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| **Name:**<br>**Enrolment No:** | UPES<br>UNIVERSITY WITH A PURPOSE |

**UNIVERSITY OF PETROLEUM & ENERGY STUDIES**
**Online End Semester Examination, December 2021**

**Course: Commodity Trading and Price risk Management** **Semester: III**
**Program: MBA (International Business)** **Time: 3 Hours**
**Course Code: INTB 8005P** **Max. Marks: 100**

| | **SECTION A**<br>**Write either True or False for each question** | **10Qx2M=20Marks** | **COs** |
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| Q1 | Plain Vanilla swaps can exchange fixed or floating rates in order to reduce or increase exposure to fluctuations in interest rates. | | CO 2 |
| Q2 | SPAN calculates the likely loss in a set of derivative positions (also called a portfolio) and sets this value as the initial margin payable by the firm holding the portfolio. | | CO 2 |
| Q3 | The purpose of Stress testing is to identify hidden vulnerabilities, especially those based off of methodological assumptions | | CO 3 |
| Q4 | A limit order is designed to limit an investor's loss on a security position. | | CO 2 |
| Q5 | OTC derivative positions by terminating offsetting trades or replacing them with a smaller set of netted trades through trade compression. | | CO 2 |
| Q6 | In trading and investing, certain securities, such as futures and mutual funds, are also marked to market to show the current market value of these investments. | | CO 2 |
| Q7 | European Options can be exercised at any time between the date of purchase and the expiration date. | | CO 2 |
| Q8 | Counterparty risk is the probability that the other party in an investment, credit, or trading transaction may not fulfill its part of the deal and may default on the contractual obligations. | | CO 1 |
| Q9 | The process by which a client agrees to transfer its future obligations to a third party is known as trade novation | | CO 2 |
| Q10 | Speculation is a trading strategy, which aims to reduce or mitigate risk where a second transaction is made to offset the risk of the first. | | CO 1 |
| | **Section B** | **4Qx5M= 20 Marks** | |
| Q11 | Illustrate how a trader applies currency swaps to mitigate foreign exchange risk | | CO 3 |
| Q12 | For a \$5,000,000 portfolio, the expected 2-week portfolio return and standard deviation is .20% and .14% respectively. Calculate VAR at 10% in percentage and dollar basis. | | CO 3 |
| Q13 | Explain the various ways in which basis risk may arise. | | CO 1 |

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| Q14 | Margin is the deposit money that needs to be paid to buy or sell each contract in an exchange. Explain various kinds of margins? | | CO 2 |
| | **Section C** | **3Qx10M=30Marks** | |
| Q15 | Compare and contrast forward and futures contracts and Explain how they are applied. | | CO 2 |
| Q16 | Contract Specifications of any commodity is imperative for trading in Exchange. Explain any five features of the same of any commodity traded in MCX.<br>**OR**<br>Explain the process of a futures exchange from the time a member takes a derivatives position until the actual settlement of the contract. | | CO 2 |
| Q17 | Summarize the steps involved in the commodity markets trade processing (OTC) lifecycle | | CO 3 |
| | **Section D** | **2Qx15M=30Marks** | |
| Q18 | Consider a case of Interest rate swaps involving two companies Company A and Company B that requires 10 million dollars to expand its operations. Co. A's main aim is to take loan at variable rate of interest and Co. B wants loan at fixed rate of interest. Co. A visit Bank A, which is ready to provide loan at LIBOR and a fixed rate of 7%.<br>Co. B visits Bank B, which is ready to provide loan at LIBOR+1% and at a fixed rate of 10%.<br>Now a swap bank approaches the two companies asking Co. A & B to take loan from Bank A& Bank B at a fixed and variable rate of interest respectively.<br>Swap Bank entered into a swap contract with Co. A wherein Co. A has to pay $5 million at LIBOR to the swap bank and in return would receive the amount at 8% fixed rate of interest from the swap bank.<br>Similarly Swap bank entered into a swap contract with Co. B. Here, Co. B has to pay $9 million at 8.5% fixed rate of interest to the swap bank, and in return, it would receive the amount at LIBOR percentage from the swap bank.<br>Analyze the situation above and answer the following questions:<br>1.) How is the swap contract beneficial to Company A?<br>2.) How is the swap contract beneficial to Company B?<br>3.) Explain the role of swap bank in the whole transaction and the profit earned by it? | | CO 3 |
| Q19 | Explain a strategy with the help of an example in which the investor is expecting big price movements in underlying asset price but the expectation of decrease in price is more than an increase.<br>**OR**<br>Explain a neutral strategy with the help of an example in which the profit as well as loss potential, both are minimum. | | CO 2 |