

**MASTER OF BUSINESS ADMINISTRATION**  
**Fourth Semester**  
**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**

**Answer any four from Question no. 2 to 8**  
**Question no. 1 is compulsory.**

1. Pritam is interested in writing a PUT option on ABACUS Pvt Ltd company's share (9 months). Currently the company's share is selling for Rs 120. The volatility of the share return is estimated as 67%. Pritam would like to exercise price to be Rs 120. The risk free rate is assumed to be 10%. How much premium should Pritam charge for writing the PUT option? (10)
2. Explain the following with a diagram: (10)
  - a) SPREAD Strategy
  - b) STRADDLE Strategy
  - c) STRANGLE Strategy
  - d) CONTANGO
3. Explain Currency Swap and Interest Swap. What are its advantages? Explain the functions of Swap Transactions. (10)
4. When will an option holder exercise one's right to buy/sell an option? Give the graphical representation of— (10)
  - (i) Pay off of CALL option buyer
  - (ii) Pay off of CALL option seller



5. What are the different types of Investor profiles? Explain “IN THE MONEY” and “OUT OF MONEY” positions. (10)
6. Explain the different types of Swap Contracts with a detailed example. (10)
7. Highlight any major five points of difference between Forward Contract and Future Contract. (10)
8. What is a Call Premium? Why is it required to be paid? Explain– (10)
  - (i) American Styled options
  - (ii) European Styled options

\*\*\*\*\*



**MASTER OF BUSINESS ADMINISTRATION**  
**Fourth Semester**  
**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. According to Black and Scholes model, Stocks with Call option pays:
  - i) Past price
  - ii) Dividends
  - iii) Current price
  - iv) No dividends
2. Currency Swap can be used to hedge:
  - i) Political risks
  - ii) Exchange rate risks
  - iii) Interest exposures
  - iv) Market risks
3. Which of the following does the most to reduce default risk for futures contract?
  - i) High liquidity
  - ii) Marketing to market
  - iii) Credit checks for both buyer and seller
  - iv) Flexible delivery arrangements
4. Settlement of Options of an individual stock is done on .....basis.
  - i)  $T + 1$
  - ii)  $T - 1$
  - iii)  $T$
  - iv)  $T^{n+1}$
5. Situations in Financial options in which strike price is less than current price of stock is:
  - i) In – the – money
  - ii) Out – of – money
  - iii) Out – of – portfolio
  - iv) In – the – portfolio
6. The Black and Scholes model is as follows:
  - i)  $C_o = SE(d_1) - Ne^{-rt} N(d_2)$
  - ii)  $C_o = SE(d_1) + Ee^{-rt} N(d_2)$
  - iii)  $C_o = EN(d_1) - Se^{-rt} N(d_2)$
  - iv)  $C_o = SN(d_1) - Ee^{-rt} N(d_2)$

7. If current price increases from lower to higher then:
  - i) Option value equal to one
  - ii) Option value will increase
  - iii) Option value will decrease
  - iv) Option value equal to zero
8. An investor who buys shares and writes a call option on stock is called:
  - i) PUT investor
  - ii) Volatile hedge
  - iii) CALL investor
  - iv) Hedger
9. Using Futures contract to transfer price risk is called:
  - i) Speculating
  - ii) Hedging
  - iii) Diversifying
  - iv) Arbitrage
10. Standardized Futures Contract exist for all of the following underlying assets except:
  - i) Gold
  - ii) Stock indices
  - iii) Treasury bonds
  - iv) Common stocks
11. "Marked to Market" strategy, gains and losses are settled:
  - i) (T-1) day
  - ii) Fortnightly
  - iii) Daily
  - iv) Weekly
12. Type of Option which cannot be exercised before an expiry date is classified as:
  - i) European option
  - ii) Australian Option
  - iii) American Option
  - iv) Money Option
13. Present value of portfolio is INR 400 and the current option price is INR 1300 then value of stock included in portfolio will be:
  - i) INR 1700
  - ii) – INR 900
  - iii) INR 900
  - iv) – INR 1700
14. An increase in value of Option leads to low present value of exercise cost only if it has:
  - i) Low Volatility
  - ii) High Interest rates
  - iii) Low Interest Rates
  - iv) High Volatility



15. Derivatives trading commenced in the year:

- i) June 2000
- ii) July 1999
- iii) July 1875
- iv) June 1850

16. Which of the following characteristics about Futures Contract is false?

- i) Marked to Market
- ii) Financial exchange traded
- iii) Higher Liquidity
- iv) Fewer delivery option

17. When Future Prices > Spot prices, it is known as:

- i) Spread
- ii) Contango
- iii) Backwardation
- iv) Strangle

18. A Trading Strategy involving taking a position in two or more options of the same type, is called:

- i) Strangle
- ii) Spread
- iii) Backwardation
- iv) Straddle

19. An Option that gives the investors the right to sell a stock at predetermined price is:

- i) PUT option
- ii) OUT OF MONEY option
- iii) CALL option
- iv) MONEY BACK option

20. According to Black & Scholes Model, purchaser can borrow fraction of security at risk free interest rate which is:

- i) Long term
- ii) No transaction cost
- iii) Short term
- iv) Transaction Cost

\*\*\*\*\*



University of Science and Technology, Meghalaya

Date Stamp: \_\_\_\_\_

<b>SESSION: 2016-17</b> <b>COURSE</b> _____ <b>PAPER Code:</b> _____ <b>NAME OF THE PAPER:</b> _____ <b>SEMESTER</b> _____																										
<b><u>Instructions to Candidates</u></b>		<b>For Objective Type Questions</b>																								
<ol style="list-style-type: none"> <li>1. This answer booklet has 4 pages. Please check before writing whether it is complete or in good condition.</li> <li>2. Do not write your name anywhere in the answer booklet.</li> <li>3. Write legibly on both sides of the paper</li> <li>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.</li> <li>5. Do not bring any book or loose paper in the examination hall.</li> <li>6. Do not tear any page from the answer booklet.</li> <li>7. Do not write anything on the question paper or blotting paper or any pieces of paper while you are in the examination hall.</li> <li>8. Any act of indiscipline or misbehavior in the examination hall will result in your expulsion.</li> <li>9. No examinee is allowed to leave the examination hall until 30 minutes lapse after the commencement of the examination.</li> <li>10. Additional answer sheet will be supplied after the main answer booklet is completed.</li> </ol>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Page No.</th> <th style="width: 40%;">Marks</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr> <td style="text-align: center;">Total</td> <td> </td> </tr> </tbody> </table>	Page No.	Marks																			Total		Session: 2016-17 <b>Course</b> _____ <b>Roll No.</b> _____ <b>Enrollment No.</b> _____ <b>Semester</b> _____ <b>Name of the Paper</b> _____ _____ <b>Paper Code</b> _____		
	Page No.	Marks																								
Total																										
<b><u>For Descriptive Type Questions</u></b>																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Question No.</th> <th style="width: 40%;">Marks</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr> <td style="text-align: center;">Total</td> <td> </td> </tr> <tr> <td style="text-align: center;"><b>Grand Total</b></td> <td> </td> </tr> </tbody> </table>		Question No.	Marks																			Total		<b>Grand Total</b>		
Question No.	Marks																									
Total																										
<b>Grand Total</b>																										

\_\_\_\_\_  
Scrutinizer's Signature

\_\_\_\_\_  
Examiner's Signature

\_\_\_\_\_  
Invigilator's Signature