

یازدهم قرداد

سوال ۱)

$$\log_n^m 2a \quad \log_{mn}^{m^2n} 2b \rightarrow mn^b 2m^2n$$

$$\downarrow$$

$$n^a 2m \quad [b] = \left[\log_{mn}^{m^2n} \right] \rightarrow \left[\log_n^{2a+1} \right] 2 \left[\frac{2a+1}{a+1} \right] = 1$$

صورت از مخرج بزرگتر است

$$\left[\frac{2a+1}{a+1} \right] = 1$$

سوال ۲)

$$y = \sqrt{\frac{x}{\log x}}$$

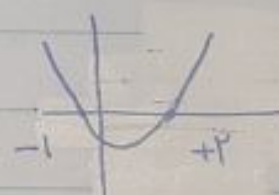
صوری و لا باید + باشد

وزیر را دنبال بزرگتر یا صوری (۵) $\leftarrow n < a < 0$ - شامل صبیح عدد صوری نیست

ب)

$$\frac{\log_e (a^2 - n - 2)}{\sqrt{n^2 - 1} + 1}$$

$n < -1$ یا $n > 2$



$\sqrt{n^2 - 1} + 1 \neq 0$, $n^2 - 1 \geq 0 \rightarrow n^2 - n - 2 > 0$

$n \geq 1$ یا $n \leq -1$

$n \rightarrow (-\infty, -1) \cup (2, +\infty)$

سوال ۳)

$$2 \log_a^a + \log_a^{\sqrt{a}} = 2$$

$n = 9 \rightarrow \mu^2$

$\log_{\mu}^a = t$

$$2 \log_a^a + \log_a^{\mu} = 2 \rightarrow \log_{\mu}^a + \log_a^{\mu} = 2$$

$xt \rightarrow$

$$t^2 - 2t + 1 = 0 \rightarrow [n = 1] \leftarrow \frac{1}{\log_{\mu}^a}$$

Sabalan

$\log_{\mu}^a = 1 \rightarrow [a = \mu]$

Subject: $\log 3 = .15$ $\log 2 = .13$

NOTE BOOK

$$\log 5 = \log \frac{10}{2} \rightarrow \log 10 - \log 2 = 1 - .13 = .87$$

(سوال ۴)

$$(\log \frac{5}{3}) x^2 + (\log 4) x - \log 10$$

$$\downarrow$$

$$(\log 5 - \log 3) x^2 + 2(\log 2) x - \log 10$$

$\log 5 = .87$ $\log 3 = .15$ $\log 2 = .13$ $\log 10 = 1$

$$.87 x^2 + .26 x - 1 = 0 \rightarrow x = \frac{-.26 \pm \sqrt{.26^2 + 4}}{2}$$

$$\log \frac{1}{15}$$

$$\log 5 = .69$$

$$\rightarrow \log \frac{2 \times 10}{4 \times 15} = \frac{2 \times 10}{4 \times 15}$$

$$2 = 0.5$$

$$\rightarrow \log \frac{2}{15} \rightarrow \frac{.30}{.18} \rightarrow \frac{10}{19} \rightarrow \text{جواب}$$

$$\log 3 = 1.10$$

$$3 = 10^x \rightarrow x = \frac{1.10}{1}$$

(سوال ۶)

$$\log 2 = 1.14$$

$$2 = 10^x \rightarrow x = \frac{1.14}{1}$$

$$\log \frac{4}{10} = 0 \quad \log \frac{2 \times 3}{4 \times 10} \rightarrow \frac{.30}{.60} \Rightarrow \frac{1}{2} \Rightarrow \log 2 = \frac{1}{2}$$

$$\log \frac{1}{n} = m \rightarrow \frac{1}{n} = 10^m \rightarrow \frac{1}{n} = 10^m$$

(سوال ۷)

$$\log \frac{1}{n} \rightarrow \frac{1}{n} \rightarrow \log \frac{1}{n} \Rightarrow \log \frac{1}{n} = \frac{1}{n}$$

Sabalan

سوال (۸)

$$n = -1 \quad \alpha \alpha$$

$$n = \frac{1}{x} \checkmark$$

سوال (۹)

$$\hookrightarrow b = r^{\frac{1}{r}(1+a)}$$

$$\hookrightarrow b_2 \gamma$$

$$\hookrightarrow r \times (r^a)^r$$

$$b \in x^q \mathcal{O}_K$$

سوال (۱۰)

$$\frac{f(a)}{b} = \log f$$

$$\forall a=b \wedge c \rightarrow \frac{\forall a}{p} \wedge \frac{c}{b}$$

5

$$\frac{1}{r} \log r$$

$$109 \frac{1}{\sqrt{p}}$$

Sabalan

$$\left(\frac{1}{\sqrt[n]{r}}\right)^{\frac{c}{a}} = \left(\frac{1}{\sqrt[n]{r}}\right)^{\log_{\sqrt[n]{r}} \frac{1}{\delta}} = \left(\frac{1}{\delta}\right)^{\log_{\sqrt[n]{r}} \frac{1}{\sqrt[n]{r}}} \\ = \left(\frac{1}{\delta}\right)^{\log_{r^{\frac{1}{n}}} r^{-\frac{1}{n}}} = \left(\frac{1}{\delta}\right)^{-\frac{1}{n}} = \delta^{\frac{1}{n}} = \sqrt[n]{\delta}$$