## Iowa State University

## The Beautiful and Damned

October 25-26, 1996 - Ames, Iowa

## Round Six

## Toss-ups

(Fine Arts: Architecture)

1. This assistant stone carver was hired to build an addition to a villa by Giangiorgi Trissino who, pleased with the work, christened him after Pallas Athena. He wrote of Rome's inspiration in Four Books of Architecture in 1570. FTP, who is this sixteenth century architect of the Villa Capra, one of whose followers was Inigo Jones?

Andrea Palladio (Andrea di Pietro della Gondola)

## (Mathematics: Statistics)

2. For a probability distribution, it is given by the second moment minus the square of the first moment. For a sample, it is given by the sum of the squares of the deviation of each element from the mean divided by the number of elements. FTP, what is this statistical quantity best known as the square of the standard deviation?

Variance

## Bonuses

## (History: France)

1. Answer the following questions on the life of Talleyrand for ten points apiece.
A. What 1790 proposal brought him instant popularity in the eyes of a National Assembly strapped for cash?
seizing Church property to pay debts
Accept: Equivalents
B. What is the common name of the affair in which he demanded bribes from three representatives of the United States in 1797?

The XYZ Affair
C. What delicate peace treaty did he negotiate in 1807 on Napoleon's behalf with Russia?

Peace of Tilsit
(Musicals: Recognition)
2. AUDIO BONUS. The moderator will play excerpts from songs from three musicals. Identify the musical FTP each.
A. Camelot
B. Guys and Dolls
C. 1776

## (History: England)

3. He was dismissed as foreign affairs secretary by John Russell for approving Napoleon III's seizure of power. As prime minister, he resigned over his policy in China, even after seeing the Crimean War through to a successful end. FTP, who is this English politician, known for aggressive foreign policy, born Henry John Temple?

Viscount Palmerston
Accept: Henry John Temple before "Henry"

## (Film)

4. A three time Academy Award winner, he was in charge of the U.S. government's documentary series Why We Fight. His films often pit an idealist against the forces of corruption, such as in Mr. Smith Goes to Washington. FTP, identify this director of You Can't Take It with You and It's a Wonderful Life.

Frank Capra

## (Social Science: Psychology)

5. This 1930 work most deeply examines the guilt that arise when personal needs come into conflict with society and the remedies we seek to resolve them. It argues that the guilt are necessary for society to function, but that they directly lead to scientific and artistic creation as well as abuse of drink and drugs. FTP, what is this work of Sigmund Freud?

Civilization and its Discontents
Accept: Das Unbehagen in der Kultur
(Literature: America, drama, 1951-now)
3. Answer the following questions about The Crucible for ten points apiece.
A. Who is the protagonist who is hanged at the end?

## John Proctor

B. Why is John Proctor's wife saved from the gallows?
because she is pregnant
C. What is the name of the Caribbean slave thought to have taught the girls her satanic rituals?

Tituba

## (Biology: Evolution)

4. Identify the following people identified with recent movements to popularize explanations of human behavior along evolutionary lines for ten points each.
A. This man's Sociobiology: The New Synthesis (1975) first introduced the public to evolutionary explanations for differing gender views with respect to sex and marriage (among other things).

Edward Oliver Wilson
B. This man's The Moral Animal (1994) focused on self-deception and social status and applied evolutionary psychology to Darwin's own life.

Robert Wright
C. This Wisconsin philosopher set himself up as the primary opponent of sociobiology's claims with such works as Vaulting Ambition (1986).

Philip E. Kitcher
(Visual Art: Sculpture, recognition)
5. VISUAL BONUS. The moderator will show you three pictures of statues of David.

Identify the sculptor of each for ten points apiece.
A. Gianlorenzo Bernini
B. Donatello
C. Michelangelo Buonarotti

## (History: American, pre-WWII)

6. It occurred at 2122 North Clark Street and its victims included guest Dr. Reinhardt Schwimmer, James Clark, Al Weinshank, John May, and the Gusenberg brothers, Frank and Pete. FTP, name this incident in which members of Bugs Moran's gang where gunned down in cold blood by the followers of Al Capone on a day usually associated with love, not hate.

## St. Valentine's Day Massacre

## (Classical Music: People)

7. With his librettist Ranieri da Calzabigi, he drew a distinction between the formal, artificial Italian opera and a simpler, musical drama with works such as Don Juan and Alceste. FTP, who is this 18th century operatic revolutionary known for Orfeo ed Euridice and Iphigénie en Tauride?

Christoph Willibald Gluck
(Sports: Baseball)
6eor Frisel Thawas,
8. This Hibbing, Minnesota native was the last player in the American League to win back-to-back MVP awards, doing so in 1960 and 1961. FTP, name this New York Yankee who, in 1961, broke Babe Ruth's single-season home-run record by hitting his 61st on the last day of the season.

Roger Maris

## (History: Miscellaneous)

9. Emperor Claudius II thought that single men made better soldiers and so forbade them to marry. A young priest disobeyed this order and married couples anyway. He was captured and, on 14 February 269 , executed. FTP, by what name do we know this man on whose day "every fowl cometh...to choose his mate," according to Geoffrey Chaucer and human lovers observe by giving each other candy, flowers, and heart-shaped cards?

St. Valentine

## (Computer Science)

6. A certain random event comes up in state A $50 \%$ of the time, in state B $25 \%$ of the time, and in state C $25 \%$ of the time. Answer the following questions for fifteen points apiece.
A. What is the entropy of that probability distribution in bits? You have 15 seconds. 1.5 bits
B. If the probabilities were changed so that the system had maximum entropy, what would that entropy be?
$\underline{\log \text { base } 2 \text { of } \underline{3}}$

## (Literature: Italian)

7. Answer these questions about Dante Alighieri.
A. For five points for each part, to what Florentine political faction did Dante belong? white guelfs
B. Aside from the Divine Comedy, Dante produced two collections of poetry. FTP each, name them.

La vita nuova (The New Life) and Il convivio (The Banquet)

## (Current Events: America, social)

8. Answer the following questions about a recent Supreme court case for ten points apiece.
A. What May, 1996 case struck down a Colorado constitutional amendment that forbid anti-discrimination legislation against homosexuals?

Romer v. Evans
B. To which 1896 case did justice Kennedy refer when he wrote that the "constitution neither knows nor tolerates classes among citizens?"
to Plessy v. Ferguson
C. With which 1986 case concerning state sodomy laws, does the Romer decision seem slightly contradictory?

Bowers v. Hardwick

## (Philosophy: Concepts)

9. You are Aristotle contemplating a bust of Homer; identify the following causes of its production according to you.
A. the block of marble from which it was carved
material cause
B. the sculptor
efficient cause
C. the sculptor's desire to make a statue
final cause

## (Hard Science: Astronomy)

10. The internal core breaks the Chandresekhar limit and collapses to the limit allowed by the Pauli Exclusion Principle; further infalling material is violently ejected causing violent explosions in the outer layers of the star which are blown away leaving only a neutron star. FTP, what are these events, one of which was observed in 1987 ?

Type II Supernova

## HALFTIME

(Literature: American, post-1900)
11. "The fog comes in / on little cat feet" begins his poem "Fog." He won two Pulitzers, one for his Collected Poems in 1950, the other for his six volume biography of Lincoln. FTP, identify this poet among whose collections are Cornhuskers and Chicago Poems.

## Carl Sandburg

## (Current Events: America)

12. For many years he would construct a new sailboat every winter only to burn it come fall. His other achievements were more permanent including an automatic telegraph machine at age 10 and, in his forties, the world's first supercomputers. FTP, who is this brilliant and eccentric electronics engineer whose died in a car crash this October whose name has become synonymous with supercomputing? Seymour Cray
(Fine Arts: Sculpture)
13. Identify the following types of stylized Western statuary for ten points apiece.
A. A sculpted female figure used as an architectural support.
caryatid
B. A recumbent statue on a tomb.
gisant
C. A depiction of the Madonna grieving over her dead son. pietá

## (History: America, pre-WWII)

11. Identify the following document from American history from quotes; 30-20-10.

30: "When in the course of human events, it becomes necessary for one portion of the family of man to assume among the people of the earth a position different from that which they have hitherto occupied, ... they should declare the causes that impel them to such a course."
20: "He has compelled her to submit to laws, in the formation of which she had no voice."
10: "We hold these truths to be self-evident: that all men and women are created equal;"

Declaration of Sentiments and Resolutions
Accept: Seneca Falls Declaration
(Geography: Greece)
12. VISUAL BONUS. The moderator will provide you with a map of the Balkans. Answer the following questions for ten points apiece.
$A$. Which two countries are labeled " A " and " B "?

> "A" is Croatia
> " B " is Albania
B. Which two islands are labeled " C " and " D "?
"C" is Euboea
" $D$ " is Rhodes
C. Which two regions of Greece are labeled " $E$ " and " $F$ "?
" $E$ " is Peloponnesus
" F " is Thrace

## (History: American, pre-WWII)

13. It functioned as a joint-stock company with 20 resident shareholders, each of whom had one vote. All received the same wages and worked the same number of hours in order to develop a union between manual labor afd transcendental growth. FTP, what is this experimental school founded by George Ripley near West Roxbury, Mass., in 1841, which later failed due to rising debts?

## Brook Farm

(History: Europe, 1000-1750)
14. "As soon as coin in coffer rings / the soul from purgatory springs," claimed this Dominican who traversed Germany in 1517 selling papal indulgences. He indirectly brought on the Protestant Reformation since it was his vulgar conduct and clumsy defenses that led Martin Luther to post the ninety-five theses. FTP, who was this monk?

Johann Tetzel

## (Literature: Indian)

15. He concealed himself after his birth to avoid Vritra, but unknowingly drank a glass of soma which swelled him to enormous size. The other adityas vowed to make him king if he killed the gigantic serpent Vritra in the mountains. He did so and became the king of the Vedic pantheon. FTP, who is this storm god, the most powerful figure of the Rig Veda?

Indra

## (Literature: English)

13. Identify the following essays descriptions for ten points apiece.
A. It was initally published anonymously and is divided into three parts: "Preliminary Confessions," "The Pleasures of Opium," and "The Pains of Opium."

Confessions of an English Opium-Eater
B. A combination of essay, novel, and autobiography, it is presented by Professor

Diogenes Teufelsdröckh and concerns what the author called his Clothes Philosophy. Sartor Resartus
C. This 1790 work denounced the French Revolution on the grounds of its injustice to individuals, attacks on religion, and attempts to build an entirely new social order.

Reflections on the Revolution in France

## (Sports: Track and Field)

14. Identify the following marathoners for ten points apiece.
A. In 1975, he became the first man to run the Boston Marathon in under 2 hours, 10 minutes. He also won three consecutive Boston Marathons from 1978-1980.

Bill Rodgers
B. Running barefoot, he won the 1960 Olympic marathon. He wore shoes in 1964, but repeated as Olympic champion anyway.

Abebe Bikila
C. This Norweigen won 8 New York marathon women's titles in 9 years from 19781986.

Greta Waitz

## (Classical Music: Recognition)

15. AUDIO BONUS. The moderator will play three excerpts from musical works by members of the Russian Five. Identify the pieces for ten points each.
A. Polovtsian Dances
B. Scheherazade
C. Pictures at an Exhibition

## (Social Science: History)

16. He ended his life as a professor of horticulture at Harvard, but was more famous for his histories of the role of Native Americans in American and European history like France and England in the New World, The Oregon Trail, and Montcalm and Wolf. FTP, who is this 19th century American historian?

Francis Parkman

## (Biology: Taxonomy)

17. A fibrous root system, floral parts that come in multiples of three, vascular bundles that are scattered throughout the stem, and veins that run parallel in the leaves. FTP, these are all traits of what type of plants that have only one cotyledon in their seeds?
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monocots
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(Chemistry: Organic)
18. An equal mixture of a pair of them are called "racemic" and is optically inactive. For such a pair to exist, the molecule must have a chiral center; one member of the pair will rotate the polarization of light to left, the other to the right. FTP, what name is given to these types of isomers which are mirror images of each other?
enantiomers
(History: Roman)
16. Identify these opponents of Marcus Tullius Cicero for ten points apiece.
A. Nobody expected Cicero to be able to prove the corruption of this Sicilian governor, but Cicero's arguments were so effective that he went into hiding without waiting for the verdict.

Gaius Verres
B. In 63 BCE , this nobleman conspired with the Gauls to overthrow the Senate, but was denounced and imprisoned by Cicero.

Lucius Sergius Catiline
C. After Caesar's murder (of which Cicero approved), he launched a great attack of 14 speeches (known as the Philippics) against this man.

Marcus Antonius (Mark Antony)

## (Earth Science/Sociology)

17. Answer the following questions on Oceania for ten points apiece.
A. Geologically, there are two main types of islands in Oceania. What are the two processes that form them?
volcanism and coral-reef building Äccept: Equivalents
B. Linguistically, all of the languages of Oceania are thought to have evolved from a now-lost common ancestor. What was it?

Malayo-Polynesian
C. Of the three major racial groups, which is characterized by being the tallest and the lightest-skinned?
polynesian

## (Literature: Greek)

18. Paris had to choose who was the most beautiful among Hera, Athena, and

Aphrodite. For ten points apiece name what each goddess offered Paris to his favor.
A. Hera
make him lord of Asia (accept equivalents)
B. Athena
invincibility in war (accept equivalents)
C. Aphrodite
the hand of Helen of Troy (accept equivalents)

## (Geography: Asia)

19. They were formed at the end of the Palcozoic era and were mined for their salt, silver, and gold, in the 1500 's, for all manner of gemstones in the 1800's, and, in the 20th century, asbestos, potash, nickel, and platinum. Oil has been discovered on the northeast side of the mountains. FTP, what is this range, now worn down to rounded hills, including Mount Narodnaya, which draws the line between Europe and Asia?

Ural Mountains

## (Literature: American, pre-1900)

20. In 1841 he published Ballads and Other Pooms containing "The Wreck of the Hesperus." He used Chaucer's Canterbury Tales as a model for his Tales of a Wayside Inn. FTP identify this American poet who borrowed the trochaic meter of the Kalevala for his "Song of Hiawatha."

Henry Wadsworth Longfellow

## END OF ROUND

(History: Middle East)
19. Identify the following Ottoman rulers for ten points apiece.
A. Who was the first sultan of the Ottoman Empire? Othman (Osman)
B. Under which sultan did the Ottoman empire conquer Constantinople?

Muhammad II (Mehmed II, Mehmet II)
C. Who was the last Ottoman sultan, a ruler forced to restore a constitutona government by Kemal Atatürk?

Abdul Hamid II

## (Physics: People)

20. Identify the following men who did important work on the photoelectric effect for ten points apiece.
A. This man first discovered the effect in 1887.

Heinrich Hertz
B. This man won a Nobel Prize for his 1905 paper explaining the effect.

Albert Einstein
C. This man did the precise experiments on which Einstein based his results.

Robert Millikan

## (History: Middle East)

E1. Answer the following questions about Babylon for ten points each.
A. What geometrical figure did the great wall of Babylon form?

Square
B. To which God was the greatest temple of the city dedicated?

Bel Marduk
C. Which Assyrian ruler destroyed Babylon in 689 BCE?

Sennacherib

## (Physics: Relativity)

E2. You can make one by adding the charge density to the current density vector, by adding the energy of a particle to its momentum vector, or by adding the time coordinate of an event to its coordinates. FTP, what are the mathematical objects which have the correct transformation properties to do general relativity and which are named for the number of components in each?

4 -vectors
(History: Italy)
E3. Roman Catholicism was reaffirmed as Italy's state religion. Italy accepted canon law in all matters in which the church has jurisdiction. The Holy See received 750 million lire. The City of the Vatican was created to be always inviolable and neutral. FTP which 1929 treaty which granted temporal power to the Holy See effected these changes? Lateran Treaty

## (Modern Culture: Literature)

E4. The recent blockbuster Twister was screenwritten by this author and his wife Anne-Marie Martin. Some of his early novels were written under the pen name Jeffery Hudson. FTP, identify this author better known for the novels Rising Sun, Sphere, and Jurassic Park.

## Michael Crichton

(Jazz)


E5. Though never divorced his wife Edna, Bea Elles claimed to be and acted as his wife for the last 35 years of his life. Born in 1899 with the first and middle names of Edward Kennedy, his first recorded song was "Rainy Nights" in 1926. FTP name the composer of "Caravan", "Sophisticated Lady" and "Mood Indigo".
Duke Ellington
(Literature: English)
E6. The publication of Goodbye to All That, memoirs of his experiences in WWI, allowed him to finance a career as a writer. He expressed his vision of poetry and poetic inspiration in his mythological study The White Goddess. FTP, give the name of this poet, classical scholar, and author of $I$, Claudius

Robert Graves

## (Miscellaneous)

E2. Answer the following about the production of tapestries for ten points apiece.
A. What name is given to the horizontal threads which interweave with the warp?

Weft
B. Which Renaissance painter's cartoons called the Acts of the Apostles made tapestry design of equal importance with the quality of weaving?

Raphael (Raphaello Sanzio)
C. What name is given to the most common background design of thousands of realistic flowers?

Millefleurs



