3. **B.** $L_{1011} = \{M \mid$ M is a turing machine and 1011 $\in$ L (M)$\}$

   L_{1011} is a language of TM descriptions. It satisfies the two conditions of Rice's Theorem. First, it is non-trivial as some TMs have 1011 in their languages, however not every language contains the string 1011. Second, it is not implementation dependent, meaning it only depends on the language. If two turing machines were to recognize the same language, then both should have descriptions in L_{1011} or neither will. Therefore Rice's theorem implies that L_{1011} is un-decideable.

   C. $ALL_{TM} = \{M \mid$ M is a TM and L(M)= $\Sigma^*\}$.

   ALL_{TM} is a language of TM descriptions. It satisfies the two conditions of Rice's Theorem. First, it is non-trivial as some TMs have Σ in their languages, however not every language does. Second, it is not implementation dependent, meaning it only depends on the language. If two turing machines were to recognize the same language, then both should have descriptions in ALL_{TM} or neither will. Therefore Rice's theorem implies that ALL_{TM} is un-decideable.