SOA真题May2003Course6 PDF转换可能丢失图片或格式，建议阅读原文
https://www.100test.com/kao_ti2020/84/2021_2022_SOA_E7_9C_9F_E9_A2_98M_c50_84058.htm COURSE 6MORNING SESSIONSECTION A-WRITTEN ANSWERCourse 6: Spring 2003 - 1 - GO ON TO NEXT PAGE**BEGINNING OF EXAMINATION**1. (6 points) You are given the following with respect to corporate bonds:Rating Spread Over Treasuries (basis points)AAA 20AA 30A 40The one-year rating transition matrix is as follows:Rating at End of YearRating at Beginning of Year AAA AA AAAA 0.8 0.1 0.1AA 0.1 0.7 0.2A 0.0 0.1 0.9(a) Describe the top down value-added strategies for active bond management.(b) Describe the corporate bond sector 0selection strategies.(c) Calculate the expected two-year horizon spread over Treasuries for a AAA-ratedbond.Show all work.Course 6: Spring 2003 - 2 - GO ON TO NEXT PAGE2. (5 points) You are given the following:Probability One Year ReturnStock X0.600.200.2010%5%-10%Stock Y0.750.2520%-20%#61472.#8226.#61472.the investor has a one-year horizon#61472.#8226.#61472.margin requirement on short sales: 50%#61472.#8226.#61472.an investor ’ s account with a broker currently holds:#61472.#8226.#61472.number of shares of XYZ stock: 500#61472.#8226.#61472.s #61472.0.02#61472.#61508.t #61472.1 year#61472.#61501.#8226.#61472.Rb2g #61472.0.09#61472.#61501.#8226.#61472.a #61472.0.4(a) Describe the key characteristics of this model.(b) Calculate the value of qb0g

using the Hull and White approximation.(c) Calculate the value of p2 a0,0f.(d) Calculate the value of a one-year cap with a notional amount of 100 and a strike interestrate of 9.5%.Show all work.Course 6: Spring 2003 - 5 - GO ON TO NEXT PAGE