Paper / Subject Code: 50042 / Al for financial & Banking application (DLOC - V) Q.p. (ode: -69289 B.E. Sem-VIII (AIDS) (-scheme 4/12/24 111 Time: 3 hours Total Marks: 80 N.B.: (1) Question No 1 is Compulsory. (2) Attempt any three questions out of the remaining five. (3) Assume any suitable data if necessary and justify the assumptions. (4) Figures to the right indicate full marks. (5) Answer each new question to be started on a fresh page. Q.1 Attempt any FOUR [20] a) Describe the benefits of digitization in banking and finance sectors. b) Describe the steps on how to track a value stock over time. c) Explain fraud alert and case management. d) Describe covariance matrix with an example. e) Explain sample skewness and kurtosis. Q.2 a) Explain capital asset pricing model in detail with an example. [10] b) Explain K-Means clustering with an example. [10] Q.3 a) Explain different blockchain technologies used in Financial - Banking sector. [10] [10] b) Explain Foreign Exchange Market in detail. [10] Q.4 a) Describe the steps for backtesting an SMA based strategy. [10]b) Explain traffic light indicator approach in fraud analytics. [10]Q.5 a) Explain vectorized and event-based backtesting in detail. b) Explain Markov regime switching model with an example. [10]Q.6 a) Explain trading bot in detail. [10][10] b) Explain sharpe ratio with an example.

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