7	**C is the correct answer as the path difference of 12cm is half the wavelength, causing destructive interference (no heating).** A is not the correct answer as the path difference of 12cm would only cause maximum heating if it was a multiple of the wavelength B is not the correct answer as the path difference of 12cm would only cause maximum heating if it was a multiple of the wavelength. D is not the correct answer as the path difference of 12cm would only cause no heating if it was an odd half multiple of the wavelength.	**(1)**