

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

Supplementary Examination, July 2020

Course: Enterprise Risk Management FINC8005

Semester: II

Programme: MBA BA

Time: 3 Hrs

Max. Marks: 100

Instructions:

SECTION A

S. No.	Attempt all questions	Marks	CO
Q1	There is no difference between uncertainty and risk. True/False	5	CO4
Q2	Risk is known as the ____ in expected return (a) Variability (b) Volatility (c) Mispricing (d) Speculation	5	CO2
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	5	CO2
Q4	When the strike price is greater 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	5	CO3
Q5	In CAPM, beta factor measures a) Return of an asset b) Risk of an asset c) Life of an asset d) capital investment	5	CO4
Q6	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	5	CO3

SECTION B

S.No.	Attempt any five questions		
Q 1	Suppose a 3-m forward contract on shares of Infosys Limited is available. The current market price of Infosys is Rs 710. If the risk free interest is s 8% per annum what should be the price of the 3 month forward contract?	10	CO2
Q2	Distinguish between the intrinsic value and time value of an option?	10	CO4

Q3.	Define Risk. Discuss the different types of business risks	10	CO3																
Q4	Explain how currency forwards can be used to hedge the risk in foreign exchange deals	10	CO4																
Q5	<p>The returns and associated probabilities of Modern Foods ltd are given below:</p> <table border="1" data-bbox="298 417 1286 533"> <tr> <td>Return %</td> <td>13</td> <td>17</td> <td>20</td> <td>22</td> <td>24</td> <td>27</td> <td>32</td> </tr> <tr> <td>Probability</td> <td>0.06</td> <td>0.11</td> <td>0.22</td> <td>0.26</td> <td>0.20</td> <td>0.10</td> <td>0.05</td> </tr> </table> <p>Calculate the expected return and standard deviation.</p>	Return %	13	17	20	22	24	27	32	Probability	0.06	0.11	0.22	0.26	0.20	0.10	0.05	10	CO3
Return %	13	17	20	22	24	27	32												
Probability	0.06	0.11	0.22	0.26	0.20	0.10	0.05												
	What are the various kinds of business risks? Distinguish between systematic risk and unsystematic risk																		
Q6.		10	CO1																
Section C																			
	Attempt any one																		
Q1.	Discuss the Black-Scholes model and its assumptions with example.	20	CO4																
Q2.	What is Project risk Management? Discuss the different techniques for project risk calculation.	20	CO3																

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	2	CO3
Q8	In CAPM, beta factor measures b) Return of an asset b) Risk of an asset c) Life of an asset d) capital investment	2	CO4
Q9	A buying hedge in the options market is achieved by a) Purchasing a call option b) Buying a put option	2	CO2
Q10	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	2	CO3

SECTION B

S.No.	Attempt any four questions		
Q 1	Define Risk. Explain systematic and unsystematic risk	5	CO2
Q2	Distinguish between the intrinsic value and time value of an option?	5	CO4
Q3.	Discuss the different types of business risks	5	CO4
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?	5	CO3
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?	5	CO3

SECTION-C

S.No.	Attempt any three																		
Q1	What is Enterprise Risk management? Discuss the process of Enterprise risk management	10	CO4																
Q2	The returns and associated probabilities of Modern Foods ltd are given below: <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Return %</td> <td>12</td> <td>15</td> <td>18</td> <td>20</td> <td>24</td> <td>26</td> <td>30</td> </tr> <tr> <td>Probability</td> <td>0.05</td> <td>0.10</td> <td>0.24</td> <td>0.26</td> <td>0.18</td> <td>0.12</td> <td>0.05</td> </tr> </table> Calculate the expected return and standard deviation.	Return %	12	15	18	20	24	26	30	Probability	0.05	0.10	0.24	0.26	0.18	0.12	0.05	10	CO3
Return %	12	15	18	20	24	26	30												
Probability	0.05	0.10	0.24	0.26	0.18	0.12	0.05												
Q3.	What are future contracts? How these are different from forward contracts?	10	CO2																

Q4.	<p>Given the following information about an asset:</p> <p>Current Market Price: Rs 50, Annual Volatility: 30%, Risk Free Interest Rate for 3months: 10%</p> <p>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?</p>	10	CO1
Section D			
	Attempt any one		
Q1.	<p>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:</p> <ul style="list-style-type: none"> 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? 	30	CO4
Q2.	What is Project risk Management. Discuss the different techniques for project risk calculation.	30	CO3

