



Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) – 201306

POST GRADUATE DIPLOMA IN MANAGEMENT (2018 -20)
MID TERM EXAMINATIONS (TERM - V)

Subject Name: **Financial Derivative and Risk Management**

Time: **01.30 hrs**

Subject Code: **PGF-04**

Max Marks: **20**

Note:

1. Writing anything except Roll Number on question paper will be deemed as an act of indulging in unfair means and action shall be taken as per rules.

2. All questions are compulsory in Section A, B & C. Section A carries 1 Case Study, 8 marks, Section B carries 3 questions of 2 marks each and Section C carries 2 questions 3 marks each.

SECTION A

8 Marks

Q. 1: Case Study:

i) A company enters into a short futures contract to sell December Silver for Rs 50000 per kilogram on the MCX. The size of the contract is 5 kilogram. The initial margin is Rs 30000 and the maintenance margin is Rs 27000. What change in the future price will lead to a margin call? What happen if you do not meet the margin call? What futures price will allow Rs 5000 to be withdrawn from the margin account?

ii) A company enters into a long futures contract to buy January Gold for Rs 37500 per 10 grams on the MCX. The size of the contract is 100 grams. The initial margin is Rs 25000 and the maintenance margin is Rs 20000. What change in the future price will lead to a margin call? What happen if you do not meet the margin call? What futures price will allow Rs 4500 to be withdrawn from the margin account?

SECTION B

6 Marks

Q. 2: On November 1, the spot price of a commodity is \$40 and the March futures price is \$38. On February 01 the spot price is \$48 and the July futures price is \$47. A company entered into futures contracts on November 1 to hedge the purchase of the commodity on February 01. It closed out its position on February 01. What is the effective price paid by the company for the commodity?

Q.3: On March 1, the price of a commodity is \$150 and the December futures price is \$160. On November 1 the price is \$140 and the December futures price is \$142. A producer entered into a December futures contracts on March 1 to hedge the sale of the commodity on November 1. It closed out its position on November 1. What is the effective price received by the producer?

Q.4 Distinguish between the terms Open Interest and Trading Volume.

SECTION C

6 Marks

Q.5: The spot price of an investment asset that provides no income is Rs 60 and the risk-free rate for all maturities (with continuous compounding) is 6%. What is the two year forward price?

Q.6: Explain carefully the difference between hedging, speculation, and arbitrage.