

Question number	Answer	Notes	Marks
4 (a)	Digital: only set values allowed ; Analogue: any value allowed / 'continuously variable' ;	ACCEPT Idea of on-off OR 1-0 for digital signal REJECT 'varies' alone / 'continuous' alone / 'varies within a range' REJECT refs to frequency ACCEPT information in diagrams e.g. labelled correct waveforms	2
(b)	easier to remove noise / can regenerate / may carry more information / more stations / easier to store /copy / use with computers ;	ALLOW can be cleaned IGNORE 'less noise' alone REJECT carries information faster REJECT easier to amplify IGNORE refs to quality / clarity of sound	1
(c)	Any three from: Waves spread out (as they leave the speaker) ; (Different frequencies / notes have) different wavelengths ; Diffract most if speaker size matches wavelength ; Giving a more even sound (if all frequencies diffract equally) ;	ACCEPT this idea on a diagram ACCEPT this idea on another diagram e.g. "high and low frequencies have same loudness" OWTTE	3

Total 6 marks