_{1\rightarrow 2} = T_2 \]
   \[ 0 + [2(9.81)(-1) + F_1(1)] = \frac{1}{2}(2)v_B^2 \]

2. For disk $A$:
   \[ T_1 + U_{1\rightarrow 2} = T_2 \]
   \[ 0 + [F_2(-1) + 10(9.81)(0.5)] = \frac{1}{2} \left[ \frac{1}{2}(10)(0.1)^2 + 10(0.1) \right](\frac{v_B}{0.2})^2 \]

3. Belt friction in statics for belt friction around drum $D$:
   \[ F_2 = F_1 e^{0.2\pi} \]
   \[ (T_2 = T_1 e^{M_k B}) \]
   \[ \therefore F_1 = \overrightarrow{\theta}, \quad F_2 = \overrightarrow{\theta}, \quad v_B = \overrightarrow{\theta} \quad \overrightarrow{\theta'} = \overrightarrow{\theta} \uparrow \]

Constraints:
\[ x_B + x_A + z_A = R \]
\[ 2x_A + x_B = R \]
\[ 2(x_A') + (-1) = 0 \]
\[ \overrightarrow{v_B} = 1 \text{ m/s} \]
\[ x_A' = -\overrightarrow{v_B} = 1 \text{ m/s} \]
\[ x_A'' = -\overrightarrow{a_B} = -1 \text{ m/s}^2 \]