L1: Options

Essential theory:

1. **What is an option?**
2. **What is the payoff of a put/call option?**
3. **What is the intrinsic value of a put/call option?**
4. **What is the difference between a profit and payoff diagram?**
5. **The four drivers of intrinsic value are (give its correlation to price):**
6. **The two drivers of time value are (give its correlation to price):**
7. **The difference between an American and European option is:**
8. **What are the trade-offs to consider when exercising early?**
9. **Give an example of how a company could use a call/put to reduce potential losses on a planned purchase or sale.**

Theory answers:

1. An option gives the holder the right, but not the obligation to buy or sell an asset at a predetermined price at some time in the future.
2. Call payoff = Max(P_{expiry} – exercise price, 0), Put payoff = Max(exercise price - P_{expiry}, 0)
3. Call intrinsic value = Call payoff now, Put intrinsic value = Put payoff now
4. Payoffs show the value of exercising the option at a certain asset price (see 2). Profit diagrams are the same, but subtract the premium.
5. <u>Asset price</u>. As it goes up, calls go up and puts go down in value.
   <u>Exercise price</u>. As it goes up, calls go down and puts go up in value.
   <u>Interest rates</u>. As they go up, calls go up (lowered PV of future outflow) and puts go down (lowered PV of future inflow)
   <u>Dividends</u>. In they occur before expiry, puts go up (lowered asset price) and calls go down.
6. <u>Time to expiry</u>. Both calls and puts go up as it increases. Greater probability of finishing deep in-the-money.
   <u>Volatility</u>. Same as above.
7. American options can be exercised before expiry. European only at the time of expiry. Holding an American option is therefore preferred.

8. Pros: Secure your profit or avoid the price drop before a dividend. Cons: a complete loss of time value.
9. Buy a call on an asset you will buy in the future to set a cap on the price you pay. Buy a put on an asset you will sell to set a minimum price you will receive.

L2: Payout Policy

Essential theory:

1. **Order and explain the following events: Ex-dividend date, announcement date, payment date, record date, cum-dividend date.**
2. **What is the dividend drop-off ratio? What would you expect it to be?**
3. **What is the M&M dividend irrelevance theorem?**
4. **Explain how investors can replicate their preferred dividend payout policy themselves.**
5. **What assumptions does M&M's theory make?**
6. **Explain six additional factors to dividend policy.**
7. **Explain the imputation tax system and define a grossed-up dividend.**
8. **Give the reasons for and against dividends from the investor's point of view.**
9. **What is meant when dividend payout policies are called 'sticky'?**
10. **What are two issues with high dividend payouts ratios?**
11. **List the four types of buyback.**
12. **Explain the tax implications of each type of share buyback.**
13. **List the benefits of choosing a share buyback over paying dividends.**
14. **What type of businesses prefer dividends/buybacks?**
15. **What type of businesses prefer off/on-market buybacks?**
16. **Compare regular and special dividends.**