

**University of Petroleum & Energy Studies**  
**College of Management & Economics Studies**  
**Bidholi Campus, Dehradun**

**End-Semester Examination – April, 2018**

**Programme Name: MBA-Business Analytics**  
**Subject: EnterpriseRisk Management**  
**Subject code: MBCG 756**

**Semester III**  
**M. Marks: 100**  
**Duration: 3 Hrs**

Note: All Sections are compulsory

**Section – A (20 Marks)**

**(10×2)Marks**

- Q1. Risks associated with counter-party default are termed as  
a) Settlement Risks    b) Market Risks  
c) Credit Risks    d) Operational Risks
- Q2. Arbitraders take advantage of \_\_\_\_\_ in the markets?  
(a) Hedgers (b) Volatility (c) Mispricing (d) Speculators
- Q3. The forward rate for any two currencies is generally a function of their spot rate and:  
(a) Trade Difference    (b) Difference in the exchange rate  
(c) Int. rate differential between them      (d) Both B and C
- Q4. Which of the following is not a derivative transaction?  
(a) An investor buying index futures in the hope that the index will go up.  
(b) A copper fabricator entering into futures contracts to buy his annual requirements of copper.  
(c) A farmer selling his crop at a future date  
(d) An exporter selling dollars in the spot market
- Q5. There are many \_\_\_\_\_ in the financial and business environment today.  
(a) Risks              (b) mergers and acquisitions      (c) legal issues (d) consolidations
- Q6. The bull spread can be created by only buying and selling  
(a) basket option      (b) futures              (c) warrant              (d) options
- Q7. When the strike price is lower than the spot price of the underlying, a call option will be \_\_\_\_\_.  
(a) At the money    (b) In the money  
(c) Out of the money    (d) American Type
- Q8. A buying hedge in the options market is achieved by  
a) Purchasing a call option    b) Buying a put option  
c) Selling a call option    d) None of these
- Q9. Price that is agreed upon at the date of the contract for the delivery of an asset at a specific futures date is called \_\_\_\_\_.  
(a) Spot Price    (b) Discount Price  
(c) Cash market price      (d) Futures Price
- Q10. Risk of an individual asset refers to variability of its returns around its mean returns.  
True or False

**Section – B**

**(5×4)Marks**

Each question is of 5 marks

- Q1. Suppose a 6-m forward contract on shares of ITC Limited is available. The current market price of ITC is Rs 180. If the risk free interest is 6% per annum what should be the price of the 6 month forward contract?
- Q2. Distinguish between the intrinsic value and time value of an option?
- Q3. Discuss the different types of business risks
- Q4. Three put options X,Y and Z with strike prices of Rs 100, Rs 105, and Rs 110 are selling at Rs 2, Rs 5 and Rs 13 respectively. Current market price of the underlying asset is Rs 105. What is

the moneyness of each of the options? What would be the moneyness of each option if each put price increases by Rs 2?

**Section – C**

**(10×3) Marks**

Each question is of 10 marks. Attempt any three

- Q1. Explain cash-and-carry arbitrage. How it is different from reverse cash and carry arbitrage.  
Q2. What is put call parity? Provide the relationship for call and put prices for European options  
Q3. What is Enterprise Risk management? Discuss the process of Enterprise risk management  
Q4. Given the following information about an asset:

Current Market Price: Rs 50, Annual Volatility: 30%, Risk Free Interest Rate for 3months: 10%

Find out the value of 3-month call option with strike prices of (a) Rs 40; (b) Rs 50 and (c) Rs 60. What are the intrinsic and time value of the calls?

**Section – D**

**(30 Marks)**

Q1. A 2-month call option on an asset with strike price of Rs 2,100 is selling for Rs 140 when the share is trading at Rs 2,200. Find out the following:

- i) What is the intrinsic worth of the call option?
- ii) Why should one buy the call for a price in excess of intrinsic worth?
- iii) Under what circumstances the option holder would exercise his call?
- iv) At what price of the asset the call option holder would break even?
- v) If the price of the asset becomes Rs 2,150, should the option holder exercise the call option?
- vi) What is the profit/loss of the holder and writther if the price of the asset is Rs 2,000, Rs 2,250 and Rs 2,500 on the date of expiry of the option?