

Life/Work Experience Examination – Part I

■ Social Impact of Technology

Select the single best answer for each question or statement, then transfer your answers to the appropriate scan sheet provided.

1. _____ theories hold that certain actions or practices are inherently right or wrong.

_____ a. Consequentialist

_____ b. Utilitarian

_____ c. Deontological

_____ d. Ethical

2. According to the textbook, all of the following are true about a person's possible opposition to technological violations of natural orders EXCEPT:

_____ a. they are sometimes based on concern about long-term consequences of intervention.

_____ b. they can be based on religious beliefs.

_____ c. they often stem from the longevity of a particular practice.

_____ d. they stem from a lack of education.

3. _____ is the resistance to changes in our culture that extends to any technological device that may come along; because of this resistance, the passage of time is necessary before a new technology will filter throughout society.

_____ a. Homeostasis

_____ b. Technophobia

_____ c. Psychological trauma

_____ d. Complexity

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4. According to Tim Healy, the Internet is an example of the unanticipated consequences of technology because:
- _____ a. its impact on human behavior is predictable.
 - _____ b. the ramifications of its influence are negligible.
 - _____ c. its influence on all humans throughout the 21st century is still unknown.
 - _____ d. its use is not consistent throughout the world.
5. About _____ of processed food that is produced in the United States contains some genetically modified ingredients.
- _____ a. 62%
 - _____ b. 33%
 - _____ c. 75%
 - _____ d. 44%
6. Individuals might blow the whistle if they believe:
- _____ a. their company is breaking the law.
 - _____ b. their company is involved in acts that are financially profitable but morally wrong.
 - _____ c. the actions of the company are potentially dangerous.
 - _____ d. All of the above

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7. It is believed that the Challenger explosion could have been prevented if:
- _____ a. the Challenger was sent into space at warmer temperatures.
 - _____ b. if the management team had listened to Boisjoly.
 - _____ c. if the seal had not leaked.
 - _____ d. the crew inside the Challenger had received more training prior to the mission.
8. According to the textbook, there is a finite amount of time that our civilization can exist based on which of the following?
- _____ a. Our civilization is based on non-renewable resources.
 - _____ b. Our production of nuclear weapons will lead to mass destruction.
 - _____ c. At the present birth and death rates, our population will outgrow its capacity to feed itself.
 - _____ d. Plagues and diseases from non-industrialized countries will kill the population.
9. Behind the United States, the world's second largest emitter of energy-related emissions is:
- _____ a. Mexico.
 - _____ b. China.
 - _____ c. The Soviet Union.
 - _____ d. Europe.

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10. In the year 2000, fossil fuels accounted for _____ of energy use while new renewable sources accounted for only _____.
- _____ a. 50%; 12%
 - _____ b. 70%; 5%
 - _____ c. 77%; 2%
 - _____ d. 97%; 3%
11. The advantages of _____ as an energy source are that it is abundant, versatile, and inexpensive compared with other energy sources.
- _____ a. coal
 - _____ b. hydroelectric power
 - _____ c. solar power
 - _____ d. crude oil
12. Which of the following power technologies has the highest fuel (thermal) efficiency?
- _____ a. Fuel cell
 - _____ b. Steam electric power plant
 - _____ c. Nuclear electric power
 - _____ d. Gas turbine electric power plant

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13. The technology that converts solar radiation into electricity is called _____ energy.
- _____ a. fossil fuel
 - _____ b. hydroelectric
 - _____ c. nuclear
 - _____ d. photo-voltaic
14. Which of the following is NOT a disadvantage of hydroelectric power generation?
- _____ a. Dam construction causes loss of land suitable for agriculture.
 - _____ b. Dam construction prevents upstream migration of fish.
 - _____ c. Downstream water flow becomes unpredictable and creates extreme conditions.
 - _____ d. Drought conditions can affect power production.
15. The biggest roadblock for electric cars is:
- _____ a. storing the electricity needed to run them.
 - _____ b. the inefficiency of the electric motor.
 - _____ c. the lack of usable prototypes.
 - _____ d. low-volume production.

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16. The study of ecology focuses specifically on:
- _____ a. the world that is all around us.
 - _____ b. the world of living things in our planet.
 - _____ c. the mutual relationship between organisms and the natural world.
 - _____ d. anything having to do with life.
17. Wetlands are important for all of the following reasons EXCEPT:
- _____ a. they provide local habitats for many species of animals and plants.
 - _____ b. one-third of endangered or threatened species in the U.S. live in or are dependent on them.
 - _____ c. they harbor the majority of the world's flowering species.
 - _____ d. they provide purification of local water supplies.
18. The United States is responsible for _____ of the world's total energy consumption.
- _____ a. 15%
 - _____ b. 25%
 - _____ c. 35%
 - _____ d. 45%

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19. Which of the following was NOT a founding principle of the Kyoto Protocol?
- ☐ a. Scientific uncertainty must not be used to avoid precautionary action.
 - ☐ b. Nations must have common but differentiated responsibilities.
 - ☐ c. All nations must be included in the contract for it to work.
 - ☐ d. Industrial nations must take the lead in addressing the problem.
20. The reauthorization of the Magnuson Act in 1996 focused on all of the following EXCEPT:
- ☐ a. overfishing.
 - ☐ b. funding.
 - ☐ c. air quality.
 - ☐ d. habitat degradation.
21. Aside from lead, the two air pollutants most hazardous to human health are:
- ☐ a. sulfur dioxide and carbon monoxide.
 - ☐ b. ozone and sulfur dioxide.
 - ☐ c. ozone and fine airborne particulates.
 - ☐ d. nitrous oxides and carbon monoxide.

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22. Which of the following is an ingredient of acid rain?
- _____ a. Lead
 - _____ b. Nitrogen dioxide
 - _____ c. VOCs
 - _____ d. Ozone
23. The economic value of the rain forest is based upon all of the following EXCEPT:
- _____ a. plants that potentially contain the basis for new medicines.
 - _____ b. its value as a source of raw materials.
 - _____ c. its value as a food source.
 - _____ d. its value as a fossil fuel source.
24. In considering the origins of the top 150 drugs in the United States, _____ origins account for the greatest percentage of drugs.
- _____ a. synthetic
 - _____ b. animal
 - _____ c. plant
 - _____ d. marine

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25. The company that put the "stealth" in the stealth bomber was:

_____ a. Lockheed Martin.

_____ b. Grumman.

_____ c. Northrup.

_____ d. Boeing.

■ *Social Impact of Technology*

Select the single best answer for each question or statement, then transfer your answers to the appropriate scan sheet provided.

1. When was the tank first used in combat?

_____ a. World War II

_____ b. World War I

_____ c. Korea

_____ d. Vietnam

2. The M1A1 Abrams tank was used with great success in:

_____ a. World War II.

_____ b. Vietnam.

_____ c. The Cold War.

_____ d. The Gulf War.

3. The project designed to clothe soldiers in order to fight the wars of tomorrow is called:

_____ a. Future Soldier 2025.

_____ b. Situational Awareness.

_____ c. Star Wars.

_____ d. Land Warrior.

Life/Work Experience Examination – Part II

4. Some turkey and chicken products contain _____ which increases the risk of human infection from bacteria that medications on the market will not easily kill. It is the most common bacterial cause of diarrhea illness in the United States.
- _____ a. campylobacter
 - _____ b. monobacter
 - _____ c. cylobacter
 - _____ d. bactercilo
5. Bayer was an early proponent of amphetamines and brought the world two blockbuster commercial winners: aspirin and:
- _____ a. morphine.
 - _____ b. heroin.
 - _____ c. cocaine.
 - _____ d. diabetic drugs.
6. Drugs that treat diseases such as Alzheimer's, depression, schizophrenia, and aging were tested by Cold Spring Harbor Laboratories on:
- _____ a. fruit flies.
 - _____ b. guinea pigs.
 - _____ c. rabbits.
 - _____ d. monkeys.

Life/Work Experience Examination – Part II

7. About _____ of HIV transmission worldwide is through unprotected sex.
- _____ a. 56%
 - _____ b. 64%
 - _____ c. 75%
 - _____ d. 33%
8. The term _____ was supposed to represent communist countries of Eastern Europe, but the term never caught on.
- _____ a. First World
 - _____ b. Second World
 - _____ c. Fourth World
 - _____ d. Soviet Bloc
9. In 1952, who coined the phrase "Third World"?
- _____ a. Albert Einstein
 - _____ b. Alfred Sauvey
 - _____ c. Richard Nixon
 - _____ d. John Kennedy

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10. The term LLCD represents _____ countries.
- _____ a. First World
 - _____ b. Second World
 - _____ c. least developed
 - _____ d. technologically advanced
11. To eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, and reduce child mortality are among the self-stated goals of the:
- _____ a. WTO.
 - _____ b. MDG.
 - _____ c. UNDP.
 - _____ d. World Bank.
12. The single largest environmental concern in Bangladesh is:
- _____ a. clean drinking water.
 - _____ b. clean air.
 - _____ c. lack of good soil for crop production.
 - _____ d. acid rain from nearby countries.

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13. In Pakistan, recycling has been implemented for _____ reasons.
- _____ a. environmental
 - _____ b. health
 - _____ c. economic
 - _____ d. aesthetic
14. According to the UNDP statistics (2004) the per capita income of Ecuador was about _____ per year.
- _____ a. \$2,500
 - _____ b. \$3,500
 - _____ c. \$4,500
 - _____ d. \$5,500
15. On April 6, 1994 the presidents of Rwanda and Burundi died in a plane crash. Both were members of the _____ ethnic group.
- _____ a. Masai
 - _____ b. Tutsi
 - _____ c. Hutu
 - _____ d. Mumbasa

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16. All of the following factors led to the 1994 genocide in Rwanda EXCEPT:
- _____ a. population growth.
 - _____ b. deforestation.
 - _____ c. hunger.
 - _____ d. natural gas.
17. With the aid of _____, computers soon will build information and conclusions and automatically coordinate applications and outputs.
- _____ a. optical networks
 - _____ b. artificial intelligence
 - _____ c. the Internet
 - _____ d. intelligent agents
18. Nano-technology:
- _____ a. is microscopic technology that is the size of atoms and molecules which is engineered to function within the structure of matter at that level.
 - _____ b. is a connecting telecommunications technology that allows for specialized repair and clarity of transmissions.
 - _____ c. is a gene therapy that scans defective genes and isolates and identifies them.
 - _____ d. is a new medical surgical techniques which utilizes radio waves and lasers.

Life/Work Experience Examination – Part II

19. In the future technology will change workforce dynamics most substantially for:
- _____ a. white-collar workers.
 - _____ b. executive managers.
 - _____ c. mid-level "technicians."
 - _____ d. service workers.
20. Key developments that have revolutionized light-wave communications are advances in:
- _____ a. oceanic fiberoptics.
 - _____ b. nanotechnology.
 - _____ c. molecular design.
 - _____ d. rare-earth optical amplifiers.
21. The brain's ability to grow and change as it learns and experiences its environment is known as:
- _____ a. neurotransmission.
 - _____ b. neurology.
 - _____ c. neuroeducation.
 - _____ d. neuroplasticity.

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22. The IPv4 (Internet Protocol version 4) addressing scheme (uses a 32-bit unique address to identify a device connected to the Internet), developed in the 1980s, yields around _____ billion possible computer addresses.
- _____ a. 1
 - _____ b. 2
 - _____ c. 3
 - _____ d. 4
23. Based on brain research, Kahn suggests that to encourage neural branching, educators should use all of the following teaching strategies EXCEPT:
- _____ a. application of different symbols.
 - _____ b. analogy.
 - _____ c. rote memorization.
 - _____ d. hypothetical thinking.
24. The goals of the UN 2000 Millennium Project include all of the following EXCEPT:
- _____ a. eradicate extreme poverty and hunger.
 - _____ b. achieve universal high school education.
 - _____ c. promote gender equality.
 - _____ d. reduce child mortality.

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25. In which of the following world geographical areas is the number of maternal deaths per 100,000 live births the highest?
- _____ a. Northern Africa
 - _____ b. Sub-Saharan Africa
 - _____ c. South-central Asia
 - _____ d. South-eastern Asia