

II (2) C (or A) $\rightarrow$ since this was worded unclearly.

$$\begin{aligned} \textcircled{3} B \Rightarrow \mu &= \sum x \cdot P(x) = (-3)(.52) + (4)(.15) + (10)(.33) \\ &= (-1.56) + (.6) + (3.3) \\ &= \boxed{2.34} \end{aligned}$$

(4) B

$$\begin{aligned} \textcircled{5} B \text{ or } C &\Rightarrow 1 - [.4437 + .3915 + .1382] = 1 - .9734 = \boxed{.0266} \\ &\stackrel{\text{or}}{=} [.0244 + .0022 + .0001] = \boxed{.0267} \end{aligned}$$

$$\textcircled{6} C \Rightarrow \mu = n \cdot p = (5)(.15) = \boxed{.75}$$

III (7) $\boxed{.3110}$

$$\begin{aligned} \textcircled{8} P(X > 5) &= 1 - [.0001 + .0011 + .0064 + .0268] \\ &= 1 - .0344 \\ &= \boxed{.9656} \end{aligned}$$

$$\begin{aligned} \textcircled{9} P(X \leq 11) &= \\ &= 1 - [.0040 + .0008 + .0001] \\ &= 1 - .0049 \\ &= \boxed{.9951} \end{aligned}$$

$$\begin{aligned} \stackrel{\text{or}}{=} P(X > 5) &= .0803 + .1701 + .2581 + .2581 + \\ &\quad + .1549 + .0422 \\ &= \boxed{.9657} \end{aligned}$$

$$\textcircled{10} P(\text{at least } 1) = P(X \geq 1) = 1 - [.1001] = \boxed{.8999}$$

$$\begin{aligned} \textcircled{11} P(3 < X \leq 5) &= .1104 + .1664 + .1941 + .1792 + .1327 + .0794 \\ &= \boxed{.8622} \end{aligned}$$

III (12) $P(X = 8) = \boxed{.1248}$

$$\begin{aligned}
 (13) \quad P(X < 16) &= 1 - (.0022 + .0003) \\
 &= 1 - [.0025] \\
 &= \boxed{.9975}
 \end{aligned}$$

$$\begin{aligned}
 (14) \quad P(\text{at least } 14) &= P(X \geq 14) \\
 &= .0291 + .0095 + .0022 + .0003 \\
 &= \boxed{.0411}
 \end{aligned}$$

$$\begin{aligned}
 (15) \quad E(X) = \mu &= n \cdot p \\
 &= (18)(.55) \\
 &= \boxed{9.9}
 \end{aligned}$$

$$\begin{aligned}
 (16) \quad \sigma &= \sqrt{n \cdot p \cdot q} & q &= 1 - p \\
 & & &= 1 - .55 \\
 & & &= .45 \\
 &= \sqrt{(18)(.55)(.45)} \\
 &= \sqrt{4.455} \\
 &= \boxed{2.11}
 \end{aligned}$$