

Ex-6(C)

i)  $A = \{5, 7\}$   
 $= \phi, \{5\}, \{7\}, \{5, 7\}$

ii)  $B = \{a, b, c\}$   
 $= \phi, \{a\}, \{b\}, \{c\}, \{a, b\}, \{a, c\}, \{b, c\}, \{a, b, c\}$

iii)  $C = \{x : x \in W \text{ and } x < 2\}$   
 $= \{0, 1, 2\}$   
 $\phi, \{0\}, \{1\}, \{2\}, \{0, 1\}, \{1, 2\}, \{0, 2\}, \{0, 1, 2\}$

iv)  
 $= \{p, 0, \pi\}$   
 $= \phi, \{p\}, \{0\}, \{\pi\}, \{p, 0\}, \{0, \pi\}, \{p, \pi\}, \{p, 0, \pi\}$

2) i) ~~Set~~

2) If  $C$  is the set of letters in word 'COOLIN' find:

i) Set  $C = \{c, o, l, e, n\}$

ii)  $n(C) = 5$

iii) no. of its subsets =  $2^n = 2^5 = 25$  or  $32$

iv) no. of its proper subsets =  $2^n - 1 = 2^5 - 1 = 25 - 1 = 24$   
 $2^n - 1 = 2^5 - 1 = 32 - 1 = 31$

3) i)  $\{TREETH\}$

$= \phi, \{t\}, \{r\}, \{e\}, \{h\}, \{t, e\}, \{e, h\}, \{t, e, h\}, \{t, h\}$