REV-00
MBA/02/06 2017/08

MASTER OF BUSINESS ADMINISTRATION
Fourth Semester (Repeat)
MANAGEMENT OF FINANCIAL DERIVATIVES
(MBA – 404 C)

Duration: 3Hrs. **Full Marks: 70**

Part-A (Objective) =20
Part-B (Descriptive) =50

(PART-B: Descriptive)

Duration: 2 hrs. 40 mins. **Marks: 50**

I. Answer the following questions: (*any five*) **2×5=10**

a) Write two features of swaps.

b) What are commodity options? Give examples.

c) What are American options?

d) What are interest rate derivatives and currency derivatives?

e) How derivatives facilitate the transfer of risk?

f) Give example of an offsetting contract.

g) What is the difference between stock and index futures?

II. Answer the following questions: (*any five*) **3×5=15**

a) Write the payoff for the holder and writer of a call option when strike price is Rs. 110, Rs. 150 and Rs. 170. The current market price of the stock is Rs. 125 and the premium is Rs. 15.

b) How currency rate swaps are useful in international trade?

c) Explain the concept of basis and basis risk in futures trading.

d) Explain some benefits of commodity futures.

e) What are the advantages of option over forward/futures contract?

f) Assume that spot price of gold is Rs. 27,000 per 10 gm. If financing cost is 14% per annum with continuous compounding, what should be the price of the 3 months futures contract on gold? If warehousing and insurance cost are placed at 1% per annum what would be the fair value of the futures contract?

g) An investor has the open position of 10 contracts long and 20 contracts short in Sensex future March and April series respectively. What is her open position after considering the spread position?

III. Answer the following questions: (*any five*) **5×5=25**

a) Using Binomial Option Pricing Model find the price of the option given that CP = Rs. 50, SP = Rs.42, u = 1.15, d = 0.95, R = 2.5

b) Company A agrees to pay company B fixed interest of rate of 9 % in exchange of receiving from it the interest at 30 bps above the floating interest rate (LIBOR). Determine the cash flow under swap for company B.

c) On what terms standardization of option contract is done by the exchange they are dealt in?

d) Suppose current NIFTY is trading at 9950. You buy one contract (lot size 50) of NIFTY near month calls for Rs. 40 each. The strike price is 10,030. Given these, what would be your break-even NIFTY level? If at expiration NIFTY advances to 10,160, then calculate profit or loss from the contract.

e) Explain how hedging can be done with commodity futures.

f) Why does the spot prices and future prices of futures derivatives converge?

g) Explain the concept of open interest with example.

*****

REV-00
MBA/02/06 2017/08

MASTER OF BUSINESS ADMINISTRATION
Fourth Semester (Repeat)
MANAGEMENT OF FINANCIAL DERIVATIVES
(MBA – 404 C)

Duration: 20 minutes **Marks – 20**

(PART A - Objective Type)

I. Choose the correct answer: **1×20=20**

1. The holder of a put option exercises the option when the price of the underlying asset is ....than the strike price.
   a) More
   b) Less
   c) Equal
   d) None of these

2. When in call option S>X, the buyer exercises the call option. The loss/gain is:
   a) Loss = Premium c
   b) Gain = premium c
   c) Gain = S-X-c
   d) Loss = S-X-c

3. Which one of the following is a 'plain vanilla swap'?
   a) Fixed to floating swap
   b) Interest rate swap
   c) Currency Swap
   d) All of these

4. Which of the following is a standardized contract?
   a) Forward
   b) Futures
   c) Both
   d) None

5. One who enters a derivative contract to make profit by assuming risk is known as:
   a) Hedgers
   b) Speculators
   c) Arbitrageurs
   d) None

6. The exchange of a set of cash flows is known as:
   a) Forwards
   b) Futures
   c) Swaps
   d) Options

7. Trading in NIFTY 50 is what type of derivative product?
   a) Equity
   b) Index
   c) Commodity
   d) Interest

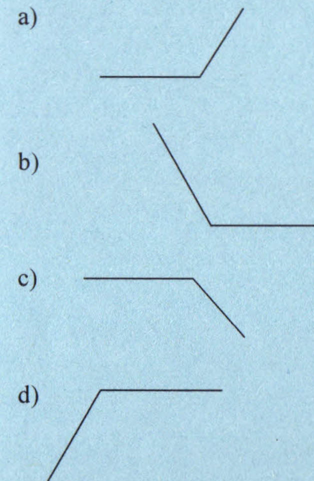
8. Exchange rate risk emanates from:
   a) Foreign currency transaction
   b) Forces of demand and supply
   c) Macroeconomic factors
   d) All of these

9. The minimum change that will be recognized in the price quotation is known as:
   a) Contract size
   b) Tick size
   c) Unit size
   d) None of these

10. The formula for calculating price of a Forward contract is:
    a) $F_1 = S_0 * (1 + r)$
    b) $F_1 = S_0 * e^{rt}$
    c) Both
    d) None of these

11. The price of the option is also known as:
    a) Strike price
    b) Premium
    c) Exercise price
    d) None of these

12. Which among the following is a payoff diagram for long call?



13. Which of the following is correct for put option?
   a) $S<X$ ----- OTM
   b) $S=X$ -------ITM
   c) $S>X$ ----- ATM
   d) None of these

14. The time of entering the swap at $T = 0$ is known as:
   a) Expiry date
   b) Strike date
   c) Effective date
   d) None of these

15. Swaps are used to transform assets from fixed rate to floating rate:
   a) Rising
   b) Floating
   c) Stagnant
   d) None

16. The value of commodity swaps change:
   a) Weekly
   b) Fortnightly
   c) Monthly
   d) Continuously

17. Which of the following is an innovation in swap?
   a) Currency swap
   b) Equity swap
   c) Swaption
   d) None of these

18. The basis of price in futures are known as:
   a) Tick size
   b) Price quotation
   c) Contract size
   d) Contract period

19. The number of futures contract outstanding is known as:
   a) Marking – to – market
   b) Open interest
   c) Variation margin
   d) None of these

20. The premium in options is charged by the:
   a) Holder
   b) Writer
   c) Buyer
   d) Seller

*****

Unveiling Excellence

University of Science and Technology, Meghalaya

*Date Stamp:*__________

SESSION 2016-17

COURSE______________**PAPER CODE:**____________

NAME OF THE PAPER:________________________

SEMESTER__________________________________

Instructions to Candidates

1. This answer booklet has 4 pages. Please check before writing whether it is complete or in good condition.
2. Do not write your name anywhere in the answer booklet.
3. Write legibly on both sides of the paper
4. You may use some space for any rough notes or calculation on the answer booklet if you need. These rough notes, calculations must be scored out before submitting the answer booklet.
5. Do not bring any book or loose paper in the examination hall.
6. Do not tear any page from the answer booklet.
7. Do not write anything on the question paper or blotting paper or any pieces of paper while you are in the examination hall.
8. Any act of indiscipline or misbehavior in the examination hall will result in your expulsion.
9. No examinee is allowed to leave the examination hall until 30 minutes lapse after the commencement of the examination.
10. Additional answer sheet will be supplied after the main answer booklet is completed.

For Objective Type Questions

Page No.	Marks
Total	

For Descriptive Type Questions

Question No.	Marks
Total	
Grand Total	

Session: 2016-17

Course______________

Roll No._____________

Enrollment No.________

Semester_____________

Name of the Paper_____

____

____

Paper Code___________

Scrutinizer's Signature **Examiner's Signature** **Invigilator's Signature**