CSL003P1M: Probability and Statistics
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Assignment -I (Solution Key)
September 5, 2019

Prob-1. $\frac{2}{3}, \frac{4}{9}$.

Prob-3. 0.24763.

Prob-4. $\frac{40}{46}$.

Prob-6. $1 - (1 - \frac{1}{365})(1 - \frac{2}{365}) \ldots (1 - \frac{24}{365})$.

Prob-7. $\frac{13}{41}$.

Prob-9. $\frac{3}{8}$.

Prob-11. $\frac{1}{10}$.

Prob-12. (a)$\dfrac{^4C_3\,^{48}C_4}{^{52}C_7}$, (b) $\dfrac{^4C_2\,^{48}C_5}{^{52}C_7}$, (c) $\dfrac{^4C_3\,^{48}C_4 + {}^4C_2\,^{48}C_5 - {}^4C_3\,^4C_2\,^{44}C_2}{^{52}C_7}$.

Prob-13. $\frac{5}{6}, \frac{1}{3}$.

Prob-14. (a)0.7037, (b) 0.2592, (c)0.2222.