## 6. PORTFOLIO THEORY

1. The expected return on securities $\mathrm{A}, \mathrm{B}$, and C are $12.2 \%, 14.6 \%$ and $8.6 \%$ respectively. Their standard deviations of returns are $40 \%, 50 \%$ and $30 \%$ respectively. The following table gives their correlation coefficients:

|  | A | B |  |
| :--- | ---: | ---: | ---: |
| A | 1 | C |  |
| B |  | 0.3 | 1 |
| C |  | 0.6 | 0.9 |

(a) Estimate the expected return and risk, of
(i) a portfolio X consisting of $50 \%$ share $\mathrm{A}, 50 \%$ share B
(ii) a portfolio Y consisting of $50 \%$ share B, $50 \%$ share C.
(b) Which of the two portfolios do you prefer and why?

