Section III: Long or Partial Truth Table (10 marks)

Use a long or partial truth table to determine if the following argument is valid. If you use a partial truth table, you must complete one column entirely to get full marks. NOTE: Do not use the short truth table method. The conclusion is in the far right column.

A	B	C	D	~ (D → A) → B	B ∨ ~C	~((A ∨ D) →C)	(A & ~B) → (C ∨ D)
T	T	T	T	T	T	T	T
T	T	T	F	T	T	T	T
T	T	F	T	T	T	T	T
T	T	F	F	T	T	T	T
T	F	T	T	T	T	F	T
T	F	T	F	T	T	F	T
T	F	F	T	T	T	T	T
T	F	F	F	T	T	T	F
F	T	T	T	T	T	T	T
F	T	T	F	T	T	T	T
F	T	F	T	T	T	T	T
F	T	F	F	T	T	T	T
F	F	T	T	T	T	F	T
F	F	T	F	T	F	F	T
F	F	F	T	F	T	T	T
F	F	F	F	T	T	F	T

The following argument is invalid because of line 8, with all true premises and false conclusions.