Q.1 Your company is committed to pay USD 1,000,000 against imports after 30 days which it wants fully hedge against exchange risk. You are facing following market rates:

	Bid	*Offer*
USD interest rate	1.25%	1.50%
PKR interest rate	15%	15.25%
USD/PKR spot	80.00	80.20

Required:
Calculate the appropriate forward rate to hedge the above transaction. Show complete working.

Q.2 Octavo plc needs to borrow GBP 6 million in three months time for a period of 6 months. For this type of loan financing Octavo plc can borrow at 13% in spot. The Treasurer of the company is expecting at least 2% rise in interest rates by the time the funds would be required.

The current price of three month's interest rate future is 87.25 The standard size of contract is GBP 500,000 while the minimum price movement is one tick, the value of which is 0.01% per year of the contract size.

Required: Calculate the hedge outcome if interest rates
Increase by 2.00%
Decrease by 1.00%

Note : Assume that IR Futures are 100% correlated with interest rates

Q.3 A UK company owes a US supplier $ 2,000,000 payable in July. The spot GBP/USD rate is 1.5350-1.5370 and the UK company is concerned that the USD might strengthen.

The details on the exchange for GBP 31,250 contract size are as follows:

	Calls (Cents per GBP 1)			Puts (Cents per GBP 1)		
Strike Price	June	July	August	June	July	August
1.4750	6.34	6.37	6.54	0.07	0.19	0.50
1.5000	3.86	4.22	4.59	0.08	0.53	1.03
1.5350	1.58	2.50	2.97	0.18	1.25	1.89

Requirement:
A) Show how traded GBP/USD currency options can be used to hedge the risk at 1.5250.
B) Calculate the sterling cost of the transaction if the spot rate in July is:
$1.4600-$1.4620
$1.6100-$1.6120

Q. 4 A nonfinancial company should manage to hedge the exposures arising out from its core busi operations rather than indulging into derivatives speculation. Comment in favor of this argument wit special reference to internal controls.

Q5. What is Asian Option and what are its useful applications?

Q.6 Write brief notes on following with at least one practical example of their application

a. Interest Rate Swaps
b. Options
c. Derivatives
d. Forward Rate Agreement
e. Exchange Forwards
f. Swaptions
g. Collar hedge
h. Futures
i. Difference between Forward and Futures
j. Black-Scholes