(a) Message authentication

$C_K(M)$

$E_{K_2}[M \| C_{K_1}(M)]$

$C_{K_1}(M)$

$E_{K_2}[M]$

$C_{K_1}[E_{K_2}(M)]$

What different mechanisms are being used in each of the three schemes above

Which of them provides

i) authentication

ii) confidentiality

iii) integrity

iv) digital signature