This formula sheet will be provided on the day of your exam.

Chapter 2: Money and How We Use It

$MV = PY$ $\%\Delta M + \%\Delta V = \%\Delta\pi + \%\Delta Y$

Chapter 4: Future Value, Present Value, and Interest Rates

$$P_{CB} = \left[\frac{C}{(1+i)} + \frac{C}{(1+i)^2} + \cdots \frac{C}{(1+i)^n}\right] + \frac{F}{(1+i)^n}$$

$$i = r + \pi^e$$

Chapter 5: Understanding Risk

Pr_i denotes the probability of payoff *i*.

Expected Value of portfolio X = *E(X)* = $\Pr_1 \times Payoff_1 + \Pr_2 \times Payoff_2 + \cdots + \Pr_n \times Payoff_n$

Variance = $\Pr_1\left[Payoff_1 - E(X)\right]^2 + \Pr_2\left[Payoff_2 - E(X)\right]^2 + \cdots \Pr_n\left[Payoff_n - E(X)\right]^2$

Standard Deviation = $\sqrt{Variance}$

Chapter 7: The Risk and Term Structure of Interest Rates

$$i_{nt} = \frac{i_t + i^e_{t+1} + i^e_{t+2} + \cdots + i^e_{t+n-1}}{n}$$ $$i_{nt} = rp_n + \frac{i_t + i^e_{t+1} + i^e_{t+2} + \cdots + i^e_{t+n-1}}{n}$$

Chapter 8: Stocks, Stock Markets, and Market Efficiency

$$P_t = \left[\frac{D^e_{t+1}}{(1+i)} + \frac{D^e_{t+2}}{(1+i)^2} + \cdots \frac{D^e_{t+n}}{(1+i)^n}\right] + \frac{P^e_{t+n}}{(1+i)^n}$$ $$P_t = \frac{D_t}{i-g}$$