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DO-19MBA407 Seat No. _____

M. B. A. (Sem. IV) (CBCS) Examination

March – 2022

Risk Management

Time : $2\frac{1}{2}$ Hours] [Total Marks : **70**

Instruction : All Questions carry Equal Marks

1 What is meant by an option contract? What are the advantages of options over futures contract?

2 Mr Mehta has made an investment in Bonds carrying 10% fixed coupon rate. Bonds have still some years to mature but interest rate are showing a rising trend, which is expected to continue. Mr Mehta has approached a bank which has quoted the below rate for the swap MIBOR+0.5% / MIBOR+0.8% against 9.50% fixed.
What can Mr Mehta do to safeguard his returns? Draw a diagram to show how the swap will work and how can Mr Mehta gain from it

OR

2 What is a derivative? Which type of derivatives are popular in India and explain them briefly.

3 Shine Ltd share is currently priced at Rs. 50. It is predicted that in the next 2 months from now prices will either rise by 10% or go down by 10%. Further in the next 2 months prices may again go up by 10% or go down by 10% in the second step. If the Risk-free rate is 8% continuous compounding and strike price is Rs 52. Using Binomial model calculate the value of Put option under 1) American Method and 2) European Method.

OR

3. What is meant by risk? Discuss the different ways of classifying and managing them?

4 Distinguish between Forwards and Futures Contract

OR

4 Micron Ltd stock is currently selling for Rs.175. There is a call option on Micron Ltd with a maturity of 2 months and an exercise price of Rs.160. The volatility in the stock price is estimated to be 30%. The risk-free rate is 12%. Calculate the price of a call option using Black-Scholes Model. You can use the following values and table

e0.12×(2/12 =1.020201 Ln 1.09375 = 0.089612

The following is the extract of table entries representing area under the standard normal curve from 0 to the specified value of z.

z	0	1	2	3	4	5	6	7	8	9
0.8	.2881	.2910	.2939	.2967	.2996	.3023	.3051	.3078	.3106	.3133
0.9	.3159	.3186	.3212	.3238	.3264	.3289	.3315	.3340	.3365	.3389

5 Write Short Notes on : (Any **Two**)

(a) Hedging

(b) Swaps

(c) Binomial Models

(d) Butterfly spread