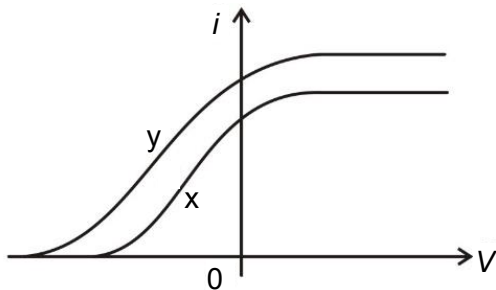


- 27 The figure shows the variation of the photoelectric current  $i$  with voltage  $V$  between the electrodes in a photocell for two different radiations, x and y.



The intensity and the frequency of radiation x are  $I_x$  and  $f_x$  while the intensity and the frequency of radiation y are  $I_y$  and  $f_y$ . Which of the following shows the relationship between the intensities and frequencies of x and y?

**A**  $I_x > I_y$ ,  $f_x > f_y$

**B**  $I_x > I_y$ ,  $f_x < f_y$

**C**  $I_x < I_y$ ,  $f_x > f_y$

**D**  $I_x < I_y$ ,  $f_x < f_y$

- 28 An electron of mass  $m$  and charge  $e$  is accelerated from rest through an electric field of potential