Iowa State University<br>The Beautiful and Damned<br>October 25-26, 1996 - Ames, Iowa

## Round One

## Toss-ups

(Literature: Russian, prose)

1. The novel takes place in the Mavrino Institute for Scientific

Research, a prison for scientists. The mathematician Nerzhim refuses to work on a sound-encoding device though he knows he will be sent to the labor camps for disobeying. FTP, identify this Aleksandr Solzhenitsyn novel where the Institute is compared with the initial level of Dante's Hell.
$V$ kruge perven (The First Circle)

## (Current Events: Europe)

2. He has written poetry his whole life, but entered medical school to ensure a career. Colleagues described him as shiftless and willing to sell false diagnoses so patients could dodge the draft. His ascent began when he was chosen president of the Democratic Party in 1990 and soon he was directing mortar attacks into his previous patients' homes in Sarajevo. FTP, who is this Serbian war criminal?

Radovan Karadzic

## Bonuses

(Mathematics: Algebra)

1. Answer the following related algebraic questions for ten points apiece.
A. In a ring, what name is given to an invertible element?
unit
B. What name is given to an element which cannot be factored as the product of two non-units?
irreducible
C. Suppose that whenever a non-unit p divides a product ab it always divides a and/or $b$ separately. What name is given to $p$ ?

Prime

## (Classical Music: Recognition)

2. AUDIO BONUS. The moderator will play three excerpts from symphonies.

Identify each for ten points apiece.
A. Camille Charles Saint-Saën's Third Symphony (Organ)
B. Ludwig van Beethoven's Third Symphony (Eroica)
C. Felix Mendelssohn-Bartholdi's Third Symphony (Scottish)

## (Chemistry: Freshman)

3. As wine ferments, its salt crystallizes on the walls of the casks, providing the most important industrial source of this acid. It was first isolated by Carl Scheele in 1770 and is used in mordants, carbonated beverages, Rochelle salts, and one kind of baking powder. FTP, what is this acid in which Louis Pasteur discovered enantiomerism, whose salt is known as Cream of Tartar?

Tartaric acid

## Classical Music: Works)

4. "O Fortune, / like the moon / you are changeable, / ever waxing / and waning; / hateful life / first oppresses / and then soothes / as fancy takes it; / poverty / and power / it melts them like ice." is the first stanza of "Fortuna, Imperatrix Mundi" in a collection of medieval German and Latin secular songs set to music by Carl Orff. FTP, what name is given to this collection heard in the background of Highlander III?

## Songs of Beuron (Carmina Burana)

## (Economics)

5. It is paid by every company which handles a product during its transformation from raw materials to finished goods; the tax is levied against the difference between selling price and total cost of production. FTP, name this type of tax first adopted by France in 1954, usually abbreviated V.A.T.

Value-Added Tax
Accept: V.A.T. before "abbreviated"
(Sports: Cricket)
3. Give the following terms from cricket for ten points each.
A. This series of test matches between England and Australia began in 1882 and is named for the remnants of a wicket. the Ashes
B. Runs scored by byes, leg byes, wide balls, and no balls are collectively referred to by this name.

## extras (sundries)

C. A match consisting of two innings is played. One team finishes both its innings, but the other takes the lead with only 3 men out in their second innings. What would the winning margin be reported as? Seven wickets
(Biology)
4. Answer the following questions about taxonomy in the plant kingdom.
A. Which phylum is distinguished by the presence of xylem and phloem?

Tracheophyta (tracheophytes)
B. Which class is distinguished by the presence of ovaries within the flowers that protect the fertilized sex cells?

Angiospermae (angiosperms)
C. Which term is often used in place of "phylum" in plant taxonomy? Division

## (History: Southeast Asia)

5. Answer these questions about the unification of Vietnam for the stated number of points.
A. For ten points, name the first man to declare himself emperor of a unified Vietnam.

Gia Long
B. For five points, within ten years, when did this occur?

1802 [Accept: 1792-1812]
C. For five points each, name the three territories unified by Gia Long to form Vietnam.

Cochinchina, Annam, Tonkin

## (Literature: Jewish)

6. It consists of 63 sections called tractates divided into six orders, each of which deals with a different subject. Its two parts are interwoven, with short statements of traditional law followed by lengthy explanations. The explanations also include historical events, customs, and folk tales. FTP, what is this holy book containing the Mishnah and the Gemara, the second in importance of the Jewish religion? Talmud
(History: European).
7. He made Michelangelo the chief architect of the Vatican and St. Peter's Church; summoned the Council of Trent; excommunicated Henry VIII; and restored the inquisition. FTP, who is this pope from 1534 until 1549, the successor of Clement VII, thought to be first longserving reform-minded pope of the Renaissance?

Pope Paul III (Alessandro Farnese)

## (Computer Science)

8. It is based on the class template features of $\mathrm{C}++$ and is a powerful implementation of generic programming through iterators and containers like deques, lists, stacks, sets, and multimaps. FTP, what is this programming tool primarily designed by Alexander Stepanov, often abbreviated STL?

Standard Template Library
Accept: STL before "abbreviated"

## (History: Central/South America)

9. Originally occupied by Charrua Indians, it was known to its European settlers before 1828 as "Banda Oriental" because it lay to the east of the Río de la Plata. Its highlands are known as the "Big Knife" because of their jutting granite formations. FTP, name this South American country led to independence by the followers of José Artigas, who established its capital at Montevideo.

La República Oriental del Uruguay
Accept: The Eastern Republic of Uruguay.

## (Current Events: Asia)

6. Given the Asian military group, identify its leader for fifteen points apiece.
A. Taliban Militia of Afghanistan

Maulana Mohammed Omar
B. Liberation Tigers of Tamil Eelam

Velupillai Prabhakaran

## Modern Culture

7. Holy bonus question! For ten points apiece, what are the names of the three young men who have served as Batman's sidekick Robin in DC comics?

Dick Grayson, Jason Todd, Tim Drake

## (Philosophy: Concepts)

8. Given the pre-Socratic philosopher, identify the substance or substances of which he thought the world was made for ten points apiece. The moderator will not give answers until the end.
A. Thales [THAY-leez]
water $\left(\mathrm{H}_{2} \mathbf{0}, \underline{\text { hydrogen hydroxide })}\right.$
B. Heraclitus
$\underline{f}$
C. Anaximenes
air

## 

9. The moderator will provide you with a map of Africa. Six countries will be marked.

Identify those countries for five points apiece.
"A": Federal Republic of Nigeria
"B": Republic of (République du) Niger
"C": Burkina Faso
"D": République de la Cote d'Ivoire (Ivory Coast)
"E": Republic of Ghana
"F": Republic of Cameroon

## (Life Science: Genetics)

10. A ladder is used to determine sizes. A comb is added to make wells and to prevent tearing. One percent TAE solution is poured before the removal of the comb. After the wells are loaded, the black wire is attached near the wells and the red wire is attached at the opposite end from the wells. FTP name the molecular technique that separates DNA based on size through the attraction of negatively charged DNA for a positive charge
gel electrophoresis

## HALFTIME

## (Sports: Baseball)

11. He owns the World Series mark for career batting average, going .391 in three Series in the 1960's. Blessed with great speed, he owned, until 1991, the records for stolen bases in both a season and career. FTP, identify this Cardinals outfielder.

Louis Clark "Lou" Brock

## (Social Science: Political Philosophy)

12. It lauds the Spartan constitution as the best, that of Solon in Athens too democratic, and that of Rome, good. It sets forth the doctrine of checks and balances explicitly and makes no political argument on Christian or biblical grounds. FTP, what is this work of political science by Machiavelli which is only nominally a commentary on Livy?

Discourses on the First Ten Books of Livy

## (History: American, pre-WWII)

10. Answer the following questions about William Jennings Bryan for ten points apiece.
A. What issue was Bryan's primary focus in the 1896 election? gold standard (free coinage of silver)
B. What issue was Bryan's primary focus in the 1900 election?
opposition to American annexation of the Philippines
C. What government post did Bryan assume under President Wilson?

Secretary of State

Physics: Relativity)
11. A rocketship of rest mass 1 Gigagram and proper length 600 meters is traveling at $80 \%$ of the speed of light relative to the observer. Answer the following questions for fifteen points apiece.
A. How long does the rocketship appear to the observer?
$3 6 0 \longdiv { 1 0 0 0 }$ meters
B. How much mass does the rocketship appear to have to its pilot?

1 Gigagram

## (Literature: British)

12. Answer the following questions about works by Henry Fielding FTP.
A. Published anonymously, this satire of a Samuel Richardson novel was Fielding's first novel

An Apology for the life of Mrs. Shamela Andrews
B. Squire Allsworthy find a child in his bed. He raises the boy who, upon adulthood, falls in love with Sophia Western, is banished, goes to London, and returns with his love

The History of Tom Jones, a Foundling
C. The title character of Fielding's last novel was based on his wife. She marries Billy Booth and remains loyal to him in spite of all the pitfalls that befall him.

Amelia Harris

## (History: Ancient)

13. Her younger brother married her to his enemy in order to end a civil war. She and her husband went to Athens and had two daughters named Antonia; she also raised the children of her husband's previous wife, Fulvia. Her husband divorced her and eloped with an Egyptian Queen triggering a new outbreak of the civil war. FTP, who was this sister of Octavian, the epitome of the virtuous Roman woman?

## Octavia

## (Literature: British)

14. An epic poem about Sir Francis Drake, a three-part poetic tribute to the great scientists of history, several poems about noted Englishman from the time of Queen Elizabeth I, and the ballad of a bandit who is saved from ambush when his lover shoots herself to warn him. FTP, these are all works by what English poet of the early 1900's, the author of Drake, The Torchbearers, and The Highwayman?

Alfred Noyes
(Philosophy: People, 1900-)
15. This French paleontologist helped discover and analyze Peking man, but is best known for his attempts to unify cosmic evolution and Christianity. He placed humans at the center of the universe and Christianity at the center of human history and optimistically wrote of history converging toward an omega point. FTP, who is this author of The Phenomenon of Man and The Divine Milieu?

Pierre Teilhard de Chardin

## (Visual Art: Architecture)

13. The moderator will hand you three pictures of famous cathedrals. Identify them for ten points apiece.
A. Cathedral of St. Basil, Moscow
B. Cathedral (Duomo) of Milan
C. The Church of the Holy Family (Templo de la Sagrada Familia)

## (History: Miscellaneous)

14. Identify the color of shirts each of the following military groups metaphorically wore for five points each.
A. Hitler's Schützstaffel

Black
B. Chiang Kai-Shek's special force of Guomindang officers Blue
C. Garibaldi's freedom fighters

Red
D. Röhm's Sturmabteilung

Brown
E. Mussolini's Private Army

Black
F. Abdul Ghaffar Khan's Khudai Khidmatgar

Red

## (Modern Culture: Movies)

15. Movie writers are often forced to invent false corporations in their scripts. Given
the clue, identify the fake company for ten points each.
A. This pharmaceuticals firm appeared in The Fugitive starring Harrison Ford.

Devlin-MacGregor
B. Arnold Schwarzenegger and Eddie Furlong break into this corporation's high-tech headquarters to destroy the advanced chips being studied by Miles Dyson.

Cyberdyne
C. This company was merely a front for John Bigboote and all the other employees named John who wished to return to Planet 10 "real soon."

Yoyodyne

## (Literature: American)

16. Come Blow Your Horn, The Star-Spangled Girl, The Prisoner of Second Avenue, Last of the Red Hot Lovers, Plaza Suite, Barefoot in the Park. FTP, these are all plays by what prolific American whose recent works include Laughter from the 23rd Floor and Lost in Yonkers?

Marvin Neil Simon

## (Physics: History)

17. He invented a system of arc welding, a high-frequency generator, a system of wireless transmission, a high-potential magnifying
transmitter, a namesake coil, and the first alternating-current induction motor. FTP, who is this electrical engineer who sold his rotating field motor plans to George Westinghouse after emigrating from present-day Croatia in 1884?

Nikola Tesla (1857-1943)

## (History: American, pre-WWII)

18. Philip Home thought that adding this man to the Presidential ticket was a mistake and commented that, "There was rhyme, but no reason in it." FTP, give the name of this first Vice President to complete an elected President's term of office and who became the 10th president of the United States.

John Tyler

## (Classical Music: People)

19. Ironically, the most critically acclaimed member of this group was originally considered its clown. Bets were on Arthur Honegger or Darius Milhard [mee-YO] to produce lasting innovations, but it was the songs and operas of Francis Poulenc which are esteemed today. FTP, what is this group of young French composers of the twentieth century?

Les Six (The Six)

## (Philosophy: Miscellaneous)

16. Given the characters from a philosophical dialogue, identify the author for ten points apiece.
A. Sagredo, Simplicio, and Salviati

Galileo Galilei [Accept Galilei]
B. Hylas and Philonous

Bishop George Berkeley [BARK-lee]
C. Philo, Demea, and Cleanthes

David Hume

## (Modern Culture: Music)

17. AUDIO BONUS. You may have heard these people sing these songs before, but did you know they were covering another artist's work? For five point apiece, identify both the artist or group that you are hearing and the artist or group that originally recorded the song.
A. Indigo Girls and Dire Straits (or Mark Knopfler)
B. Annie Lennox and The Clash
C. Jimmy Hendrix and Bob Dylan

## (Literature: Classical)

18. Answer the following questions about Theseus for ten points apiece.
A. What did Theseus have to do to get the sword and sandals his father Aegeus had left for him?
lift the stone which had been placed on top of them
B. What monster did Theseus kill on the isle of Crete?
minotaur
C. What was the name of Theseus' queen who fell in love with his illegitimate son by an Amazon?

Phaedra

## (History: European)

19. Given the date of a British Act of Union, identify the two entities that were united in that year for ten points apiece, each part all or nothing.
A. 1840
the province of Upper Canada and the province of Lower Canada
B. 1536

England and Wales
C. 1707

England and Scotland

## (History: American, pre-1800)

20. One required that only English-built and English-manned ships could bring imports to America. Another declared that all American imports must first land in England. A third required that inter-colonial trade must pass through England. FTP, what were these 17th century acts targeting the Dutch whose primary purpose was to protect English trade?

Navigation Acts

## END OF ROUND

## (Hard Science: Earth Science)

E1. Indicators of strong, vertically extensive updrafts, they are comprised of alternating concentric spheres of clear and cloudy ice. They are produced in larger sizes during repeated up and down movements in a cloud. FTP, name this weather phenomenon that can cause extensive damage to cars and houses upon impact.
hail or hailstones

## (History: European)

E2. He was chancellor from 1612 until his death in 1654, during which time he directed the political affairs of his country which was enjoying its period of greatest influence. He was regent for Queen Christina and took over the war effort after Gustavus Adolphus was killed. FTP, who was this Swedish diplomat of the Thirty Years' War?

Axel Gustafson Oxenstierna [OOK-sen-sher-nah]

## (Literature: American)

20. Identify the Saul Bellow work from a brief description, for ten points each.
A. The title character writes letters to "the famous dead" while his mind wanders back and forth over his various relationships, focusing especially on his ex-wife Madeleine. Herzog
B. Narrated by Charlie Citrine, it follows his life in 1970's Chicago and his memories of a friendship with a troubled poet. The title refers to a screenplay bequeathed to him by the poet.

Humboldt's Gift
C. Written in the form of a journal, it tells the story of a man awaiting induction into the army. It was Bellow's first novel.

Dangling Man

## (Miscellaneous)

E1. Given the country, identify its major wire news service for ten points apiece.
A. England

Reuters [ROY-ters]
B. Russia

Tass
C. China

Xinhua

## (Visual Art: Other)

E2. Paints are composed of pigments mixed with vehicles; the vehicles bind the pigment particles so that they can be spread with a brush. Identify the type of vehicle used in each of the following.
A. encaustic paints
beeswax
B. tempera
egg whites
C. transparent water color
gum arabic
(Literature: American)
E3. During a stay at a summer resort, Edna Pontellier begins to fall in love with young Robert Lebrun. Returning with her husband to the city, she abandons her former life for artistic and sexual pursuits. FTP, identify this novel by Kate Chopin.

The Awakening
(Geography: Canada)
E4. This city's landmarks include Signal Hill, from which Marconi sent his first transatlantic radio message in 1901 and Lester Field, from which the first transatlantic flight began in 1919. Featuring a splendid harbor at which John Cabot is said to have landed in 1497, it is the easternmost terminal of the national Canadian highway and railroad. FTP, name this city, the capital of Newfoundland.

St. John's
(Architecture: People)
E5. He turned from goldsmithing to architecture late in his career and invented linear perspective for showing depth on a flat surface, a technique he used at the Foundling Hospital, the churches of San Lorenzo and Santo Spirito, and the Pazzi Chapel. FTP, who was this early architect of the Italian Renaissance who designed and supervised the raising of the dome over the Cathedral of Florence?

Filippo Brunelleschi [broo-nay-LAYS-kee] (1377?-1446)
(Miscellaneous)
E6. Angst, bulb, depth, eighth, else, fifth, glimpsed, gospel,, liquid, mollusk, mulcts, ninth, oblige, rhythm, sculpts, sixth, twelfth, and width are all English words lacking a certain something. FTP, what is this characteristic also shared by tenth, silver, and orange?
they lack rhymes



