ATPL Instruments Typical Exam Question 15

To solve this problem you should use the cold weather corrections available in the CAP GEN.

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

OAT at aeroplane indicated altitude = -38°C
Your indicated altitude is 5,400'
Aerodrome elevation is 2,267'

Temperature on ground will be

$$= -38 + \left(\frac{5400 - 2267}{1000}\right)(2)$$

$$= -38 + \left(\frac{3133}{1000}\right)(2)$$

$$= -38 + 6.266$$

$$= -31.7°C$$

You will need to interpolate on the tables to obtain the required values.

Altitude correction required is 622' which means that you are 622' lower than indicated.

True altitude is therefore 5,400 – 622 = 4,798'

The high point is at 4,320'

Therefore you are approx. 458' above the high point.

The correct answer is b)