

**207.** For an insurance:

(i) Losses have density function

$$f_X(x) = \begin{cases} 0.02x & 0 < x < 10 \\ 0 & \text{elsewhere} \end{cases}$$

(ii) The insurance has an ordinary deductible of 4 per loss.

(iii)  $Y^P$  is the claim payment per payment random variable.

Calculate  $E[Y^P]$ .

(A) 2.9

(B) 3.0

(C) 3.2

(D) 3.3

(E) 3.4