

Sample HFD exam questions:

1. Explain in your OWN words what is algorithmic trading? What markets are suitable for that?
2. How fundamental analysis can be used in HFT strategies? Give an example of such strategy.
3. Explain in OWN words the notion of autocorrelation. How can it be used in trading strategies? Give an example of such strategy.
4. Explain in OWN words the notion of cointegration. How can it be used in trading strategies? Give an example of such strategy.
5. Explain in OWN words what is a momentum strategy. Give an example. What are potential sources of trending behavior?
6. Explain in OWN words what is pair trading. What statistical tools are useful in such strategies?
7. What is a bid price, an ask price, a mid price, a bid-ask spread and a tick?
8. What is volatility? Give two examples of its measures. How can it be used in trading strategies?
9. Explain in OWN words what is a drawdown, a maximum drawdown, a maximum drawdown duration?
10. Explain in OWN words what is a periodic pattern. Give 2 examples (with intuitive explanation) of periodic patterns for HFD.
11. Explain in OWN words what kind of data and why are adjusted for splits and dividends.
12. What are the advantages and disadvantages of Sharpe Ratio?
13. Explain in OWN words the meaning of LPM/HPM.
14. Explain in OWN words what is a data-snooping bias.
15. Give at least 3 examples of different entry techniques. Discuss their advantages and disadvantages.
16. Give and explain 2 examples of statistical arbitrage strategies for equities.
17. Explain in OWN words the idea of event arbitrage. Give 5 examples of particular events which might be traded upon.
18. Describe shortly what strategy would you consider in case of below group of assets (mention just one strategy and justify it theoretically)...
19. Based on the below statistics please calculate the correct value of the Calmar/Sterling ratio...
20. Having the following statistics for different strategies please rank them from most to least profitable...
21. Describe the strategy shown on below plot. What entry technique is used here? Do you think that the strategy was successful over the period presented on the plot?

