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| **http://ksu.edu.sa/sites/KSUArabic/Students/FemaleStds/AlmalazCenter/AboutCenter/logo/ksu%20logo.png** |  |  |
| **كلية العلوم**  **قسم الرياضيات** |  | **College of Science.**  **Department of Mathematics** |

**Final Exam**

**Academic Year 1443-1444 Hijri- SecondSemester**

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| **معلومات الامتحان Exam Information** | | | | | |
| **اسم المقرر** | **Stochastic Processes** | | | | **Course name** |
| **رمز المقرر** | **380 Math** | | | | **Course Code** |
| **تاريخ الامتحان** | **1444-08-09** | | **2023-03-01** | | **Exam Date** |
| **وقت الامتحان** | **08: 00 AM** | | | | **Exam Time** |
| **مدة الامتحان** | **ثلاث ساعات** | **3 hours** | | | **Exam Duration** |
| **رقم قاعة الاختبار** |  | | | | **Classroom No.** |
| **اسم استاذ المقرر** |  | | | | **Instructor Name** |
|  | | | | | |
| **معلومات الطالب Student Information** | | | | | |
| **اسم الطالب** |  | | | | **Student’s Name** |
| **الرقم الجامعي** |  | | | | **ID number** |
| **رقم الشعبة** |  | | | | **Section No.** |
| **الرقم التسلسلي** |  | | | | **Serial Number** |
| **تعليمات عامة:** | | | | **General Instructions:** | |
| * عدد صفحات الامتحان  صفحة. (بإستثناء هذه الورقة) * يجب إبقاء الهواتف والساعات الذكية خارج قاعة الامتحان. | | | | * Your Exam consists of  PAGES (except this paper) * Keep your mobile and smart watch out of the classroom. | |

**هذا الجزء خاص بأستاذ المادة**

***This section is ONLY for instructor***

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| **#** | **Course Learning Outcomes (CLOs)** | **Related Question (s)** | **Points** | **Final Score** |
| 1 | 1.1 Explain fundamental concepts  advanced probability and stochastic  processes and their applications life and  nonlife insurance. | Q1(b) | 4 |  |
| 2 | 1.2 Describe different models using  stochastic processes in real life problems. | Q2(b)  Q4(a,b) | 10 |
| 3 | 2.1 Evaluate and solve problems of risks  using Markov chains models. | Q2(a)  Q3(a,b) | 9 |
| 4 | 2.2 Model actuarial, financial and many life  problems using applied mathematics  concepts and stochastic processes. | Q5(a,b)  Q6(a,b) | 14 |
| 5 | 3.1 Prepare partially student to Probability  and LTAM of SOA Exams | Q1(a) | 3 | 40 |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |