注意事項

一、本試題共四大題，共計 100 分。

二、請將最適當的答案依題號作答於考試答案卷上。

三、試題答錯者不倒扣；題次號碼錯誤或不按順序或鉛筆作答，不予計分。

1. Please explain the following terms and standards in medical informatics: (40%)

   (1) HL7 (health level seven)
   (2) ICD-9-CM (international classification of diseases, clinical modification)
   (3) SNOMED (systematized nomenclature of medicine)
   (4) LOINC (logical observation identifiers, names and codes)
   (5) MeSH (medical subject headings)

2. Data Mining is one of the popular skills in many fields. Please elaborate what data mining is and its application in Biomedical Informatics. (14%)

3. (1) Please explain what "Evidence-based research" is? (10%)
   (2) Describe the limitations of classic evidence-based medicine and clinical practice guidelines. (10%)
   (3) Please describe what your solutions are for these limitations? (10%)

4. Please define the following terms: (16%)

   (1) Gene expression microarray
   (2) Bioinformatics