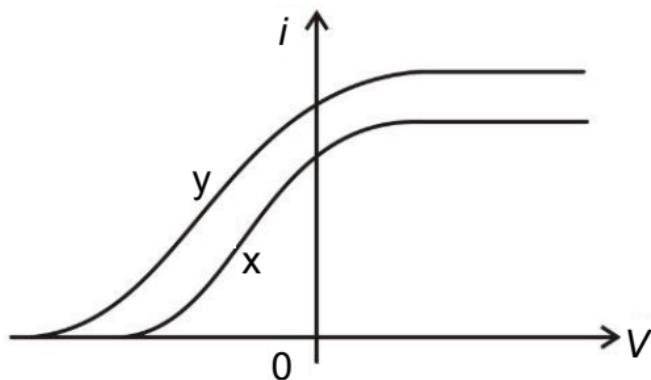


- 27 The figure shows the variation of the photoelectric current  $i$  with voltage  $V$  between the electrodes in a photocell for two different radiations,  $x$  and  $y$ .



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