

2011 -			
C/4	10 - 8 :	:	3 :

(04) :

$$u_{n+1} = \frac{1}{2}u_n + \frac{9}{4} : n \quad u_0 = 2 : (u_n)$$

$$v_n = 2u_n - 9 : n \quad (v_n)$$

$$v_2 \quad v_1 \quad v_0 \quad u_2 \quad u_1 \quad (1)$$

$$(v_n) \quad (2)$$

$$n \quad v_n \quad (3)$$

$$n \quad u_n \quad (4)$$

(04) :

$$2, 1, 1 : 12$$

$$3, 2, 2, 2, 1 \quad 2, 2, 1, 1$$

:

" B " " A

$$A \cap B \quad B \quad A : (1)$$

$$B \quad A (2)$$

(05) :

$$Z \quad \bar{Z} + |Z| = 6 - 2i : Z (1)$$

$$\frac{8}{3} + 2i \quad -\frac{8}{3} + 2i \quad \Leftrightarrow \quad -\frac{8}{3} - 2i \quad \frac{8}{3} - 2i$$

$$|z-1| = |z+i| \quad z = x+iy \quad M (2)$$

$$y = x \quad y = -x+1 \quad \Leftrightarrow \quad y = -x \quad y = x-1$$

$$k \in Z : n \quad (1+i\sqrt{3})^n \quad n (3)$$

$$6k \quad 3k \quad \Leftrightarrow \quad 3k+2 \quad 3k+1$$

$$(E) \quad Z \in C \quad z = \frac{6-z}{3-z} \dots (E) (4)$$

$$-1-i \quad 1-i \quad \Leftrightarrow \quad 2i \quad 2-i\sqrt{2}$$

(07) :

$$f(x) = x - \frac{1}{1+e^x} : R \quad f$$

(3cm) f (C)

$$\lim_{x \rightarrow -\infty} f(x) \quad \lim_{x \rightarrow +\infty} f(x) \quad (1)$$

$$R \quad x \quad f'(x) > 0 : \quad (2)$$

$$y = x - 1 \quad y = x$$

$$(\Delta') \quad (\Delta) \quad (C) \quad (3)$$

$$(\Delta') \quad (\Delta) \quad (C) \quad (4)$$

$$e^\alpha + 1 = \frac{1}{\alpha} :$$

$$0 < \alpha < \frac{1}{2} \quad \alpha \quad f(x) = 0 \quad (5)$$

$$(\alpha \approx 0.4) \quad (\Delta') \quad (\Delta) \quad (C) \quad (6)$$