



BBC-19MBA407 Seat No. _____

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

July – 2021

Risk Management

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

Instructions :

- (1) Attempt any **five** out of **ten** questions.
- (2) All questions carry equal marks.

- 1 What is an option contract ? How does it differ from a forward and futures contract ?
- 2 What do you understand by a forward contract ? Illustrate with an example.
- 3 How would you convert a fixed rate liability into a floating rate liability using a swap ? Draw a schematic diagram to explain your answer.
- 4 What are the functions of derivatives ? What are their disadvantages ?
- 5 What is a currency swap ? How is it different operationally from an interest rate swap ?
- 6 Describe the features of an Interest rate swap.
- 7 Two Companies A Ltd. and B Ltd. are intending to raising finance of Rs 500 crore each.They have been offered the following loans by the bank :

	Fixed Rate	Floating Rate
A Ltd	13.00%	MIBOR+85bps
BLtd	11.50%	MIBOR+45bps

Standard Bank, acting as a swap intermediary, is willing to work out a swap arrangement for a fee of 15 bps from each firm. B Ltd believes that interest rate will fall and, hence, wants to raise funds on a floating rate basis. A Ltd feels otherwise, and wants to raise funds on a fixed interest rate basis. What swap can be arranged between the two parties ? What would be the saving in financing cost for each firm if benefits of swap are shared equally ?

- 8 Goodluck Ltd. stock is currently selling for Rs. 850. There is a call option on Goodluck Ltd with a maturity of 3 months and an exercise price of Rs. 820. The volatility in the stock price is estimated to be 45%. The risk-free rate is 9%. Calculate the price of a call option using Black-Scholes Model. You can use the following values and table

$$e^{0.09 \times (3/12)} = 1.022755 \quad \text{Ln } 1.0365 = 0.035932$$

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

z	0	1	2	3	4	5	6	7	8	9
0.1	.0398	.0438	.0478	.0517	.0557	.0596	.0636	.0675	.0714	.0753
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406	.1443	.1480	.1517

- 9 A Stock is currently priced at Rs.100. It is known that in the first 3 months of the current year from now prices will either rise by 15% or go down by 15%. Further in the next 3 months prices may again go up by 15% or go down by 15% in the second step. If the Risk-free rate is 12% continuous compounding and strike price is Rs 110. Calculate the value of Call and Put option as per European Method.
- 10 Write Short Notes on :
- Straddle and Strangle
 - American Options