19P440 (Pages: 2) Name: ……..…...

Reg. No……..

FOURTH SEMESTER M.Com. DEGREE EXAMINATION, APRIL 2021

(CBCSS - PG)

CC19P MCM4 C14 - FINANCIAL DERIVATIVES & RISK MANAGEMENT

(Commerce- Core Course)

(2019 Admission - Regular)

Time: Three Hours Maximum: 30 Weightage

Part A

Answer any ***four*** questions. Each question carries 2 weightage.

1. Who are *"Arbitrageurs"* and *"Hedgers"?*
2. Explain the differences between Spot Contract and Forward Contract.
3. Explain the significance of *"Value at Risk".*
4. Explain the concepts, *"Long Put"* and *"Short Call"* Strategy.
5. Compare *"Systematic Risk"* and *"Unsystematic Risk".*
6. A call option is available at a strike price of ₹. 25 and the current market price of the shares of LMN Ltd. is ₹. 27.50. Calculate the Intrinsic Value and the Time Value of Call Option; if the option is available at a premium of ₹. 4.
7. From the following data, compute the Optimal Hedge Ratio:
   (a) Correlation Co-efficient between ΔS and ΔF = 0.93
   (b) Standard Deviation of ΔS (σ_S) = 0.04
   (c) Standard Deviation of ΔF (σ_F) = 0.06

(4 x 2 = 8 Weightage)

Part B

Answer any ***four*** questions. Each question carries 3 weightage.

8. "Futures are improvised versions of Forward contracts". Do you agree? Justify.
9. Explain the need and importance of Risk Management during COVID times.
10. From the following information, determine the Call-Option and Put-Option values assuming that no dividend is expected during its life:

    S = ₹. 280
    E = ₹. 260
    r = 8% p.a.
    t = 0.6667
    $N(d_1)$ = 0.6336
    $N(d_2)$ = 0.4770

11. "Hedging through Options is better compared to Futures and Forwards". Substantiate with an example.
12. What is *"Moneyness of Option"*? Illustrate with an example the concepts, *"In-the-Money", "Out-of-the-Money"* and *"At-the-Money*" Options.
13. Explain the key issues in taxation on Derivatives.
14. From the following figures, calculate the Futures price of the index:

Value of BSE Index	=	4000
Value of Portfolio	=	₹. 10,00,000
Risk-free interest rate	=	8%
Dividend yield on index	=	6% p.a.
Beta of the portfolio (β)	=	1.5

(4 x 3 = 12 Weightage)

Part C

Answer any ***two*** questions. Each question carries 5 weightage.

15. Describe the regulatory framework for Derivatives trading in India.
16. Categorise in detail with various examples the different types of Futures traded in India.
17. Current market price of shares of A Ltd. is ₹. 100 and an option with exercise price of ₹. 115 for a call option with twelve months to expiration. It is expected that spot price of these shares at the end of three months from now might increase by 60% of the current spot price or it might decline by 20% of the current spot price. If risk-free rate of interest is 10% p.a.; what will be the price of Call Option and Put Option using Binomial Model?
18. "Swaps are essentially effective derivative instruments for risk management". Evaluate this statement keeping in mind its advantages and types.

(2 x 5 = 10 Weightage)

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