All the strings are under tension. The strings are one type of harp are made from nylon of density 1070 kgm²l. One string has a diameter of 1,14 mm. (a) (i) Show that the mass per unit length µ of the string is about 1.1 × 10² kgm²l. (2) (3) (4) (ii) When the middle of the string is plucked, a note of frequency 440 Hz is produced. Calculate the tension in the string. [length of string = 41.0 cm] (4) Tension in string =	(ii) Whe is proceed length of the strings has a diameter (a) (i) Shoot (ii) When is proceed to the strings has a diameter (b) The graduation of the strings has a diameter (a) the strings has a diameter (b) Shoot (a) the strings has a diameter (b) Shoot (b) Shoot (b) Shoot (c)	on one type of harp are madeter of 1.14 mm. w that the mass per unit length of the string is roduced. culate the tension in the string the of string = 41.0 cm	gth μ of the string is about $1.1 \times 10^{-3} \mathrm{kg m^{-1}}$. s plucked, a note of frequency 440 Hz ng. Tension in string =	(4)
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(Total for Question 18 = 9 marks)