



Financial Derivatives

The sample questions are related to the AIBP Specialization course "**Financial Derivatives**". The students are advised to thoroughly read the exam guidelines and the course syllabus for this course before start studying for the paper. The questions are shared to give an idea to the student about the paper format and types of questions. For further information visit the IBP website www.ibp.org.pk

Multiple Choice Questions

Each MCQ carry one mark.

- Q1. The benefit of a futures exchange is:
- A. Availability of free legal services
 - B. Elimination of customer risk exposure
 - C. Guarantee of trading volume (Answer)
 - D. Provision of clearing services
- Q2. Interest rate parity is ensured by:
- A. The Government
 - B. The World Bank
 - C. Arbitrage (Answer)
 - D. State Bank of Pakistan
- Q3. What is the impact, all else equal, of an increasing volatility of the stock price on the value of an option?
- A. Increases the value (Answer)
 - B. Decreases the value
 - C. Leaves the value unchanged
 - D. The impact is indeterminable with the information given



Constructed Response Question

Each CRQ carry five marks.

Question:

An investor enters into a short forward contract to sell 100,000 British pounds for US Dollars at an exchange rate of 1.9000 US\$ per pound. How much does the investor gain or lose if the exchange rate at the end of the contract is:

- 1. 1.8900
- 2. 1.9200

Answer:

- 1. The investor is obliged to sell pounds for 1.9000 when they are worth 1.8900.
The gain
Is $(1.9000 - 1.8900) \times 100,000$
= \$ 1,000/-
- 2. The investor is obliged to sell pounds for 1.9000 when they are worth 1.9200.
The loss
Is $(1.9200 - 1.9000) \times 100,000$
= \$ 2000/-



Extended Response Question

Each ERQ carry ten marks.

Question:

Assume today is January 9, 2009. The price of a treasury bond with a 12% coupon that matures on October 12, 2020 is quoted as 102.7. What is the cash price?

Answer:

There are 89 days' b/w Oct.12, 2009 and Jan. 9, 2010.

There are 182 days' b/w Oct.12, 2009 and April 12, 2010.

The cash price of the bond is obtained by adding the accrued interest to the quoted price.

The quoted price is $102 \frac{7}{32}$ or 102.21875.

The cash price is therefore:

$$102 + (89 / 182) \times 6 = \$104.93$$