Theorem on sufficient conditions *(continuation)*

1) For any $t \in (0, \Theta) \setminus \mathcal{T}$ such that $S(t) \neq \varnothing$, there exists a value $\varepsilon_0 > 0$ and a set $G_\infty \subset G(t, \varepsilon_0) \setminus D(t)$, such that

a) the relations

$$G(t, \varepsilon_0) \subset G_\infty \cup \Omega,$$

$$\lim_{\varepsilon \to +0} \sup\{\varphi(x) : x \in G(t, \varepsilon) \setminus G_\infty\} = t$$

hold and the function

$$\omega(x) = \begin{cases} \varphi(x) - t, & x \in G(t, \varepsilon_0) \setminus (G_\infty \cup D(t)); \\ 0, & x \in D(t) \cap G(t, \varepsilon_0); \\ \infty, & x \in G_\infty \end{cases}$$

is u-stable on the set $G(t, \varepsilon_0) \setminus D(t)$;