ECON 180 - Regulation & Antitrust Policy
Drake University, Spring 2015
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Signature: _____

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QUIZ 14 VERSION A
"Health and Safety Regulation"

INSTRUCTIONS: This exam is closed-book, closed-notes. Simple calculators are permitted, but graphing calculators or calculators with alphabetical keyboards are NOT permitted. Mobile phones or other wireless devices are NOT permitted.

Multiple choice: Circle the one best answer to each question. [10 pts each]

(1) One kind of market failure occurs when risks of injury, disease, or death affect people who are not buyers or sellers of the good or service which causes this risk. This kind of market failure is called
a. market power.
b. imperfect information.
c. externalities.
d. irrationality.

(2) Surveys show that people tend to over-estimate
a. relatively small risks, like tornados.
b. relatively large risks, like cancer.
c. all risks.
d. none of the above—people show no bias in estimating risk.

(3) The value of a statistical life (VSL) equals the
a. present discounted value of a person's lifetime earnings.
b. present discounted value of a person's lifetime earnings less consumption.
c. present discounted value of taxes paid during a person's lifetime.
d. none of the above.

(4) Suppose a person is willing to pay $1200 to eliminate a 1 in 5,000 risk of death. The value of a statistical life for this person is
a. $1200.
b. $5000.
c. $6200.
d. $4,166,667.
e. $5,000,000.
f. $6,000,000.

(5) As people's incomes rise, they are willing to pay
a. less for reducing risk of injury or death.
b. more for reducing risk of injury or death.
c. the same amount for reducing risk of injury or death.
d. first more, then less for reducing risk of injury or death.

(6) The curve relating actual wages and injury risk across different jobs in the job market is called the
a. wage curve.
b. supply curve.
c. indifference curve.
d. isoprofit curve.
e. hedonic equilibrium curve.
f. cost curve.

(7) For the United States, a typical estimate of the value of a statistical life (in 2000 dollars) is about
a. $500,000.
b. $7,000,000.
c. $90,000,000.
d. $1,100,000,000.
e. $13,000,000,000.

(8) Willingness-to-pay for air quality can be estimated using data on the prices of
a. automobiles.
b. houses.
c. appliances.
d. public transportation.

(9) Suppose the government is considering regulating exposure to some toxic chemical in the workplace. Five possible standards have been proposed, as shown below. Standard A is the most lax. Standard E is the most stringent.

Standard	Allowable exposure (mg/m3)	Average cost per life saved (millions)	Marginal cost per life saved (millions)
A	0.1	$0.50	$0.50
B	0.04	$2.50	$4.50
C	0.01	$3.67	$6.00
D	0.004	$4.38	$6.50
E	0.0001	$4.90	$7.00

If the value of a statistical life were $5 million, what would be the economically efficient standard?
a. Standard A.
b. Standard B.
c. Standard C.
d. Standard D.
e. Standard E.

(10) Optimal regulation of health and safety throughout the economy would
a. attempt to reduce all risks to zero.
b. reduce each risk to the same low level.
c. equate the marginal cost of reducing each risk to the same value of a statistical life.
d. allow unregulated market forces to determine risks.

[end of quiz]