I. Grammaire / 34 marks

1. Insérez la préposition qui convient.  
   a. He has been looking ___ his stethoscope everywhere.  
   b. The doctor provided the patient ___ painkillers.  
   c. A doctor is responsible ___ the safety of his patients.

2. Choisissez le pronom relatif le plus adapté.  
   a. I spoke to the boss, ___ was in a hurry  
   b. The applicants ___ tests are satisfactory will be employed.  
   c. ___ he particularly likes is to work in the emergency department.

3. Reliez les propositions grammaticales à l’aide des conjonctions suivantes.  
   a. Mr. Boggis had locked his surgery _____ somebody broke in.  
   b. _____ you are careful, you should live to be a hundred.  
   c. You’ll just have to wait _____ I come back.

4. Choisissez la bonne forme verbale (infinitif complet/ base verbale/ -ing/ etc).  
   a. Why not _____ a new CT-scan? (to buy)  
   b. He would rather _____ a surgeon than an anaesthesist. (to be)  
   c. _____ potential donors for bone marrow transplants is difficult. (to find)

5. "Make" ou "have"?  
   a. I hope these pills won’t _____ me too sleepy.  
   b. The OHP was sent back to the firm to _____ it repaired.  
   c. I’ll _____ a doctor come & examine you. You don’t look well at all.

6. Ajoutez le pronom personnel idoine.  
   a. Listen, he is singing this new song of _____  
   b. Everybody arrived on time, didn’t _____?  
   c. I like doing things by _____

7. Complétez avec le "tag" approprié.  
   a. Let’s begin now, _____?  
   b. She believes in cloning, _____?  
   c. They can’t have finished yet, _____?

8. Utilisez les amorces pour mettre les phrases suivantes au discours indirect.  
   a. The doctor asked: "How old is she?"  
      => The doctor asked me ______________.  
   b. "Doctor, I will do my best to help you."  
      => I told the doctor ______________.  
   c. The senior doctor: "Why didn’t you give us a ring?"  
      => He wondered ______________.
9. Quels adjectifs correspondent aux noms suivants? Unit XVII
a. heart => ________
   b. brain => ________
   c. liver => ________
   d. back => ________

10. Construisez un mot de la même famille. Unit XVIII
a. He could not stand it anymore. The pain was __________ (to bear)
   b. We have known each other since our early __________ (child)
   c. I am not sure the treatment is going to be __________ (effect)

11. Construisez les adjectifs composés d’après les éléments soulignés. Unit XIX
a. A midwife with __________ => a ________ midwife
   b. A prosthodontist __________ => a ________ prosthodontist
   c. An operation which __________ => a ________ operation

II. Questions sur les conférences / 6 marks
1. (porphyria) What are the 3 classifications of porphyria?
2. (gout) How can you describe gout in a few key words?
3. (evolution) What is a key sentence in The Origin of Species (1859, p.12)?

III. Résumé

Résumer le texte « The Perpetual Challenge of Infectious Diseases » en 250 mots +/- 10%.

Notez le nombre de mots au dessus du résumé.

The Perpetual Challenge of Infectious Diseases
Anthony S. Fauci, M.D., and David M. Morens, M.D.
1,003 words

Infections have distinct characteristics that, when considered together, set them apart from other diseases. Paramount among these characteristics is their unpredictability and their potential for explosive global effect, as exemplified by the bubonic–pneumonic plague pandemic in the 14th century, the 1918 influenza pandemic, and the current pandemic of human immunodeficiency virus (HIV) infection and the acquired immunodeficiency syndrome (AIDS), among others. Infectious diseases are usually acute and unambiguous in their nature. The onset of an infectious illness, unlike the onset of many other types of disease, in an otherwise healthy host can be abrupt and unmistakable. Moreover, in the absence of therapy, acute infectious diseases often pose an all-or-nothing situation, with the host either quickly dying or recovering spontaneously, and usually relatively promptly, often with lifelong immunity to the specific infecting pathogen.
Not only are some infectious diseases transmissible to others, a unique characteristic among human diseases, but their transmission mechanisms are relatively few (including inoculation and airborne and waterborne transmission), well understood, and comparatively easy to study, both experimentally and in the field. In addition, such transmission is generally amenable to medical and public health interventions. Unlike many chronic and lifestyle-associated diseases resulting from multiple, interacting risk cofactors, most infectious diseases are caused by a single agent, the identification of which typically points the way not only to general disease-control measures (e.g., sanitation, chemical disinfection, hand washing, or vector control) but also to specific medical measures (e.g., vaccination or antimicrobial treatment).

Given their nature, infectious diseases are potentially preventable with personal protection, general public health measures, or immunologic approaches such as vaccination. As preventive measures have become more effective and efficient, history has shown that certain infectious diseases, particularly those with a broad global health impact and for which there is no nonhuman host or major reservoir, can be eliminated. Such diseases include poliomyelitis, which has been eliminated in the Western Hemisphere and smallpox, which has been eliminated globally.

Another unique aspect is that the extraordinary adaptability of infectious pathogens i.e. their replicative and mutational capacities, provides them with a temporary evolutionary advantage against pressures aimed at their destruction. These pressures include environmental factors and antimicrobial drugs, as well as the human immune response. At the same time, such adaptations provide us with opportunities to respond with new vaccine antigens, such as annually updated influenza vaccines or new or different anti-infective agents. This back-and-forth struggle between human ingenuity and microbial adaptation reflects a perpetual challenge.

Infectious diseases are closely dependent on the nature and complexity of human behavior, since they directly reflect who we are, what we do, and how we live and interact with other people, animals and the environment. Infectious diseases are acquired specifically and directly as a result of our behaviors and lifestyles, from social gatherings, to travel and transportation, to sexual activity, to occupational exposures, to sports and recreational activities, to what we eat and drink, to our pets, to the environment — even to the way we care for the ill in hospitals and other health care environments. Moreover, microbial colonizing infections that lead to long-term carriage without disease e.g., within the endogenous human microbiome, may influence the development of infections with exogenous microbes and also have an effect on general immunologic and physiologic homeostasis, including effects on nutritional status. Human microbiomes seem to reflect, and may even have helped to drive, human evolution.

In this struggle, infectious diseases are intimately and uniquely related to us through our immune systems. The human immune system, including the primitive innate system and the specific adaptive system, has evolved over millions of years from both invertebrate and vertebrate organisms, developing sophisticated defense mechanisms to protect the host from microbes. In effect, the human immune system evolved as a response to the challenge of invading pathogens. Thus, it is not by accident that the fields of microbiology and immunology arose and developed in close association long before they came to be considered distinct disciplines.

Because infectious pathogens are evolutionarily dynamic, the list of diseases they cause is ever-changing and continually growing. Since newly-emerging infectious agents do not arise spontaneously, they must recently have come from somewhere else, usually from animal infections, as occurred with HIV infection, influenza, and the severe acute respiratory syndrome. This interspecies transmission underscores the importance of interlinking the study of human and animal diseases and recognizing the central role that microbial reservoirs, including those in animals, vectors and the environment, play in human infectious diseases. Preexisting or established infectious diseases also may reemerge in different forms,
as in extensively drug-resistant tuberculosis or in different locations, as in West Nile virus infection in the United States, to cause new epidemics. Indeed, many human infectious diseases seem to have patterns of evolution, sometimes played out over thousands of years, in which they first emerge and cause epidemics or pandemics, become unstably adapted to human populations, undergo periodic resurgences and eventually become endemic with the potential for future outbreaks.

(…)

We are living in a remarkable era. Almost all the major advances in understanding and controlling infectious diseases have occurred during the past two centuries and momentous successes continue to accumulate. These breakthroughs in the prevention, treatment, control, elimination and potential eradication of infectious diseases are among the most important advances in the history of medicine. Nevertheless, because of the evolutionary capacity of infectious pathogens to adapt to new ecologic niches created by human endeavor, as well as to pressures directed at their elimination, we will always confront new or reemerging infectious threats. Our successes in meeting these threats have come not just from isolated scientific triumphs but also from broad approaches that complement the battle against infectious diseases on many different fronts, including constant surveillance of the microbial landscape, clinical and public health efforts and efficient translation of new discoveries into disease-control applications. These efforts are driven by the necessity of expecting the unexpected and being prepared to respond when the unexpected occurs. The challenges are truly perpetual. Our response to these challenges must be perpetual as well.