

Seat No.	
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## HB-19MBA407 M. B. A. (Sem. IV) (CBCS) Examination April - 2023 Risk Management

Time:  $2\frac{1}{2}$  Hours / Total Marks: 70

**Instruction**: All questions carry equal marks.

- 1 What is meant by risk management? Explain with the help of suitable examples how do we benefit from it.
- 2 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

- (a) Rakesh is bullish about SBI stock which trades in the spot market at Rs. 510. He buys 10 three-month call option contracts on SBI with a strike of 525 at a premium of Rs. 1.27 per call. Three months later, SBI closes at Rs. 545. Assuming 1 contract = 50 shares, find his profit or loss.
- (b) What are the benefits of trading in Index Futures compared to any other security ?
- What is a derivative? Why derivatives are popular with investors worldwide? Briefly discuss the Indian scenario.

## **OR**

AXT Ltd. share is currently priced at Rs. 475. It is predicted that in the next 3 months from now prices will either rise by 20% or go down by 20%. Further in the next 3 months prices may again go up by 20% or go down by 20% in the second step. If the Risk-free rate is 10% continuous compounding and strike price is Rs. 600. Using Binomial model calculate the value of call and put option as per European Method.

4 What are the merits and demerits of forward contract?

## OR

SimTech Ltd. stock is currently selling for Rs. 655. There is a call option on SimTech Ltd. with a maturity of 3 months and an exercise price of Rs. 645. The volatility in the stock price is estimated to be 25%. The risk-free rate is 8.5%. Calculate the price of a call option using Black-Scholes Model. You can use the following values and table

$$e0.085 \times (3/12) = 1.021477$$

$$Ln \ 1.01550 = 0.015385$$

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	0.793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406	.1443	.1480	.1517

- 5 Write short notes on: (any two)
  - (a) Long straddle
  - (b) European Options
  - (c) ITM, ATM and OTM (in terms of options)
  - (d) Short Strangle