

中山醫學大學九十八學年度博士班入學招生考試試題

牙醫學系博士班

考試科目：口腔醫學

時間：120 分鐘

※請注意本試題共(1)張，如發現頁數不足，應當場請求補齊，否則缺頁部份概以零分計算。 第 (1) 頁

本試題共五大題，總分 100 分。

1. Please describe and compare the cell death “necrosis” and apoptosis. (20%)
2. Please describe the concepts of “Targeted therapy” in cancer treatment. Please also describe the potential oncogene in the pathogenesis of oral cancer. (20%)
3. Please describe the roles of matrix metalloproteinases (MMPs) in the pathogenesis of oral diseases. Please also describe the pharmacological agents that can inhibit MMPs activity proved in recent scientific papers. (20%)
4. One of the requirements for the PhD degree is to be the first author of two Science Citation Index (SCI) papers. Please introduce the Journal Citation Reports. What is the Impact Factor? (10%)
5. Please describe the following biotechniques: (a) Real time polymerase chain reaction (b) Confocal microscopy (c) Tissue microarray (d) DNA-DNA check board (e) Flow cytometry (30%)