MB124A

Sl. No.

IV Semester M.B.A. Degree Examination, May/June - 2026

MANAGEMENT

Elective-A : Finance

Derivatives

(Non-CBCS Scheme)

Time : 3 Hours **Maximum Marks : 80**

SECTION - A

Answer any Five sub-questions. Each question carries Three marks. (5×3=15)

1. a) Define Risk Management.

b) What do you mean by forward and futures?

c) Give the meaning of hedging.

d) What do you mean by put-call parity?

e) What is an index future?

f) What do you mean by commodity market?

g) What is margin account?

SECTION - B

Answer any Four questions. Each question carries Five marks. (4×5=20)

2. Explain the types of derivative contracts.

3. What are the terminologies in swaps contract? Explain.

4. Share A is currently available at Rs. 100/-. The risk free rate of interest is 8% per annum compounded continuously. What should be the ideal contract price of one-month futures contract? Also find the value of a one-month futures contract on the given index assuming that each contract has 200 units.

5. Explain the advantages and disadvantages of derivatives.

6. Explain the assumptions of Black and Scholes model.

7. The spot price (S_0) for a barrel of oil is Rs. 1000/-. The cost of storing 1 barrel of oil is Rs. 20/- per month. What would be its future value? If the length of the contract is 3 months continuously compounded risk free rate is 8%.

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SECTION - C

Answer any Three questions. Each question carries Ten marks. (3×10=30)

8. Explain the classification of derivatives.

9. Elucidate futures trading in commodity exchange and forward markets commission.

10. The current price of a share is Rs. 50/- and it is believed that at end of one month the price will be either Rs. 55/- or Rs. 45/-. What will a European call option with an exercise price of Rs. 53/- on this share be valued at, if the risk free rate of interest is 15% per annum. Also calculate the hedge ratio, applying binomial formulation.

11. Explain the factor affecting options prices.

12. From the following information prepare the margin account of the trader who had taken a long position, number of contract is equal to1; number of units per contract is 50; price per unit on day 1 Rs. 700; Initial margin being 12% and maintenance margin is 75%.

Days	:	1	2	3	4	5	6	7	8	9
Price	:	693	682	663	648	623	610	633	638	621

Assuming that all margin calls are honoured immediately.

SECTION - D

13. Case (Compulsory) (1×15=15)

For the following data value the call option under the Black and Scholes model.

Stock Price	Rs. 50/-
Months to expiration	3 months
Risk free rate of interest	10% P.A.
Standard deviation of stock	40%
Exercise Price	Rs. 55/-
Option type	European Call

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