

- 27** A metal surface is illuminated with a beam of monochromatic electromagnetic radiation. Based on 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 below a threshold 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 provided frequency of radiation remains constant.
- D** The rate of emission of photoelectrons decreases when the frequency of the radiation increases at constant intensity.