Roll No._____

# University of Petroleum & Energy Studies

**End-Semester Examination – May, 2019**

**Programme Name: MBA-Business Analytics** **Semester IV**
**Subject: EnterpriseRisk Management** **M. Marks: 100**
**Subject code: FINC 8005** **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 (CO1)

a) Settlement Risks b) Market Risks
c) Credit Risks d) Operational Risks

Q2. Arbitragers take advantage of ____ in the markets? (CO3)

(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: (CO3)

(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? (CO2)

(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. (CO4)

(a) Risks (b) mergers and acquisitions (c) legal issues (d) consolidations

Q6. The bull spread can be created by only buying and selling (CO3)

(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 (CO2)
(c) Out of the money (d) American Type

Q8. A buying hedge in the options market is achieved by (CO1)

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 _____. (CO4)

(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. (CO2)

True or False

**Section – B** **(5×4)Marks**

Each question is of 5 marks. Attempt any four

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 s 6% per annum what should be the price of the 6 month forward contract? (CO1)

Q2. Distinguish between the intrinsic value and time value of an option? (CO4)

Q3. Discuss the different types of business risks (CO3)

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?. (CO2)

Q5. Define Risk. Explain systematic and unsystematic risk (CO1)

**Section – C** **(10×3) Marks**

Each question is of 10 marks. Attempt any three

Q1. What are future contracts? How these are different from forward contracts? (CO3)

Q2. The returns and associated probabilities of Modern Foods ltd are given below: (CO1)

| Return % | 12 | 15 | 18 | 20 | 24 | 26 | 30 |
|---|---|---|---|---|---|---|---|
| Probability | 0.05 | 0.10 | 0.24 | 0.26 | 0.18 | 0.12 | 0.05 |

Calculate the expected return and standard deviation.

Q3. What is Enterprise Risk management? Discuss the process of Enterprise risk management (CO4)

Q4. Given the following information about an asset: (CO2)

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 (30×1 Marks)

Each question is of 30 marks. Attempt any one (CO3)

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 writher 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?

Q2. What is foreign exchange market? Who are the participants of foreign exchange market? (CO1)

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**Section – A (20 Marks)** **(10×2)Marks**

Q1. CAPM accounts for (CO4)

a) Systematic risk b) Unsystematic risk
c)Price risk d) None

Q2. Risk in capital budgeting implies that the decision maker knows……. of the cash flows (CO2)

a) Variability b) Probability
c)Certainty d) None of the above

Q3. Which of the following is true? (CO1)

a) Higher the Beta, lower the risk b) Higher the Beta, higher the risk
c) Risk is constant d) Beta is constant

Q4. Which of the following is not a derivative transaction? (CO2)

(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
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Q5. There are many _____ in the financial and business environment today. (CO4)

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**Section – B** **(5×4)Marks**

Each question is of 5 marks. Attempt any four

Q1. Define Risk. Explain systematic and unsystematic risk (CO1)

Q2. Distinguish between the intrinsic value and time value of an option? (CO4)

Q3. Discuss the different types of business risks (CO3)

Q4. Three put options X,Y and Z with strike prices of Rs 100, Rs 105,and Rs 110 are selling at Rs 8, Rs 12 and Rs 15 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 8?. (CO2)

Q5.Suppose a 6-m forward contract on shares of TCS Limited is available. The current market price of TCS is Rs 280. If the risk free interest is s 8% per annum what should be the price of the 6 month forward contract? (CO3)

**Section – C** **(10×3) Marks**

Each question is of 10 marks. Attempt any three

Q1. What is Enterprise Risk management? Discuss the process of Enterprise risk management (CO4)

Q2. The returns and associated probabilities of Modern Foods ltd are given below: (CO1)

| Return % | 13 | 16 | 19 | 20 | 23 | 27 | 30 |
|---|---|---|---|---|---|---|---|
| Probability | 0.06 | 0.10 | 0.23 | 0.25 | 0.19 | 0.11 | 0.06 |

Calculate the expected return and standard deviation.

Q3. What are future contracts? How these are different from forward contracts? (CO3)

Q4. Given the following information about an asset: (CO2)

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 Rs 40 What are the intrinsic and time value of the calls?

## Section – D (30×1 Marks)

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