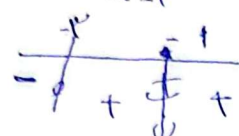
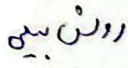


نام و نام خانوادگی ملودی زاده پاسنامه تشریحی تکلیف شماره کلاس درس		
الف) $r \cos u + 1 \neq 0$ $r \cos u \neq -1$ $\cos u \neq -\frac{1}{r}$ $D_f = R - \left\{ r k \pi + \frac{r \pi}{r}, r k \pi + \frac{r \pi}{r} \right\}$	ب) $\cos u - 1 \neq 0$ $\cos u \neq 1$ $D_f = R - \left\{ r k \pi \right\}$	۱
الف) $\tan u + 1 \neq 0 \rightarrow \tan u \neq -1 \rightarrow k\pi - \frac{\pi}{4}$ $\tan u \neq 0 \rightarrow \cos u \neq 0 \rightarrow k\pi + \frac{\pi}{2}$ $D_f = R - \left\{ k\pi - \frac{\pi}{4}, k\pi + \frac{\pi}{2} \right\}$	ب) $\cot u - 1 \neq 0 \rightarrow \cot u \neq 1 \rightarrow k\pi + \frac{\pi}{4}$ $\cot u \neq 0 \rightarrow \sin u \neq 0 \rightarrow k\pi$ $D_f = R - \left\{ k\pi - \frac{\pi}{4}, k\pi \right\}$	۲
الف) $-1 \leq \sin y \leq 1 \rightarrow -1 \leq u^2 - r \leq 1 \rightarrow$ $1 \leq u^2 \leq r \rightarrow \sqrt{1} \leq u \leq \sqrt{r} \rightarrow 1 \leq u \leq \sqrt{r}$ $D_f = [-\sqrt{r}, \sqrt{r}] \cup [1, \sqrt{r}]$	ب) $-1 \leq \sqrt{u} - r \leq 1$ $r \leq \sqrt{u} \leq r+1 \rightarrow r^2 \leq u \leq (r+1)^2$ $D_f = [r^2, (r+1)^2]$	۳
الف) $-1 \leq u - r \leq 1 \rightarrow r \leq u \leq r+1$ $\rightarrow r \leq u \leq r+1$ $\rightarrow -r-1 \leq u \leq -r$ $D_f = [-r-1, -r] \cup [r, r+1]$	ب) $-1 \leq u^2 + r u + 1 \leq 1$ $0 \leq u^2 + r u + 1 \rightarrow 0 \leq (u+1)(u+r)$ $u^2 + r u + 1 \leq 0 \rightarrow u(u+r) \leq 0$ $D_f = [-r-1, -r] \cup [-1, 0]$	۴
الف) $u^2 - r > 0 \rightarrow u^2 > r \rightarrow u > \sqrt{r}$ $u < -\sqrt{r}$ $D_f = (-\infty, -\sqrt{r}) \cup (\sqrt{r}, \infty)$	ب) $r - u > 0 \rightarrow u < r$ $\rightarrow -r < u < r$ $D_f = (-r, r)$	۵

الف) $a - a^2 > 0 \rightarrow a < 1$ $a - a^2 > 0 \rightarrow a > 0$ $a - a^2 \neq 1 \rightarrow a \neq 2$ $D_f = (0, 1) - \{2\}$	ب) $a^2 - 1 > 0 \rightarrow a^2 > 1 \rightarrow a > 1 \vee a < -1$ $a + a^2 > 0 \rightarrow a > -1$ $a + a^2 \neq 1 \rightarrow a \neq -2$ $D_f = (-1, -2) - \{-2\} \cup (1, \infty)$	6		
الف) $\frac{a^2 - (a+1)}{a-1} = \frac{(a-1)(a-2)}{a-1} > 0$  $D_f = (2, \infty)$	ب) $\frac{a+2}{a-1} > \frac{-2}{+1} = -2$ $a+2 > 0 \rightarrow a > -2$ $a+2 \neq 1 \rightarrow a \neq -1$ $D_f = (-2, -1) - \{-1\} \cup (1, \infty)$	7		
الف) $a - 2 > 0 \rightarrow a > 2$ $2 - \log_e(a-2) \geq 0 \rightarrow \log_e(a-2) \leq 2$ $a-2 \leq e^2$ $a \leq 10$ $D_f = (2, 10]$	ب) $a > 0$ $(\log_e a - 1) > 0$ $\log_e a > 1$ $\log_e a > \frac{1}{e}$ $a > \sqrt{e}$ $D_f = (\sqrt{e}, \infty)$	8		
الف) $\varepsilon^n \neq -1$  $D_f = \mathbb{R}$	ب) $\varepsilon^n - 1 \neq 0$ $\varepsilon^n \neq 1 \rightarrow n \neq 0$ $D_f = \mathbb{R} - \{0\}$	ج) $\varepsilon^n - 2 \neq 0 \rightarrow \varepsilon^n \neq 2$ $\rightarrow n \neq \frac{1}{p}$ $D_f = \mathbb{R} - \{\frac{1}{p}\}$	د) $\varepsilon^n - 2 \neq 0$ $\varepsilon^n \neq 2$ $a \neq \log_e 2$ $D_f = \mathbb{R} - \{\log_e 2\}$	9
الف) $(\varepsilon_{n+1})! \rightarrow \varepsilon_{n+1} \in \mathbb{W}$ $\rightarrow \varepsilon_n \in \mathbb{W} + 1$ $\Rightarrow n \in \frac{\mathbb{W} + 1}{\varepsilon}$ $D_f = \{n \mid n = \frac{k+1}{\varepsilon}, k \in \mathbb{W}\}$	ب) $(\frac{\varepsilon_n - 1}{\varepsilon_n + 0}) \in \mathbb{W}$  $n = \frac{\varepsilon \mathbb{W} + 1}{\varepsilon \mathbb{W} + 1}$ $D_f = \{n \mid n = \frac{\Delta k - 1}{k - 1}, k \in \mathbb{W}\}$	10		