

- Q.1 A. What are the three main features of options?  
B. What are the three differences between convertibles and warrants?  
C. List four factors that determine the premium of an option's market value over its expiration value.

Q.2 Consider the following data:

$$\begin{array}{lll} S = 60 & u = 1.4 & d = 0.8 \\ E = 50 & r = 0.12 & R = 1.12 \end{array}$$

What is the value of the call option?

- Q.3 Mr. Ajmal is bearish on the stock of ABC Ltd. Therefore he purchases 5 put option contracts on ABC shares at a premium of Rs.3. The exercise price is Rs. 41 and it has a maturity period of 3 months. The market price of the stock is Rs. 40. If Mr. Ajmal is correct and ABC's share price falls to Rs.30, how much profit he will earn over 3-month?
- Q.4 A. What is meant by the term structure of interest rates?  
B. What is a yield curve?  
C. What does the unbiased (pure) expectations theory suggest about the shape of the yield curve?
- Q.5 "The Black-Scholes model is used by traders as an interpolation tool". Discuss this view.
- Q.6 Explain the no-arbitrage and risk neutral valuation approaches, to value a European option using a one-step binomial tree.