

### ATPL Instruments Typical Exam Question 23

Note: You will need to use the cold weather correction tables from the CAP GEN for this question:

To use the tables, you will need the temperature at the airport which has to be estimated from the OAT assuming ISA conditions.

OAT at aeroplane indicated altitude =  $-10^{\circ}\text{C}$  }  
Your indicated altitude is 6,500'  
Aerodrome elevation is 1,800'

Estimated temperature at aerodrome elevation will be

$$\begin{aligned} &= -10 + \left(\frac{6500-1800}{1000}\right)(2) \\ &= -10 + \left(\frac{4700}{1000}\right)(2) \\ &= -10 + (4.7)(2) \\ &= -10 + 9.4 \\ &= -0.6^{\circ}\text{C} \end{aligned}$$

You will thus need to read the altitude correction required from the tables for a temp of  $-0.6^{\circ}\text{C}$  and a height difference of 4,700 feet. This will require interpolation.

From the tables, a correction of 284 feet is required. i.e. 290' which means that you are 290' lower than indicated.

True altitude is thus  $6,500 - 290 = 6,210'$

Clearance above the ridge is therefore 1,210'

The correct answer is b)