|  |  |  |
| --- | --- | --- |
| **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**

|  |
| --- |
| **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***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **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 |       |       |       |