## Les Enfants Terribles <br> Academic Quiz Bowl Tournament <br> Packet \#8 by Iowa State University <br> 18-19 April 1997

## Toss-Ups

1. He was Ziusudra to the Sumerians and his most creation was cubical according to the Enuma Elish. The Babylonians called him Utnapishtim and said he guarded the plant of life. The Hindus called him Manu while the Greeks called him Deucalion and thought the he recreated the human race by casting rocks behind him after a flood. FTP, name the Christian version of the prototypical character who survives a great deluge.

Answer: Noah
2. For giffin goods, the own-price version is negative. For substitute goods, the cross-price version is positive; for complementary goods, negative. For inferior goods, the income version is negative; for normal goods, positive. FTP, what is this generic economic term for the percentage change in the quantity demanded divided by the percentage change in another variable?

## Answer: elasticity

3. This work had its basis in a story told in 1838 by Episcopal clergyman Horace Lorenzo Conolly about a young couple who had been separated by the British order expelling about 6,000 inhabitants from Acadie in Nova Scotia. Influenced by Goethe's_Hermann und Dorothea_, its characters are Gabriel Lajeunesse, and his bride, surnamed Bellefontaine. It begins "This is the forest primeval, the murmuring pines and the hemlocks." FTP, give the name of this Henry Wadsworth Longfellow poem which it shares with its heroine.

## Answer: Evangeline

4. Novel features include the presence of a third horn in the orchestra and the horns' apparent early entrance into a pianissimo tremolo of violins in the first movement. The Allegro finale reprises heroic themes from the composer's Creatures of Prometheus, while unexpected C-sharps in the first movement also hint at individualism and strength. FTP, in what 1803 symphony of Ludwig van Beethoven, originally entitled "Bonaparte", do these features occur?

## Answer: Eroica (Ludwig van Beethoven's Third Symphony in E-flat)

5. It was a miracle of rare device, having both sun and caves of ice. It also featured an Abyssinian maid playing a dulcimer, a deep romantic chasm, sunny spots of greenery, sinuous rills, and twice five miles of fertile ground with walls and towers girdled round. FTP, what is this "pleasure-dome" of Kubla Khan, first described to the world by Samuel Taylor Coleridge?

## Answer: Xanadu

6. Uninterested in the family jewelry business, he formed his own interior design company. A leader of Art Nouveau, his iridescent "Favrile" glassware, with its asymmetrical shapes and floral patterns, epitomized the movement. FTP, name this American designer, famous for his vases and lampshades.

Answer: Louis Comfort Tiffany
7. An alkaloid with formula C 4 H 10 N 4 O 2 , it decreases blood flow to the brain and so can be used to alleviate migraine headaches. By widening bronchial airways, it can also help to relieve asthma attacks.

In large amounts, however, it may cause insomnia, restlessness, and anxiety, to which your packet editors can attest. FTP, name this naturally occurring chemical found in kola nuts, tea leaves and coffee beans.

Answer: caffeine
8. Barrelhouse is the owner of a saloon in Harlem. MacDuffy is the personnel manager at the Liberty Paint Factory. Ras the Exhorter is a black separatist. And Brother Jack is the leader of a religious group known as the Brotherhood. FTP, these characters all influence the unnamed title character in what 1952 Ralph Ellison novel?

Answer: Invisible Man
9. In addition to the main island which bears the name of the country, other islands include Al Muharraq, Sitrah, and Umm Nasan and it has been ruled by the Al Khalifah arabs since 1782. It has only small oil reserves itself, but its refinery on Sitrah Island is one of the world's largest and processes much of Saudi Arabia's oil. FTP, identify this Persian Gulf island nation with capital at Manama.

Answer: The State of Bahrain
10. It was founded in London in 1844 by George Williams who wanted to give visiting clerks from the countryside a place to lodge and read the Bible. Exercise became a part of the American branch in 1856 and two of its gym instructors invented the games of basketball and volleyball. FTP, identify this 25 million member group devoted to promoting health and Judeo-Christian values, the subject of a popular dance tune by the Village People.

## Answer: YMCA (Young Men's Christian Association)

11. If the Hermitian operators corresponding to two observables do not commute, as they don't for components of angular momentum or position and momentum in different directions, then the operators cannot share eigenstates; collapse into the eigenstate of one will alter the eigenvalue of the other. FTP, by what name is the principle of modern physics known which loosely means that some pairs of variables cannot be measured simultaneously?

## Answer: Heisenberg's Uncertainty Principle

12. He owns the National League record for career triples with 252 and ranks second in major league putouts by a shortstop. The only player ever to lead the National League in batting eight times, he hit over .300 in 17 consecutive seasons, finishing with a . 329 average. FTP, identify this man, nicknamed the "Flying Dutchman", a Pirate great often considered the best shortstop in history.

## Answer: John Peter (Honus) Wagner

13. He defeats Samson Carrasco the first time, a collection of mourners, and two monks. He loses the to Samson Carrasco the second time and also to a letter carrier, a goatherd, shepherds, and several giants. The lion refuses to fight. FTP, who is this knight errant whose battles seem less chivalrous when view through the eyes of his squire, Sancho Panza.

Answer: Don Quixote de la Mancha (Alonzo Quixano)
14. He came to prominence with his legal defense of some of Mackenzie's foreign supporters; in the 1840's he helped to rebuild the Conservative party. He was largely responsible for authoring the Quebec Resolutions which established the Dominion. FTP, who is this man who dealt with the Pacific scandal and the Riel rebellion during his term as the first Prime Minister of the Dominion of Canada?
15. Between 1235 and 1240, Sundiata, the king of Kangaba, conquered the nearby lands of Sosso and founded a city which was to become his capital and give its name to his empire and to a 20th century nation located in the same region. The empire reached its height under Mansa Musa and then declined before the Tuareg and Songhai raiders. FTP, name this empire whose name which lives on in the nation ruled from Bamako.

Answer: Mali Empire
16. Cephalosporins interfere with bacterial cell wall formation. Fluoroquinolones interfere with bacterial enzymes. Aminoglycosides and tetracyclines interfere with bacterial protein formation. Macrolide ones interfere with protein formation during multiplication. Penicillins also damage bacterial cell walls. FTP, what general name is given to these drugs, medicines given to treat bacterial infections?

## Answer: anti-biotics

17. He trained as an architect, but later switched to writing after moving to London from his home in Wessex. His poems were received poorly--though they remained his chief love--and so he began the novels for which he is best remembered. FTP, who was this author of the poems "The Convergence of the Twain" and "The Darkling Thrust" and the novels Far from the Madding Crowd and The Mayor of Casterbridge.

Answer: Thomas Hardy
18. His number is the ratio of gravitational to viscous forces in a fluid. His property states that real numbers can be made arbitrarily large by multiplying by a sufficiently large integer. His principle states that buoyant forces are equal the weight of the water displaced by an object. His screw is still used today to lift water by only turning a handle. FTP, what man, the greatest mathematician of antiquity, gave his name to all of these inventions before dying at Roman hands circa 212 BCE?

Answer: Archimedes of Syracuse (c. 287 - c. 212 BCE)
19. 0.1 to 0.2 percent positrons. One percent electrons. Nine percent helium or heavier nuclei. Ninety percent protons. Such is the typical catch of astronomical detectors looking for these. FTP, what name is given to these highly-energized charged particles which originate in supernova explosions around the Galaxy?

Answer: cosmic rays
20. The Balfour Declaration was addressed to Lionel Walter. Lionel Walter's father, Nathan, was the first Jewish British peer, and his grandfather, Lionel, was the first Jewish member of the House of Commons and provided the money Britain needed to buy the Suez Canal. FTP, identify this banking family that wielded considerable influence in 19th and early 20th century Europe.

Answer: Rothschild

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## Bonuses

1. Identify the following rulers of Athens for ten points apiece.
a. This man was the only tyrant to rule Athens.

Answer: Peisistratus
b. This man lightened Draco's law code, opened the Laurium silver mines, began exporting olive oil, extended citizenship, and made wealth the sole qualification for office.
Answer: Solon
c. This man governed during the golden age; he restricted citizenship and led Athens in the

Peloponnesian War until his death from the plague.
Answer: Pericles
2. Identify the following places from Middle Earth for ten points apiece.
a. This is the quiet and comfortable region in the northwest which is home to the hobbits and their hobbitholes.
Answer: Shire
b. This is the old dwarfish underground kingdom through which the Nine Walkers pass on their way to the South. In it they awaken a sleeping balrog.
Answer: Moria Khazad-Dum)
c. This is Denethor's seven-walled city; its siege features prominently in the conclusion of The Return of the King.
Answer: Gondor
3. Answer the following about rivers from Asia for ten points apiece.
a. This 1800 -mile-long river rises in Tibet and runs through Jammu and Kashmir and into Pakistan before emptying into the Arabian Sea.
Answer: Indus
b. This 1300 -mile-long river drains 160,000 square miles of land in Myanmar and is contained entirely within that country.
Answer: Irrawady
c. This is the world's muddiest river: it carries two pounds of silt per cubic foot of water and is named for this characteristic.
Answer: Yellow River (Hwang-Ho)
4. A beam of $600-\mathrm{nm}$ laser light is split into two and then recombined after the second beam has been allowed to travel farther than the first. Answer the following questions for fifteen points apiece.
a. What is the shortest additional distance the second beam can travel in order to produce destructive interference upon recombination?
Answer: 300 nanometers
b. If the same experiment is performed in water, what is the answer?

Answer: 225 nanometers (accept 210-240)
5. The moderator will play you three excerpts from recent movie scores. Identify the movies for ten points apiece.

Answer: 1. Philadelphia
2. Pulp Fiction
3. The Last of the Mohicans

## Visual Bonus LET-07


6. Identify the following possibly related men for ten points apiece.
a. He charged $\$ 1,000,000$ per hit and had a third nipple.

Answer: the man with the golden gun (Scaramanga)
b. He lived in Chicago and had a terrible morphine addiction.

Answer: the man with the golden arm
c. He was born in Northern Ireland and keeps Irish folk melodies as his signature despite worldwide fame.

Answer: the man with the golden flute (James Galway)
five
7. Given each work, identify the most destructive natural disaster which occurs in it for leapoints apiece.
a. Candide

Answer: Lisbon earthquake of 1755
b. The Decameron

Answer: plague
c. The Thornbirds

Answer: brushfire
d. "The Convergence of the Twain"

Answer: shipwreck of the Titanic
e. Germinal

Answer: mine collapse
f. Porgy

Answer: hurricane
8. The moderator will hand you reproductions of three famous statues. Identify each work for ten points apiece.

Answer: A. The Ecstasy of Saint Theresa
B. Bird in Space
C. Moses
9. Identify these terms from the philosophy and history of science for ten points apiece.
a. Coined by Herbert Butterfield, it refers to the "unhistorical" process of focusing only on the achievements of past thinkers which are considered to be forerunners of what moderns believe is correct.
Answer: whiggish history
b. Coined by Thomas Kuhn, it refers to the general set of strategies, questions, facts, and theories that scientists in a given discipline accept as true and worthwhile.
Answer: paradigm
c. Coined by Auguste Comte, this term refers to the discipline of science which he thought was the most difficult and most useful. It could only be studied using positivist techniques.
Answer: sociology
10. Identify the following small things that your body is using right now for ten points apiece.
a. This is the monomer which is the energy input to glycolysis.

Answer: glucose
Wrong: glycogen
b. The result of glycolysing glucose is one of two products depending on whether or not oxygen is available. Name the two possible products of glycolysis.
Answer: lactic acid (lactate) and pyruvic acid (pyruvate)
11. Identify the following chemical terms relating to acids and bases for ten points apiece.
a. This is the name given to a solution containing both an acid and its conjugate base. The pH remains relatively constant even as temperature or other concentrations fluctuate-an essential characteristic of bodily systems.
Answer: buffer
b. This is the name given to the negative logarithm of the dissociation constant for an acid. It characterizes the pH to be expected for a buffer using a certain acid.
Answer: pKa
This chemical equation predicts the pH of the buffer resulting from a given concentration of an acid with a given pKa .
Answer: Henderson-Hasselbach equation
12. Given the protest of the 1960 's, identify the university at which it first occurred for ten points apiece.
a. the Free Speech Movement

Answer: University of California at Berkeley
b. "teach-ins" protesting the Vietnam War

Answer: University of Michigan at Ann Arbor
c. Formal offices of the Students for a Democratic Society were established

Answer: University of Columbia
13. Identify the following terms from computation theory for ten points apiece.
a. This is the most common model of computation; it is an abstract machine with an infinite blank tape which can contain a string of symbols. It has a finite memory and can only examine one symbol at a time. Answer: Turing Machine
b. This was a formalization of arithmetic and logic representing all statements and terms with functions.

It took its name from the Greek character which begins each string, listing the functions' arguments.
Answer: lambda calculus
c. Surprising, the lambda calculus and Turing machines can compute the exact same set of functions.

What name is given to the assumption that any intuitively reasonable formalization of computation will lead to precisely the same set of functions?
Answer: Church-Turing Thesis (or Turing-Church)
14. Identify the following American short stories from brief descriptions for ten points apiece.
a. The villagers gather together to randomly select their sacrifice to ensure good harvests.

Answer: The Lottery
b. It focuses on a newly married pair traveling across Texas to their home. The groom is apprehensive about what lies in wait.
Answer: The Bride Comes to Yellow Sky
c. Prince Prospero throws a huge ball while his country is devastated by a plague; just at midnight the jolly dancers are visitiong by death.
Answer: The Masque of the Red Death
15. Name these Platonic dialogues for ten points apiece.
a. This dialogue contains the speech by Aristophanes in which love is explained as a longing for the missing half of a four-legged, four-armed, two-headed creature. It takes place at a banquet.
Answer: Symposium
b. In this dialogue, Socrates attempts to prove that all knowledge is recollection by having a slave answer geometry questions after drawing diagrams on the ground.
Answer: Meno
c. This dialogue concerns the attempts by the title character to convince Socrates to avoid execution by fleeing his prison cell. It contains Socrates/Plato's thoughts on life after death and patriotism.
Answer: Crito
16. Given the following political parties, identify the first U.S. president to belong to it for ten points apiece.
a. Democrat

Answer: James Polk
b. Whig

Answer: William Henry Harrison
c. Democratic-Republican

Answer: Thomas Jefferson
17. Given the biography, identify the subject for five points apiece.
a. The Man Who Knew Infinity

Answer: Srinivas Ramanujan
b. Lust for Life

Answer: Vincent Van Gogh [van GO]
c. American Caesar

Answer: Douglas Macarthur
18. Identify the following ministers of Henry VIII for ten points apiece.
a. This man was the papal legate in England and was in near control of the country until his downfall; it resulted from his failure to secure an annulment.
Answer: Cardinal Thomas Wolsey
b. This man became Lord Chancellor after Wolsey; he tried to remain totally aloof from the "King's Great Matter" but was unable to. He resigned and was then convicted of treason and executed.

## Answer: Sir Thomas More

c. This unscrupulous man became Lord Chancellor after Thomas More. He was primarily responsible for engineering the break with Rome and parliament's acceptance of it.
Answer: Thomas Cromwell
19. Identify the following sacred works of India for ten points apiece.
a. This is the longest Veda; it consists of 1,028 hymns directed primarily to Indra.

Answer: Rig Veda
b. This Veda consists primarily of precise instructions for sacrificial procedures and chants. It also has the one hundred names of Rudra.
Answer: Yajur Veda
c. For five points each, name the other two Vedas.

Answer: Atharva Veda and Sama Veda
20. There are six female or sometimes-female characters or creatures mentioned in Sophocles' Oedius the King. For five points apiece, name these six.

Answer: 1. Merope,
2. Jocasta,
3. Ismene,
4. Antigone,
5. Tiresias,
6. the sphinx

