CSE-4103 Section-A R011: 1603013

$$\frac{\text{Problem:}}{\text{sc(m)} = \{0, 2, -3, 1, -2, -1, 4, 3, -1, 0, \dots\}}$$

1 4 2 2 2 2

- (i) se (- n+2)
- (ii) x (- n-2)
- (iii) x (-27+1)
- (iv)x(-3-1)
- (v)-se(-m+2)

Answere:

(i)
$$x(n) = \begin{cases} 2 & ... & 0 & ... & 0 \\ 1 & ... & 0 & ... & 1 \end{cases}$$

$$\Rightarrow x(n+2) = \begin{cases} 2 & ... & 0 & ... & 2 \\ 1 & ... & 0 & ... & 1 \end{cases}$$

$$\Rightarrow x(-n+2) = \begin{cases} 2 & ... & 0 & ... & 1 \\ 1 & ... & 0 & ... & 1 \end{cases}$$

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$$\Rightarrow x(-n+2) = \begin{cases} 2 & ... & 0 & ... & 1 \\ 1 & ... & 1 & ... & 1 \end{cases}$$

(ii)
$$x(m) = \{2..., 0, 2, -3, 1, -2, -1, 4, 3, -1, 0, ...\}$$

 $\Rightarrow x(m-2) = \{2..., 0, 2, -3, 1, -2, -1, 4, 3, -1, 0, ...\}$
 $\Rightarrow x(-m-2) = \{2..., 0, -1, 3, 4, -1, -2, 1, -3, 2, 0, ...\}$

(ii) x(m) = $\{...,0,2,-3,1,-2,-1,4,3,-1,0,...\}$ $= \chi(n+1) = \{..., 0, 2, -3, 1, -2, -1, 4, 3, -1, 0, ...\}$ $= \chi(-8+1) = \{..., 0, -1, 3, 4, -1, -2, 1, -3, 3, 0, ...\}$ ラ×(-2の+1)=3...,0,3,€-1,1,2,-.., $(iv) \times (m) = \{0, ..., 0, 2, -3, 1, -2, -1, 4, 3, -1, 0, -...\}$ $\exists x(n-1) = \{-..., 0, 2, -3, -1, -2, -1, 4, 3, -1, 0, ...\}$ $= |x(-n-1)| = \frac{1}{2}, -\frac{1}{2}, 0, -\frac{1}{3}, 4, -\frac{1}{2}, -\frac{2}{1}, -\frac{3}{2}, 0, -\frac{1}{2}$ $= \pi(-\frac{m}{3}-1) = \{--1,0,0,0,-1,0,0,3,0,0,4,0,0,-1,0,0,$ -2,0,0,1,0,0,-3,0,0,2,0,0,---3