Question(7)

Given the percentage of people to be employed in Government services-

$$P[G] = P[G|E]P[E] + P[G|M]P[M] + P[G|N]P[N]$$

$$= (0.1 \times 0.4) + (0.1 \times 0.4) + (0.5 \times 0.2)$$

$$= 0.04 + 0.04 + 0.1 \Rightarrow \boxed{0.18}$$

Now,
e Engineering

$$P[E|G] = \frac{P[G/E]P[E]}{P[G]}$$

$$= \frac{0.04}{0.18}$$

$$= 0.22$$

$$\boxed{22\%}$$

Medicine

$$P[M|G] = \frac{P[G|M] \cdot P[M]}{P[G]}$$

$$\frac{0.04}{0.18}$$

$$\boxed{22\%}$$

⑤

Neither.

$$P[N|G] = \frac{P[G|N] \cdot P[N]}{P[G]}$$

$$\frac{0.10}{0.18} = 0.55$$

$$= \boxed{55\%}$$

Thus one having no degree are in government services with highest percentage

of $\boxed{55\%}$.