

### 11.5 Question 5

**11.5.A S/MIME provides authentication, confidentiality, compression, and email compatibility. Which ones of the following statements about these four services are true and which ones are false? Justify.**

**S/MIME uses public key cryptography for content encryption in order to ensure confidentiality.**

**S/MIME requires that the signing is done first followed by the message encryption.**

**S/MIME uses X.509 public-key certificates.**

**Lossy compression can be applied in any order with respect to the signing and message encryption operations.**

**S/MIME provides 7-bit encoding for converting a stream of 8-bit octets to a stream of ASCII characters while some electronic mail systems accept only blocks of ASCII characters.**