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PW-161100020407 Seat No. _____

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

August - 2020

Risk Management

Time : **3** Hours] [Total Marks : **70**

1 What do you understand by risk and what are the different ways of classifying and managing them?

2 (A) What are the advantages of futures contract over forward contracts?

(B) Mr A and Mr B both have approached a bank for the purpose of loan. The bank has quoted the following to both of them

	Fixed	*Floating*
Mr. A	10%	*MIBOR* + 2%
Mr. B	12%	*MIBOR* + 3%

Mr. A is interested in getting loan at floating rate of interest while Mr. B is interested in getting loan at Fixed rate of interest

Analyze the above situation and advice whether interest rate swap will be beneficial or not?

OR

2 A stock is currently priced at Rs. 120. It is known that in the first 6 months from now the prices can either go up by 15% or fall by 15%. Further in the next 6 months again the prices may either go up by 15% or fall by 15%. If the risk free interest rate is 8% p.a., find the value of a European Call and Put option with an exercise price or Rs. 115 and a maturity of 1 year.

3 What is a derivative? Which type of derivatives are popular in India and also explain why they are popular, with the help of suitable example.

OR

3 Explain the features of option. What are the advantages of options over forward/futures contract?

4 (A) What are the merits and demerits of forward contract?

(B) How would you convert a floating rate liability into a fixed rate liability using a swap? Draw a schematic diagram to explain your answer.

OR

4 Infosys Ltd stock is currently selling for Rs. 200. There is a call option on Infosys Ltd with a maturity of 4 months and an exercise price of Rs. 195. The volatility in the stock price is estimated to be 30% The risk-free rate is 10%. Calculate the price of a call option using Black-Scholes Model. You can use the following values and table

$e^{0.10\times(4/12)} = 1.033895$

$Ln\,1.0256 = 0.025318$

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
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.4	.1554	.1591	.1628	.1664	.1700	.1736	.1772	.1808	.1844	.1879

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

(1) Currency Swaps

(2) Binomial Model

(3) Long Call Butterfly spread

(4) Black and Scholes Model