

Iowa State University

The Beautiful and Damned

October 25-26, 1996 - Ames, Iowa

Round Five

Toss-ups

(Philosophy: Concepts, 1000-1700)

1. It begins with a metaphysics admitting only one substance "God or Nature" since nothing finite was self-subsistent. It goes on to the psychology of the passions and then builds an ethic based on the previous sections. FTP, what is this work in the style of Euclid including "Of Human Bondage," written by Baruch Spinoza?

Ethics

(Earth Science: Meteorology)

2. David Hofmann predicted a record low of less than 80 Dobson units based on this year's westward winds which shift air toward the poles. He was wrong, as this phenomenon measured 111 Dobson units even after sunlight returned to the poles and triggered the chlorine and bromine free radical reactions which create it. FTP, what is this phenomenon centered on Antarctica involving the destruction of our atmosphere?

ozone hole

Bonuses

(Chemistry: Organic)

1. Answer the following questions about Grignard synthesis for ten points apiece.

A. What metal's ions play a central role in the synthesis?

magnesium

B. To produce a primary alcohol using the Grignard synthesis to what should the alkylmagnesium halide be added?

formaldehyde

C. To produce n-butane, with what alcohol should an ethylmagnesiumhalide be reacted?

ethanol (ethyl alcohol)

(Social Science: Economics)

2. Mathematical economists often model production functions using the form $Q=K^aL^b$ where K and L represent capital and labor. Answer the following questions about this for ten points apiece.

A. What name is given to this sort of production function?

Cobb-Douglas Production Functions

B. If the industry shows increasing returns to scale, what can be said about a and b?

$a+b>1$ [Accept: Equivalents]

C. What expression gives the marginal product of labor?

$MPL = bK^aL^{b-1}$

(Fine Arts: Architecture)

3. His Turku Sanomat newspaper building was based on the "five points of a new architecture," while the Viipuri library featured undulating wooden roofs filled with skylights. He shifted later toward a use of materials and traditions local to Finland as in his Villa Mairea (1938). FTP, identify this alphabetically first Finnish architect.

Alvar Aalto

(Classical Music: Works)

4. Pianists, fossils, birds, cocks and hens, the elephant, kangaroos, people with long ears, a tortoise, a cuckoo fond of the bottle, and the swan, form a famous set of musical exhibits. FTP, in which Camille Saint-Saëns work do movements which those titles appear?

Le carnaval des animaux (The Carnival of the Animals)

(History: America, 1951-now)

5. "We are the people of this generation, bred in at least modest comfort, housed now in universities, looking uncomfortably to the world we inherit," began a 1962 manifesto echoing the politics of C. Wright Mills and the anti-establishment views of its primary author, Tom Hayden, and the Students for a Democratic Society. FTP, what was this doctrine, named for the Michigan camp at which it was written?

Port Huron Statement

(Film)

3. Identify the film from clues FTP.

A. Starring Robert De Niro, this movie was based on the life of boxer Jack La Motta.

Raging Bull

B. Adapted by Buck Henry, the cast included Orson Wells, Art Garfunkle, Anthony Perkins, Bob Newhart and Alan Arkin.

Catch-22

C. The documentary on the making of this film was entitled *Hearts of Darkness*.

Apocalypse Now

(Mathematics: Topology)

4. Open, closed, both, or neither? I'll describe three subsets of the real plane, you tell me if each is open, closed, both, or neither. The moderator will not give answers until the end.

A. The circle centered on the origin with radius 1.

Closed

B. The set of all points with radial coordinate r less than 2.

Open

C. The empty set

both

(Literature: English)

5. Identify the early English novels from clues for ten points apiece.

A. The title heroine of the Samuel Richardson novel defies her family's arrangements for her marriage by fleeing with Robert Lovelace who eventually rapes her.

Clarissa

B. Narrated by the title character, this novel relates her life from her birth in prison through her time as a prostitute and pickpocket up to her current life of security with her sixth husband.

Moll Flanders

C. After reading too many gothic books, Catherine Morland begins to suspect that life may be a sinister plot headed by General Tilney.

Northanger Abbey

(Sports: Miscellaneous)

6. Sonja was a three-time runner-up to Vera Menchik for the title of Women's World Chess Champion. Oskar was a novelist whose "Calendar Histories" paints a portrait of Bavarian peasant life. Steffi is a tennis player who won three Grand Slam titles in 1996. FTP, identify this German surname.

Graf

(Literature: Aztec)

7. Supposedly Huitzilopochtli told his citiless people to travel until they came to a cactus with an eagle eating a serpent nearby. After 100 years of wandering, his people found the place, named it "the place of the cactus," and began to build. FTP, what name is given to this site on Lake Texcoco which became the seat of the Aztec Empire and, later, the state of Mexico?

Tenochtitlan

Accept: Mexico City

(Physics: Relativity)

8. The standard solution involves the fact that even though motion is relative, the two observers are not identical since one feels a period of intense acceleration which, no matter how quickly it is carried out in the one frame, will result in a great elapse of observed time for the other. Thus the one that traveled will be appear younger. FTP, what standard paradox of relativity classes have I just answered?

the twin paradox

(Miscellaneous)

9. It comes from a tree native to the Molucca islands whose golden-yellow pear-shaped fruit hardens and finally splits open to reveal a bright scarlet membrane. Although other spices can be taken from the membrane, the kernel provides the most familiar one. FTP and a glass of eggnog, what is this spice?

Nutmeg

Accept: mace before "membrane"

(Current Events: World)

6. The 1996 Noble Peace Prize winners have been announced. Answer the following questions about them FTP.

A. Both of the winners have campaigned for autonomy of this region currently controlled by Indonesia.

East Timor

B. Name the two winners for ten points each. One is a spokesman for Fretilin, a revolutionary front, the other is a Roman Catholic bishop.

José Ramos-Horta, Carlos Filipe Ximenes Belo

(History: England)

7. Answer the following questions about the events leading up to the Battle of Hastings for ten points apiece.

A. What king died in 1066 leaving open the question of succession?

Edward the Confessor

B. What Anglo-Saxon council elected Harold II to replace Edward?

Witan

C. What family relationship did William of Normandy bear to Edward through which he pressed his claim?

William was Edward's cousin

(Classical Music: Recognition)

8. AUDIO BONUS. The moderator will play three excerpts from symphonies by Wolfgang Amadeus Mozart. Identify them for ten points each.

A. Prague Symphony (Symphony No. 38)

B. Jupiter Symphony (Symphony No. 41)

C. Symphony No. 40

(Geography: Japan)

9. VISUAL BONUS. The moderator will provide you with a map of Japan. Answer the following questions for ten points apiece.

A. Which letter is closest to Tokyo?

F

B. Which letter is closest to Kyoto?

C

C. Which letter is closest to Mount Fuji?

E

(Fine Arts: Painting)

10. Correggio's has a basket, one of Raphael's has a goldfinch, another an oak, del Sarto's has harpies, Leonardo's has rocks, Parmigianino's had a long neck. FTP, who is this omnipresent character of Renaissance art, most often depicted with her child, Jesus the Christ?
The Madonna (virgin Mary)

HALFTIME

(Philosophy: People)

11. According to him, the world consists of life and matter. Life is driven upwards by the creative force of evolution while matter is driven downwards in the generation of entropy. The highest forms of life possess intuition, which yields global knowledge, while lesser forms have intellect and instinct. FTP, this hints at which 20th century French philosopher's views as described in *Time and Free Will*?
Henri Bergson

(Literature: English)

12. Rupert and Ursula's productive, if difficult, relationship is contrasted to the domineering, violent relationship between her sister Gudrun and Gerald which ends with Gerald freezing to death in the Alps. FTP, name this D.H. Lawrence work of which the two sisters are the title characters.

Women in Love

(History: Ancient)

13. They were the descendants of the pre-Dorian population and were assigned to lands of citizens who were forbidden to enfranchise them or sell them to foreigners. Each year the ephors declared war on them so that the crypteia, Sparta's secret police, could kill them with impunity. FTP, what was this slave population of ancient Sparta?

helots [HELL-utz] [Wrong: perioeci]

(Physics: History)

10. Three sets of father/son pairs have won Nobel prizes in physics. For five points per name, name them.

Sir William O. Bragg,
Sir William L. Bragg,
Niels Bohr,
Aage Niels Bohr,
Joseph Thompson, and
George P. Thompson

(Theatre)

11. Identify the following characters from the Italian *commedia dell'arte* FTP.
A. A Venetian merchant, he was very serious and often went on long tirades.

Pantalone (Pantaloone)

B. This character was a caricature of Spanish soldiers. Scaramouche was a descendant of this braggart character.

Capitano (Captain)

C. A servant girl, she often was entangled in love relations with various male characters.

Columbina (Columbine)

(Basketball)

12. In the history of the NBA, only six players have ever won at least 3 scoring titles. For five point each, identify these six players.

Michael Jordan, Wilt Chamberlain, George Gervin, George Mikan,
Neil Johnston, Bob McAdoo

(Visual Art: Painting, recognition)

13. VISUAL BONUS. The moderator will show you three portraits of popes. Identify the pope and the painter of each for five points per part.

A. Pope Leo X by Raphael (Raffaello Sanzio)

B. Pope Innocent X by Diego Velázquez

C. Pope Paul III by Titian (Tiziano Vecellio)

(Computer Science)

14. This bastardized computer programming language, composed of bits and pieces from the languages C, sed, and awk, has the motto "There's More Than One Way to Do It." The language has lately become increasingly popular among web page authors as a scripting language. FTP, name this language created by Larry Wall, whose name is a homophone for the jewel produced by oysters.

Perl

(History: America pre-WWII)

15. It was founded by Philadelphia tailors including Uriah S. Stephens as a secret fraternal lodge. It rose to prominence under the command of Terence V. Powderly when it forced railroads owned by Jay Gould to meet its demands in 1885. It declined after a failed 1886 strike and the Haymarket Riot. FTP, what was this first attempt to organize all workers into a single, chivalric union?

The Noble Order of the Knights of Labor

(Modern Culture: Literature)

16. It tells of the childhood education of an anti-democratic aristocrat and a strong-willed, gorgeous courtesan who fall deeply in love and ascribes to them a Christian monotheism not generally part of Greek cultural life. FTP, what is this work of historical fiction by Taylor Caldwell about Pericles and Aspasia which lent its name to the 1995 Iowa State University Academic Quiz Invitational Tournament?

Glory and Lightning

(Geography: America)

17. It lies within a bend of the Passaic river, northeast of Garret Mountain. The Society for Establishing Useful Manufactures, headed by Alexander Hamilton, chose the site in 1791. The city went on to become the largest producer of silk in the U.S as well as a leader in locomotives and Colt revolvers. FTP, what is this New Jersey city named for a former governor which lent its name to a William Carlos Williams poem?

Paterson (Accept: Clifton or Grafton before "Society")

(History: China)

14. Answer the following questions about the Taipings and their rebellion for ten points apiece.

A. To which religion did they ascribe?

Christianity

B. In which Chinese city did they establish their capital?

Nanking

C. Within five years, when did the rebellion officially begin?

1851 (1846-1856)

(Literature: Roman)

15. Identify the following characters from the Aeneid for ten points apiece.

A. Aeneas' son

Ascanius

B. the queen who endeavors to keep Aeneas in Carthage.

Dido

C. the Italian king whose daughter Aeneas courts leading to the concluding series of battles with Turnus, her other suitor.

Latinus

(Biology: Anatomy)

16. Answer these questions on plant reproduction for ten points apiece. 1

A. Give the term meaning that a flower has all four organs: sepals, carpels, stamens, and petals.

Complete

B. Give the name for flowers lacking either carpels or stamens.

Imperfect

C. It means that the two types of imperfect flowers, carpellate and staminate, are on different plants.

Dioecious [DI-oh-E-shuhs]

(History: Russia)

17. Identify the first man to hold each of the following offices under the Russian provisional government following the February Revolution.

A. Minister of War

Alexander Kerensky

B. Commander-in-Chief of the Army

Lavr Kornilov

C. Prime Minister

Prince Lyov

(Literature: American, post-1900)

18. It opens with an introduction entitled "The Book of the Grotesque." Centering around George Willard, a young reporter for The Eagle, the residents of the title town confide the 23 stories that make up the collection. FTP, identify this work by Sherwood Anderson.

Winesburg, Ohio

(History: South America)

19. He sought aid from Great Britain in 1810 but was guaranteed only neutrality; upon his return to the battlefield he was forced to recapture Caracas. He was forced into New Granada, but at Carabobo and Ayacucho, his forces ended Spanish power in South America, allowing him to become dictator of Upper Peru. FTP, who is this "George Washington of South America"?

Simon Bolivar

(Literature: American, pre-1900)

20. "In the desert / I saw a creature, naked, bestial, / Who, squatting upon the ground, / Held his heart in his hands, / And ate of it." These lines are from the collection *The Black Riders and Other Lines* by, FTP, what author of "War Is Kind" and *The Red Badge of Courage*?

Stephen Crane

Accept: *The Black Riders and Other Lines* or
"The Heart" before "collection"

END OF ROUND

(Modern Culture: Music)

18. AUDIO BONUS. I'll play three songs by the Fab Four, you name them for ten points apiece.

A. "Can't Buy Me Love"

B. "Maxwell's Silver Hammer"

C. "Free as a Bird"

(Literature: Russian)

19. Identify the author; 30-20-10.

30: Among his early works are the plays *A Poor Gentleman* and *One May Spin a Thread*.

20: His first novel was *Rudin*, about an intellectual whose speeches cause Natalya to fall in love with him.

10: In 1852 he published the short story cycle *A Sportsman's Sketches*.

Ivan Sergeyevich Turgenev

(History: European)

20. At the beginning of World War I, two German ships in the Mediterranean were sent on an important, secret diplomatic mission while being pursued by an English fleet. Answer the following questions about this naval action.

A. Name the state which the German ships were to visit.

Ottoman Empire (Turkey)

B. Name either of the two German capital ships on the mission.

Goeben or Breslau [BREZ-lau rhymes with "wow"]

C. The German ships committed acts of war in the name of Turkey and thereby closed the Black Sea to Russia, cutting her ability to import by 95%. Name either of the two ports Russia was forced to use for the remainder of the war.

Archangel, Vladivostok

(Life Science: Genetics)

E1. Complete shading indicates expression of the disease and partial shading indicates a suspected carrier. Circles represent women and squares represent men while lines show the relationships between the people. FTP name this special family tree that is used to trace inherited diseases, to predict the occurrence of diseases in offspring, and to prove the lineage of animals for registration.

Pedigree

(History: England)

E2. He was imprisoned in the Tower of London for a year after his father's failed attempt to put Lady Jane Grey on the throne. After his wife, the former Amy Robsart died in 1560, there were rumors that he had murdered her in order to pursue the hand of Queen Elizabeth in marriage, but she rejected him, and even proposed that he marry Mary, Queen of Scots. FTP, name this man, the fifth son of John Dudley, duke of Northumberland.

Earl of Leicester (Baron Denbigh) (Robert Dudley)

(Social Science: Paleontology)

E3. He ran a British spy network in East Africa and later used his intelligence skills against the Mau mau; but these were mere interruptions in his lifelong quest at the head of the "Hominid gang" to prove his theory that humans originated in Africa. FTP, who is this discoverer of Homo habilis, the patriarch of the most famous clan of paleontologists?

Louis Leakey

(Current Events: American, social)

E4. This doctoral graduate of the Georgia Institute of Technology holds 16 patents, and is the co-inventor the charge-coupled device used in most video cameras today. Prior to his job change in 1994, he was the chairman of the board, president, and CEO of National Semiconductor Corporation. FTP, name this man, appointed chairman of the board and CEO of Apple Computer, Inc. in February, 1996.

Dr. Gilbert Amelio

(History: America, -1800)

E1. Answer the following questions about the *Articles of Confederation* for ten points apiece.

A. What legislative body did the articles create?

Congress of the Confederation

B. How many votes in Congress were necessary to amend the Articles?

13

C. Why did Maryland at first refuse to sign the final draft?

It objected to the western land claims of seven states

(Literature: American, post-1900)

E2. Identify the playwright from a title for ten points apiece.

A. The Heidi Chronicles

Wendy Wasserstein

B. The Piano Lesson

August Wilson

C. M. Butterfly

David Henry Hwang

(History: Middle East)

E5. Asher, Issachar, Manasseh, Naphtali, Dan, Reuben, Simeon, Gad, Zebulun, Ephraim, Judah, and Benjamin, were, FTP, all tribes of which nation?

tribes Israel

Accept: ten lost tribes of Israel before "Judah" Accept: Jacob's sons

(Miscellaneous)

E6. Multiple answers possible. One hundred from the President, five by the Vice President, five hundred by senators, 2,175 by representatives, five from the District of Columbia, 6 from Puerto Rico, 1 from Guam, 85 from the regular U.S. armed forces, 85 from the reserves, and an unlimited number of sons and daughters of Medal of Honor winners. FTP, to what institution is the ability to appoint candidates so divided?

United States Military (Naval, Air Force, Marine) Academy



