



The Institute of  
Bankers Pakistan

**Time Allowed: 3 Hours**

**Maximum Marks: 100**

**Date: December 12, 2019**

**Financial Derivatives**

**AIBP (Specialization)**

**Roll No:**

Instructions:

- Attempt ALL questions;
- Answers must be neat, relevant and brief;
- In marking the question paper, the examiners take into account clarity of exposition, logic of arguments, presentation and language;
- Read the instructions printed inside the top cover of answer script CAREFULLY before attempting the paper;
- DO NOT write your Name, Access No. or Roll No. etc. anywhere inside the answer script(s);
- Candidates are advised not to mark any of the objective answer on the question paper, otherwise their paper will be cancelled;
- Question Paper must be returned to invigilator before leaving the examination hall.

**SECTION B: SUBJECTIVE**

**All the questions from Section B are compulsory.**

**(40 Marks)**

**Q1.** Differentiate between options and futures contracts.

**(06 Marks)**

**Q2.** Q Limited (QL), a listed company, has recently issued debt finance for acquiring plant and machinery to increase its activity levels. The debt finance is a floating rate bond, with a face value of Rs. 320 million redeemable in four years. The mark-up on bond is payable annually, and is based on Karachi Interbank Offer Rate (KIBOR) plus 60 basis points. The first annual payment is due at the end of year one.

QL is concerned that the expected rise in KIBOR rates over the coming few years would make it increasingly difficult to pay the mark-up due. It is therefore proposing to swap the floating rate interest payment to a fixed rate payment.

Y Bank (YB) has offered QL a swap agreement, whereby QL would pay YB mark-up based on fixed annual rate of 10.7625% in exchange for receiving a variable amount based on current KIBOR rates. Payments and receipts will be made at the end of each year, for the next four years. YB will charge an annual fee of 20 basis points if the swap is agreed and will also guarantee the swap. The current KIBOR rates are as follows:

Year	One	Two	Three	Four
Rate	9.5%	10.1%	10.5%	10.8%

The current annual forward rates for years two, three and four are as follows:

Year	Two	Three	Four
Rate	10.7%	11.3%	11.7%



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**Required:**

- A.** Based on the above information, calculate the amounts QL expects to pay or receive every year on the swap (excluding the fee of 20 basis points). Explain why the fixed annual profit rate of 10.7625% is lesser than the four year KIBOR of 10.8%. **(05 Marks)**
- B.** Demonstrate that QL's mark-up payment liability does not change, after it had undertaken the swap, whether the mark-up rates increase or decrease. **(05 Marks)**
- Q3.** Explain the difference between credit risk and market risk. **(06 Marks)**
- Q4.**
- A.** Explain the following terms: **(06 Marks)**
- Swaps
  - Forward contracts
- B.** Discuss the risks associated with trading in derivatives **(06 Marks)**
- Q5.** Discuss the following terms with reference to options contracts: **(06 Marks)**
- In the money
  - Out of money
  - At the money

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