(5 points) Answer the following essay question, writing only on the paper provided:

1. Carefully define what is meant by adverse selection in health insurance markets. What methods might be used to reduce moral hazard problems in health insurance? How effective are these methods likely to be? Briefly explain your answer.
(10 points) Answer all of the following 10 multiple-choice questions. There are two extra credit questions as well that you may choose to answer. Make sure that your answers are coded in the answer sheet provided.

1. Expected utility equals:
   A. The average utility one expects to gain over their lifetime.
   B. \( P_G M_G + P_B M_B \).
   C. \( P_G U(M_G) + P_B U(M_B) \).
   D. The highest utility one receives of either the good state happening or the bad state happening.

2. Consider the following two statements:
   I. Survival analysis suggests that economies of scale in the hospital industry have increased over the past several decades.
   II. Under fee-for-service payment with health insurance coverage hospitals tend to engage in non-price competition.
   A. both statements are true.
   B. both statements are false.
   C. I is true while II is false.
   D. I is false while II is true.

3. Which of the following statements are true?
   I. Difficulty in excluding non-payers from consumption is one of the characteristics of a public good.
   II. Consumption of a good by one consumer that precludes consumption by another consumer is one of the characteristics of a public good.
   A. both statements are true.
   B. both statements are false.
   C. I is true while II is false.
   D. I is false while II is true.

4. Which of the following are not one of the disadvantages of an assumption that hospitals are profit maximizers?
   A. The majority of hospitals are legally non-profit firms.
   B. Profit-maximization ignores the role that physicians play in hospitals.
   C. Empirical evidence suggests that hospitals often invest in non-profitable technology.
   D. All of the above are disadvantages.

5. Which of the following is not an advantage of allowing non-profit hospitals?
   A. Charitable donations.
   B. The ability to pay dividends to owners.
   C. Favorable tax status.
   D. Increased ability to provide the public goods associated with hospital care.

6. Which of the following statements are true?
   I. Contingent consumption refers to consumption that is contingent upon enough money to pay for the good(s).
   II. An insurance contract that leads to over-insurance implies that money in the bad state \( M_B \) exceeds money in the good state \( M_G \).
   A. both statements are true.
   B. both statements are false.
   C. I is true while II is false.
   D. I is false while II is true.

Use the following graph to answer Question 7

7. The individual in the graph above is:
   A. Risk-averse.
   B. Risk-neutral.
   C. Risk-loving.

8. Which of the following statements are true?
   I. The expected utility hypothesis suggests that individuals make choices in order to maximize their expected utility.
   II. The expected value hypothesis suggests that individuals make choices in order to minimize their expected value.
   A. Both statements are true.
   B. Both statements are false.
   C. I is true while II is false.
   D. I is false while II is true.

9. According to the synthesis model of hospital decision making we discussed in class, hospitals are assumed to desire to maximize:
   A. profit.
   B. utility.
   C. Quality of hospital services.
   D. Quantity of hospital services.
10. Which of the following statements are true?
   I. The problem of moral hazard suggests that health care will be underutilized.
   II. Experience rating insurance is one possible solution to the problem of moral hazard.
   A. both statements are true.
   B. both statements are false.
   C. I is true while II is false.
   D. I is false while II is true.

The Following Two Questions are Extra Credit

11. Which of the following will tend to increase a person’s demand for health insurance?
   A. A decrease in the magnitude of the loss being insured.
   B. An increase in the probability of the loss to a very high level.
   C. A decrease in the starting income of the individual.
   D. An increase in the premium.

12. In the physician control model of hospital behavior hospitals are assumed to:
   A. be profit maximizers.
   B. be utility maximizers.
   C. make decisions in such a way as to maximize physicians’ profits.
   D. be cost minimizers.