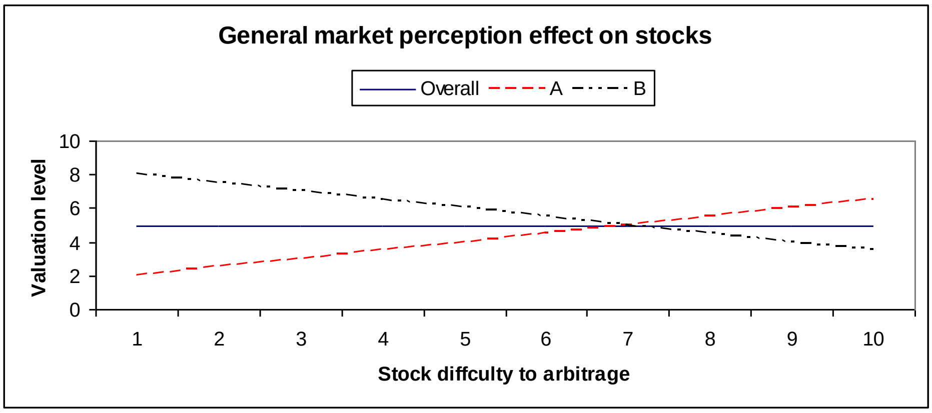
1. Anil and Mukul decide to determine the value of some of their "hidden" companies. There exists only one black market for hidden companies. For his hidden company, Mukul can only allocate one share each to 10 members in the hidden board of directors for the price of INR 53. Where as Anil can gift one share each to all of his 1000 hidden partners for price of INR 10. Who amongst the two has a more valuable company?

    **a.** Anil
    **b.** Mukul
    **c.** Both are equally valuable
    **d.** Cannot determine the value

2.




In the above chart, the x axis orders stocks according to how difficult they are to value and arbitrage (eg: Bond stocks would be towards the left, distressed stocks to the right). Y axis measures prices of stocks. Trend A then reflects which of the following market situations:

    **a.** A bubble situation, when propensity to speculate is high
    **b.** A slump situation, when propensity to hedge is high
    **c.** A day-to-day market situation, when neither propensity is strong
    **d.** Can't say

3. I have inherited a bond from my distant uncle which promises to pay me a sum of INR 10000 after two years. On inquiring with some highly talented, yet honest investment bankers, I have realized that I can sell the bond today for a sum of Rs. 9000. The bankers also mentioned something about the current opportunity cost of capital being 9% for a 2 year period. Another friend of mine has just asked me what the current yield on my bond is before deciding to buy it from me– What should be my answer?

    **a.** 9%
    **b.** 0%
    **c.** 5.4%
    **d.** Can't say

4. I hold 2 zero coupon bonds – One is a 5 year bond with a face value of INR 1000. And another a 10 year bond with a face value of 10000 Rs. The central bank has taken measures to deal with the financial turmoil in the world and the interest rates will change by 1% (across the yield curve) starting tomorrow (Information from a most reliable inside source). I have only enough money to incur transaction charges on selling one of these bonds off. Which one should I sell?

   **a.** 10 year bond
   **b.** 5 year bond
   **c.** Neither – there would be no effect on the bond prices
   **d.** Can't say

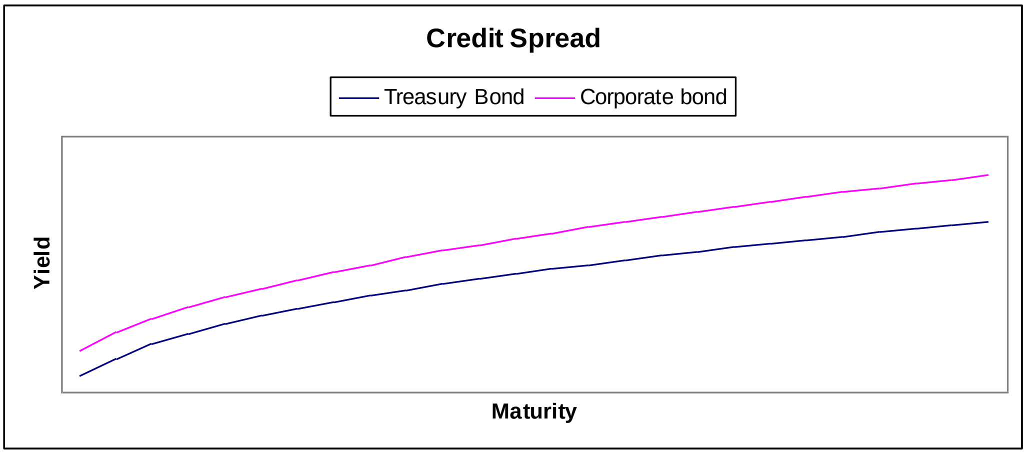
5. Which security should I invest in to maximize returns :

   A = A 20 year floating rate bond with coupon payments every year (risk-free)
   B = A contract to reinvest in the same bond every year as a 1 year zero coupon bond, where I get a coupon = FV * int. rate for the year and the principal back every year

   Assume electronic trading has made the transaction time for the option B negligible so that receiving the coupon and reinvesting doesn't take any time at all.

   **a.** B
   **b.** A
   **c.** Both are same
   **d.** Can't say

6.




If the X axis in the above chart represents the time scale, the following can be said about the economy:

   **a.** The interest rates are declining
   **b.** The interest rates are rising
   **c.** Inflation in the economy is decreasing.
   **d.** Can't say

7. The Sikkim lucky draw has just declared you to be the winner of a INR 1,000,000 prize. You have the option of buying another lottery, which has a 15% expected rate of return. Before you made your decision, you are approached by the ICL to build a stadium in the city. The stadium has an expected return of 16% (equal risk). The ICICI bank had offered to fund the stadium at an interest rate of 14%. If you invest in the stadium and are asked what minimum rate you would be ready to sell it at, at the end of 3 years… what is the minimum price you should quote?

   **a.** INR 1560896
   **b.** INR 1481544
   **c.** INR 1520875
   **d.** Can't say

8. In the distant future, suppose the nominal interest rate on an American bond is 5%, but inflation in USA happens to be 8%. I am the Governer of the Reserve Bank of India and am making sure that the dollar sees a 10% increase over the Rupee. Should I buy the bond?

   **a.** Yes
   **b.** No
   **c.** Would make no difference
   **d.** Can't say

9. Which of the following statements is True?

   **a.** According to Capital Asset Pricing Model, for an investment with negative Beta, expected return would be less than the interest rate.
   **b.** Expected return on an investment with Beta=3 is thrice as high as the expected return from the market
   **c.** If a stock lies below the security market line, it is undervalued
   **d.** An efficient portfolio gives the highest expected return for a given standard deviation, or the highest standard deviation for a given expected return

10. For a 3-factor APT model, with risk-free interest rate = 7% and the following details:

| Change in Factor | Risk Premium |
|---|---|
| GNP | 5% |
| Energy prices | -1% |
| Long-term interest rates | 2% |

Which of the following stocks provide the highest expected rate of return?

   **a.** Stock AMZ which is uncorrelated with all three factors
   **b.** Stock GE with average exposure to each factor (factor b=1 for each)
   **c.** A renewable energy stock with high exposure to the energy factor (=2) and no exposure to other factors
   **d.** A steel company stock with average sensitivity (=1) to changes in interest rates and GNP, but negative exposure to the energy factor (=-1.5)

11. As in investor, what would you prefer:

   **a.** Investment paying interest of 14% compounded annually
   **b.** Investment paying interest of 13.54% compounded semi-annually
   **c.** Investment paying interest of 13.32% compounded quarterly
   **d.** Investment paying interest of 13.6% compounded continuously

12. Which of the following is False:

    **a.** A European call on a non-dividend paying stock has same value as an American call option on the same stock
    **b.** Short hedge (selling commodity futures) is appropriate for managing risks faced by commodity producing firms
    **c.** It is never optimal to exercise an American put option on a dividend paying stock
    **d.** The parties to a standard future contract do not need to bear the counter-party risk

13. Which of the following is True?

    **a.** MM's propositions assume perfect financial markets , with no distorting taxes or other imperfections
    **b.** MM's propositions say that the cost of equity increases with borrowing and that the increase is proportional to D/V, the ratio of debt to firm value
    **c.** Borrowing does not increase financial risk and the cost of equity if there is no risk of bankruptcy
    **d.** Borrowing increases firm value if there is a clientele of investors with a reason to prefer debt

14. A security trades in the Spot market at Rs. 1423. Money can be invested at 10% p.a. The fair value of a one month futures contract on the security is ___

    **a.** Rs. 1441.90
    **b.** Rs. 1434.40
    **c.** Rs. 1426.70
    **d.** Rs. 1434.90

15. There are 3 stocks X,Y and Z about which certain information is given in the table below. Choose the correct answer assuming that CAPM holds.

| | Beta | Expected Returns |
|---|---|---|
| Stock X | 1.25 | a |
| Stock Y | 1 | 14 % |
| Stock Z | b | c |
| Portfolio (1/5 of X, 2/5 of Y, 2/5 of Z) | 1.25 | d |
| Portfolio (3/5 of X, 2/5 of Z) | e | 17.5% |

    **a.** a=16.5%, c=19%, d=18.5%, e=1.45
    **b.** a=15.5%, b=1.5, c=19%, d=15.5%
    **c.** a=16.5%, b=1.5, c=19%, d=16.5%
    **d.** b=1.5, c=18%, d=16.5%, e=1.35

16. Indicate the effect of <u>decrease</u> in the following key variables on the value of a call option:
    Stock price (P), Interest rate (rf), Exercise price (EX), Volatility (sd), Time to expiration (t)

    **a.** Decreases, Increases, Increases, Decreases, Decreases
    **b.** Increases, Decreases, Increases, Decreases, Increases
    **c.** Decreases, Decreases, Increases, Decreases, Decreases
    **d.** Decreases, Decreases, Increases, Increases, Decreases

17. Given below is the set of feasible risky portfolios. Assuming risk-free rate=5%, find the most efficient portfolio.

| Portfolio | Expected Return | Standard Deviation |
|---|---|---|
| A1 | 15% | 20% |
| A2 | 20% | 35% |
| A3 | 30% | 40% |
| A4 | 35% | 55% |

- **a.** A1
- **b.** A2
- **c.** A3
- **d.** A4

18. Following data has been given for a stock in Economic Times dated 14-Oct-08. From the data we can say (All data in INR)

| Stock | Open | High | Low | Close | Volume | 52 Wk H/L |
|---|---|---|---|---|---|---|
| Artson Engg. | 23 | 42 | 18 | 19 | 20000 | 45/12 |

- **a.** The spread for Artson Engg. stock is INR 35
- **b.** The range for Artson Engg. Stock is INR 24
- **c.** The gap for Artson Engg. stock is INR 4
- **d.** The mood swing for the stock is negative

19. For a company stock if Moving Average Convergence/Divergence falls below the signal line it represents

- **a.** A bearish Trend
- **b.** A bullish Trend
- **c.** A end of the current trend
- **d.** A signal that the security is overbought and will soon return to normal levels.

20. A trader request for a Inside Ask quote in the market, It means he/she wants to inquire about:

- **a.** All of the sellers and resisting supply
- **b.** The best selling price and upward resistance
- **c.** The volume
- **d.** All of the above

21. A system allowing a client to trade directly with another client or a market maker on Nasdaq, or a specialist on the floor of an exchange without broker interference was available to the Public after:

- **a.** 1987 – After the Black Monday Crash
- **b.** 1997 – Order Handling Changes
- **c.** 2000 – at the Millennium
- **d.** 2001 – With Decimalization

22. The margin offered by a broker/dealer to finance purchase, trading or carrying of equity securities is basically:

    **a.** A loan amount to the clients
    **b.** An escrow account between the broker and client.
    **c.** Deduction from the clients equity
    **d.** A part of 401(k) plan which allows a client to save for retirement while deferring income taxes on the saved money and earnings until withdrawal.

23. Which of the following is not traded at NASDAQ

    **a.** Amazon.com, Incorporation
    **b.** Intel Corporation
    **c.** IBM Corporation
    **d.** Microsoft Corporation

24. Which of the following Network does not allows brokerages and traders to trade directly between themselves without allowing middleman

    **a.** Bloomberg Tradebook
    **b.** Instinet Data
    **c.** Archipelago
    **d.** Cowen

25. A trader/investor is said to be flat in the market when?

    **a.** There exists a breakeven in trader's profit/loss statement
    **b.** No trades are active at that time for that trader
    **c.** The trader's opinion of the future direction of the market is even-handed
    **d.** None of the Above

26. An Indian bank wants to issue bonds to obtain funds for an acquisition overseas. The bank has also issued preferred and common stock for the same in past. How can the bank calculate cost of acquiring the new firm?

    **a.** The weighted average component cost of common stock, preferred stock, and debt.
    **b.** The price the firm paid for its assets divided by their market value.
    **c.** Shareholders' equity.
    **d.** The cost of bonds issued multiplied by face value of bonds.

27. The weighted average cost of capital for a company which issues bond, preferred stock and common stock depends upon:
    I. Risk-free rate and market sensitivity (beta) of the company
    II. Net present value of the project to be financed
    III. Percentage of financing coming from each financing source

    **a.** I and II
    **b.** Only III
    **c.** I and III
    **d.** I, II and III

28. An Investor makes use of Level II quotes to.

    **a.** View the inside market prices on a stock
    **b.** View the current quote and quote size available from each market participant, whether Market Maker or ECN
    **c.** Determine the spread
    **d.** Confuse novice investors

29. Rahul is the CFO of a steel company. He wanted to hedge his exposure to currency to prevent fluctuations in profit. He can do so on the following exchange –

    **a.** Chicago Board of Trade
    **b.** London Stock Exchange
    **c.** The Intercontinental Exchange (ICE)
    **d.** None of these

30. Ashima has a certainty equivalent to a gamble's expected value which is less than expected value of the gamble. Ashima shows

    **a.** Risk aversion
    **b.** Risk preference
    **c.** Risk indifference
    **d.** A strange outlook towards life

31. For a momentum based trading strategy we would –

    **a.** Go long on the stock on breakout or when it makes new highs
    **b.** Short the stock on breakouts or when it makes new highs
    **c.** Hedge the stock with a futures or forwards contract
    **d.** Sell call options of the stock with the high price being the strike price

32. John had a margin call from his broker when his stock went against him. He realized that his mark to market loss had triggered this call even though his margin deposited initially was –

    **a.** Greater than the maintenance margin
    **b.** Lower than the maintenance margin
    **c.** Equal to the maintenance margin
    **d.** Cannot be determined exactly

33. Currency traders realized that since the percentage movements in currencies in extremely small they would have to come up with another heuristic of measurement instead of talking about the changes in percentages. This was -

    **a.** 1/10th of a percent
    **b.** 1/100th of a percent
    **c.** 1/1000th of a percent
    **d.** 1/10000th of a percent

34. Which of the following trading techniques is an arbitrage trade –

   **a.** Carry trade
   **b.** Trading CDS of fixed and floating interest rates
   **c.** Buying volatility bonds of US and selling those of India
   **d.** Buying both the call and put options of a stock

35. Sarah bought and sold Reliance on the NSE on the same day. To her surprise she found that only ___ % of the total value of the stock had been credited and debited from her account during the day.

   **a.** 5%
   **b.** 10%
   **c.** 20%
   **d.** 25%

36. A trader has purchased crude oil futures at Rs.750 per barrel. He wishes to limit his loss to 50%. How can he do so?

   **a.** Place a buy order at Rs. 375
   **b.** Place a market order at Rs. 375
   **c.** Place a stop order at Rs. 375
   **d.** Buy spot of the commodity when price drops to Rs. 375

37. Deepti had to pay some money upfront to enter into a futures contract on the National Stock Exchange. When she tried to correlate the margin and the total worth of the stock she realized that the underlying concept being used was -

   **a.** Time Value of Money
   **b.** Term structure of interest rates
   **c.** Mark to market
   **d.** Value at Risk

38. Suppose that ONGC is to receive payment in rupees in 9 months and wants to engage in hedging. The firm would ______ rupees on the 9-month forward market in order to protect itself from a/an ______ of the rupee.

   **a.** sell; appreciation
   **b.** sell; depreciation
   **c.** buy; depreciation
   **d.** buy; appreciation

39. The shift toward imperfectly competitive markets in domestic and international trade questions the concept of:

   **a.** official exchange rates
   **b.** complete currency pass through
   **c.** exchange arbitrage
   **d.** trade adjustment assistance

40. Commodities Futures pricing

    **a.** converges to spot prices at maturity
    **b.** does not include cost of carry
    **c.** must be higher than spot prices
    **d.** none of the above

41. Hedging a position using futures on another commodity is called

    **a.** Replacement hedging
    **b.** Alternative hedging
    **c.** Surrogate hedging
    **d.** Proxy hedging

42. The rupee change in the value of a stock call option is always

    **a.** higher than the rupee change in the value of the stock
    **b.** lower than the rupee change in the value of the stock
    **c.** negatively correlated with the change in the value of the stock
    **d.** A and B

43. Find the odd one out

    **a.** LTCM
    **b.** Solomon Brothers
    **c.** Goldman Sachs
    **d.** Lone Star

44. What is the value of an Adjustable Rate bond (100 Rs face value) lent at LIBOR 2 years from hence just after the LIBOR is reset? Assume LIBOR is 5%

    **a.** 90
    **b.** 95
    **c.** 100
    **d.** 110

45. If the par bond yield curve is flat, then

    **a.** The term structure is upward sloping
    **b.** The term structure is downward sloping
    **c.** The term structure is also flat
    **d.** Can't comment on the shape of the term structure