Q4 Part d

Monday, 29 April 2024 5:55 PM

(d) Consider a schema $T(A, B, C, D)$ with the functional dependencies $AB \longrightarrow C$, $AB \longrightarrow D$ and $BC \longrightarrow D$.

If we decompose the schema into (A, B, D) & (B, C, D), is it a **lossless decomposition**? If yes, explain why. If not, try to produce a counterexample.

Are the two subschemas in **Boyce-Codd normal form**? Explain. **[8 marks]**