

- 27** A metal surface is illuminated with a beam of monochromatic electromagnetic radiation. By the photoelectric effect, photoelectrons may be emitted from the metal surface.

Which statement about the photoelectrons is correct?

- A** No emission of photoelectrons occurs if the radiation is of a very low intensity.
- B** Photoelectrons are emitted only if the wavelength of the radiation is greater than a minimum value.
- C** The maximum speed of the photoelectrons emitted increases when the intensity of the radiation increases at constant frequency.
- D** The rate of emission of photoelectrons decreases when the frequency of the radiation increases at constant intensity.

- 28** The following graph shows the spectrum of X rays emitted from an X-ray tube.