

Test the formal proof of validity :

1.  $Z \supset A$

$Z \vee A \therefore A$

2.  $A \vee (B \cdot C)$

$A \supset C \therefore C$

3.  $A \supset (B \supset C) \therefore B \supset (A \supset C)$

4.  $(A \supset B) \cdot (C \supset D)$

$A \vee C$

$(A \supset \sim D) \cdot (C \supset \sim B) \therefore B \equiv \sim D$