

# C.U.SHAH UNIVERSITY

## Summer Examination-2018

**Subject Name : Future, Option and Risk Management**

**Subject Code: 5MS04FOM1**

**Branch: M.B.A**

**Semester: 4**

**Date: 03/05/2018**

**Time : 10.30 To 01.30**

**Marks : 70**

**Instructions:**

- (1) Use of Programmable calculator and any other electronic instrument is prohibited.
  - (2) Instructions written on main answer book are strictly to be obeyed.
  - (3) Draw neat diagrams and figures (if necessary) at right places.
  - (4) Assume suitable data if needed.
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### SECTION – I

- |            |   |             |
|------------|---|-------------|
| <b>Q-1</b> | <b>Attempt the Following questions</b>  | <b>(07)</b> |
|            | <ol style="list-style-type: none"> <li>a. What is Derivatives? <span style="float: right;">01</span></li> <li>b. What do you mean by SWAP? <span style="float: right;">01</span></li> <li>c. What do you mean by Indices? <span style="float: right;">01</span></li> <li>d. What do you mean by Tick Size? <span style="float: right;">01</span></li> <li>e. What do you mean by Call Option? <span style="float: right;">01</span></li> <li>f. What do you mean by Put Option? <span style="float: right;">01</span></li> <li>g. Give full form of T-Bills. <span style="float: right;">01</span></li> </ol> |             |
| <b>Q-2</b> | <b>Attempt all questions</b>  | <b>(14)</b> |
| 1          | What do you understand by forward contract? Illustrate with an example.   | <b>07</b>   |
| 2          | Explain Cash and carry and reverse cash and carry arbitrage   | <b>07</b>   |
| <b>OR</b>  |   |             |
| <b>Q-2</b> | <b>Attempt all questions</b>  | <b>(14)</b> |
| 1          | Explain about different participants in derivative markets.   | <b>07</b>   |
| 2          | What do you understand by Intrinsic Value and Time Value of option contract? Explain.   | <b>07</b>   |
| <b>Q-3</b> | <b>Attempt all questions</b>  | <b>(14)</b> |
| 1          | Discuss differences between future and forward contracts.   | <b>07</b>   |
| 2          | A Sugarcane trader is expecting a stock of 200 MT from various farmers to be available to him after three months in coming April. In normal course the price of sugarcane in the month of April remain at Rs.80 per Quintal. He is worried about the fall in price of sugarcane anticipating a bumper crop. Future contract in sugarcane are not available. But Future in sugar are available and 3 months contracts of 10MT are selling for 800 Rs Quintal. How can the traders hedge his position using future contracts in sugar assuming:   | <b>07</b>   |
|            | ➤ The price of sugar and sugarcane are perfectly positive co related.   |             |



- The price of Sugarcane change by half of as much as that of sugar
  - The price of sugarcane change twice of as that of sugar
- How can the trader immunize himself from the changes in sugar?

**OR**

- Q-3** 1 What is Calendar Spread? Explain with Example. **07**  
 2 How Sensex and Nifty can be calculated? Describe. **07**

### SECTION – II

- Q-4** **Attempt the Following questions** **(07)**

- a. What do you mean by Underlying Assets? **01**
- b. Give full form of MCX. **01**
- c. What do you mean by Short Hedge? **01**
- d. Give Full form of LIBOR. **01**
- e. Give Full form of ATM. **01**
- f. What do you mean by Speculation? **01**
- g. What do you mean by Individual Stocks? **01**

- Q-5** **Attempt all questions** **(14)**

- 1 Discuss Different types of Interest rate Swap. **05**
- 2 What do you mean by Margin in Option? Discuss. **05**
- 3 Explain : Open Interest **04**

**OR**

- Q-5** 1 A stock is trading at Rs 600 today. What would be the fair value o future contract on the stock manufacturing after 90 days if  $R_f = 12\%$  and after 45 days stock is expected to give Dividend 30 Rs.What would be the fair value of contract if dividend not paid assume annual compounding. **07**  
 2 Discuss the function of Derivative Market. **07**

- Q-6** **Attempt all questions** **(14)**

- 1 Explain Hedging of fixed rate and floating rate loan using Example. **07**
- 2 Discuss features of Interest rate swaps. **07**

**OR**

- Q-6** **Attempt all Questions** **07**

- 1 The price of Suzlon share at NSE is ruling at Rs 85, While a three month future contracts on Suzlon is being traded at Rs 90.if one can borrow at 12% and Suzlon is not paying any dividend in the next three months, is there an arbitrage opportunity available in the prices ruling in the spot market and future markets? If so, how can the profit be made? Assume size of the future contract as 1000 shares. **07**
- 2 An investor buys 5 future contracts on gold with each contract of 100 gm of gold. The price quotation is Rs.15550 per 10 gm.The tick size is 1 rs.Initial Margin is set @ 4% while minimum margin is 90% of the initial margin. **07**

Find out :

1. Minimum change in value of Contract
2. The amount of initial margin the investor has to deposit
3. At what price level the investor would get a margin call.

