

M1.(a) upper audio frequency maximum 15–20kHz ✓
sampling frequency must be higher ✓ than $2\times$ ✓ highest audio frequency 3

(b) 65536 ✓
allow 65535 1

(c) $5 / 65535$ ✓ = $76\mu\text{V}$ ✓
allow 65536
ecf from (b) 2

(d) high & low frequencies are lost *or* reduced bandwidth ✓
reference to perceived quality, e.g. lack of bass / treble in the music, 'tinny', or similar ✓ 2

[8]