

1997 Hamilton Invitational, Maryland - College Park

Round 7 ISU

Tossups

1. It consists of a city at the mouth of the Pearl river and three small islands. It produces primarily textiles and fireworks, but is most important as a source of foreign currency to its only neighbor. Its government is appointed by Portugal, but in practice China dominates its political life. FTP, name this territory on the southern coast of China, 40 miles from Hong Kong.

Answer: Macao (Macau)

2. Canonized in 1494, this saint succeeded Lanfranc as Archbishop of Canterbury in 1093, but was exiled by William II and again by Henry I. Much influenced by Augustine, he tried to find "necessary reasons" for religious belief. FTP, name this theologian who originated the "ontological proof" for the existence of God.

Answer: Saint Anselm

3. It is a specific type of program music, a one-movement orchestral composition unified within itself. Unlike "absolute" music, it attempts to tell a story or to set a scene. Franz Liszt is considered its inventor and wrote thirteen of them, the most famous of which are Les préludes, Tasso, and Mazeppa. For ten points, name this musical form which was perfected by Richard Strauss near the end of the 19th century.

Answer: tone poem (symphonic poem)

4. Class K is in the lower right; Class O is at the upper left. There is a horizontal line at the top made up of giants and supergiants. The diagonal connecting K to O is called the Main Sequence. For ten points, provide the hyphenated name for this graph relating the size of a star to its spectral luminosity, named for the Danish and British astronomers who developed it.

Answer: Hertzprung-Russell diagram

Prompt: H-R diagram

5. The cerebral cortex and spinal column begin degenerating in middle age and progress rapidly, inducing muscular weakness, tendon reflex, and spasm. This is followed by atrophy of the hands, forearms, and legs. There is no known cure. FTP, name this disease of sufficient power to fell the mighty "Iron Horse" of baseball.

Answer: amyotrophic lateral sclerosis (ALS)

Accept: Lou Gehrig's disease

6. The basic idea is the creation of eyes with your stones and the prevention of your opponent from doing the same by placing his stones in atari, eliminating their freedoms, and eventually capturing or surrounding them. The advanced ideas wouldn't even fit into an ACF-length question.

-46TP, what is this intense game which, until 1600, formed a compulsory course at the Japanese military academy?

Answer: Go

7. When the current in an LRC circuit neither leads nor lags the driving voltage, then the impedance is simply equal to the resistance and power dissipation is at its greatest. This occurs for one single frequency, also the frequency at which a capacitor and inductor would oscillate if connected on their own. FTP, what term from physics denotes this phenomenon?

Answer: resonance (resonant frequency)

8. Among its minor characters are the Bishop of D_____ who claims the candlesticks were a gift, and Enjolras, the leader of the students at the barricades. It includes digressions on thieves' argot, life in a nunnery, the sewers of Paris, and the Battle of Waterloo. FTP, name this romantic novel about the mayor, thief, and convict Jean Valjean.

Answer: Les Miserables

9. After hearing The Last Words of Dutch Schultz, you pick up The Adding Machine, which turns out to be The Soft Machine. You call the Exterminator!, one of The Wild Boys, and hop on the Nova Express using The Ticket That Exploded. FTP, identify this author of all these titles, whom you might meet over a Naked Lunch.

Answer: William S. Burroughs

10. The Clausius Theorem states that for any cyclic process, the line integral of the heat exchanged with the environment divided by the temperature is less than or equal to zero. The difference is zero only if the process is reversible. FTP, what physical quantity, roughly analogous to the "disorder" of the system, is constrained to never decrease by this theorem?

Answer: entropy

Accept: Second Law of Thermodynamics until "quantity"

11. This native of Ferrara became vicar of the Dominicans in Tuscany. When a republic was established in Florence in 1494, he became its guiding spirit, fostering a Christian commonwealth and repressing vice and frivolity. Summoned to Rome to answer charges of heresy, he disregarded the order. FTP, name this fiery priest who was burned 1498.

Answer: Girolamo Savonarola

12. Two mathematical instruments show that it is 10:30 in the morning of April 11, the time that this portrait was supposed to have been finished. Various symbols of death abound: a string on the lute is broken, a crucifix is in the extreme upper left, Jean de Dinteville wears a badge decorated with a skull and, in the very front, there is a skull that can only be seen by looking from the extreme right. FTP, identify this painting which show two young aristocratic diplomats, crafted by Hans Holbein the Younger.

Answer: The French Ambassadors

13. The first was founded in 1864 and met primarily in Geneva from 1866-1872. The second met in 1889 and was been interrupted by both world wars. The Third, also called the Comintern, was officially abolished in 1943, and there was an abortive effort by Trotsky to start a fourth in the 1930's. FTP, give the shared name of these worldwide socialist organizations named for their cross-border appeal.

Answer: International

14. It began with a transfer of the U.S. Navy's oil reserves from the Secretary of the Navy to the Secretary of the Interior, who then siphoned oil to the Mammoth Oil and Pan-American Petroleum and Transportation Companies, among others; it ended when Senator Thomas Walsh exposed Secretary Albert Fall's dirty deeds. For ten points, name this scandal of the Harding Administration, so-called for the town in Wyoming that ultimately proved not to be the government's cup of tea.

Answer: Teapot Dome scandal

15. The book begins with the opening of a meeting over which Joseph Smiggers presides, and its attendees include Tracy Tupman, Augustus Snodgrass, and Nathaniel Winkle. From such humble but verbose origins comes a novel of highwaymen, duels, lawsuits, jails, and the byways and alleys of old England. For ten points, name this satire of human relations, in which Charles Dickens details the misadventures of Sam Weller and his employer, the man whose papers form the central interest of the story.

Answer: The Pickwick Papers

16. He was governor of the Canary Islands in 1936 when a left-wing government was returned to power. He led troops from Morocco into Spain and established a Nationalist government in Burgos. Three years of civil war later, he became dictator and, with the help of the Falange party, ruled Spain. FTP, who is this dictator who reconstituted the Spanish

throne upon his 1975 death?

Answer: Francisco _Franco_ y Bahamonde (1892-1975)

17. They were introduced in the 1822 Analytic Theory of Heat to solve initial value problems arising in partial differential equations. Because trigonometric functions of different periods are orthonormal, they can be used to represent arbitrary functions in tractable forms. FTP, what are these series of sines and cosines named for their discoverer?

Answer: _Fourier_ series

18. Its name means "consolidation" or "unity", and it was formed in 1973 when the Gahal bloc, consisting of the Herut and Liberal parties merged with the smaller La'am bloc, consisting of the Free Center, State List, and Land-of-Israel parties. FTP, name this Israeli political bloc which has made prime ministers of Menachem Begin, Yitzhak Shamir, and B.B. Netanyahu.

Answer: _Likud_

19. He told his cousin-in-law about a kiss he'd seen between Ruth Varnum and Ned Hale, but that was as close as he would come to making advances. Nevertheless, his love is returned by his cousin-in-law, but is thwarted by his shrewish hypochondriac wife Zenobia. A failed attempt at suicide by sled leaves Mattie crippled and this New England farmer forever with a limp. FTP, name this tragic title character of Edith Wharton.

Answer: _Ethan Frome_

20. He was killed when he reproved a student harshly and was struck down with his own lyre, but the name of this mythological music instructor lives on as Peter's successor in the apostolic chair, the given name of a specialist in molecular bonding and the dangers of nuclear war, and a scripture-quoting, blanket-toting Peanuts character. FTP, give the shared name.

Answer: _Linus_

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Boni

1. Given a brief description, identify the founder of one of the American colonies for ten points each.

a. His views on Native Americans and religious freedom forced him to flee from Massachusetts and establish Rhode Island in 1636.

Answer: Roger Williams

b. Wishing to set up a colony for debtors, he was granted a royal charter and founded Georgia in 1733.

Answer: James Edward Oglethorpe

c. Granted a tract of land by King James I, he and his followers founded a settlement at Odiorne's Point, the first settlement in New Hampshire.

Answer: David Thomson

2. Identify the following track and field stars for ten points each.

a. In 1979, he ran the 200 meter race in 19.72 seconds, a world record that held until shattered by Michael Johnson this summer.

Answer: Pietro Mennea

b. Running for Finland, he won gold medals at the 1924 Olympic Games in the 1,500meter, 3000 meter, 10000 meter cross-country, 3000 meter team, and cross-country team events. The five gold medals are the most for any track and field athlete at one Olympic Games. Name this Flying Finn.

Answer: Paavo Johannes Nurmi

c. Despite dominating the pole vault event for the last decade, he has managed to win only one Olympic gold medal, at Seoul in 1988.

Answer: Sergey Nazarovich Bubka

3. Given each of the following African heads-of-state, identify the country he leads for ten points apiece.

a. Liamine Zeroual

Answer: Algeria

b. Daniel arap Moi

Answer: Kenya

c. Sani Abacha

Answer: Nigeria

4. Michael Jordan attended the ungodly University of North Carolina. For 10 points each, identify the colleges of these other Chicago Bulls.

1. Scottie Pippen

Answer: Central Arkansas

2. Ron Harper

Answer: Miami of Ohio

3. Luc Longley

Answer: New Mexico

5. Identify these characters created by E.B. White for ten points apiece.

a. He is a swan who cannot honk. In compensation, he learns to play the trumpet.

Answer: Louis the trumpeter swan

b. He is a testy but lovable rat who lives beneath Wilbur's feeding trough.

Answer: Templeton

c. He is a mouse in the family of Frederick C. Little who encounters great adventure on his search for the bird Margalo.

Answer: Stuart Little

6. Identify the following Christopher Marlowe characters for ten points apiece.

a. He is a Scythian shepherd who becomes a great warrior.

Answer: Tamburlaine the Great

b. He is a lover of wealth who is forever in competition with Ferneze the Christian and Calymath the Turk for more riches and power.

Answer: The Jew of Malta (Barabas)

c. She is the queen of Carthage who falls in love with Aeneas, but is

abandoned by him.

Answer: Dido, Queen of Carthage

7. Name the architects of the following buildings, for 10 points each:

1. La Sagrada Familia in Barcelona.

Answer: Antonio Gaudi

2. The Wainwright Building, and the Stock Exchange in Chicago.

Answer: Louis Henry Sullivan

3. Notre Dame du Haut

Answer: Le Corbusier (or Charles Eduouard Jeanneret)

8. When the Homeric epic about quiz bowl is written, the Iowa State team and Rob Hentzel will play starring roles. For 5 points each, which figure of the Trojan War would Rob be compared to in these episodes:

1. Chris rings in early on a rebounded physics tossup and steals it from Rob. To get even, Rob refuses to buzz in the rest of the round.

Answer: Achilles (Achilleus)

2. Rob predicts that South Carolina will kick Iowa State's butt. No one listens to him; the final score is South Carolina 420, Iowa State 80.

Answer: Cassandra

3. When the most valuable Cyclone award goes to Chad Rob goes berserk and neg fives 43 consecutive tossups.

Answer: Ajax (Aias)

4. Christian is interested in one of the Carleton women. Rob offers to introduce him to her for a small fee.

Answer: Pandarus

5. Rob's buzzer finger gets an infected blister. The team, convinced that they can win without him, dumps Rob at Immediate Med and heads to the tournament.

Answer: Philoctetes

6. Tom Waters submits a round of recycled questions. Rob tries to warn the tournament director not to use them, but gets tangled up in the wires of a buzzer system and is electrocuted.

Answer: Laocoon

9. Identify the following enemies of Alexander the Great for ten points apiece.

1. This Greek city rebelled against his father's rule after his father's assassination. Alexander razed it except for the temples and the house of Pindar.

Answer: Thebes

2. Alexander's victories at Issus and Arbela were against this Persian king.

Answer: Darius III

3. Alexander's greatest battle was at the river Hydaspes against Porus, a king in what modern country?

Answer: India

10. One of the most important stories from Egyptian mythology concerns the trial of one sibling for the murder of another. For ten points each, name in order the sibling who was killed, the son who brought the charges, and the "father figure" who presided over the trial.

Answer: 1. Osiris, 2. Horus, 3. Geb

11. Identify the following insects important in the study of evolutionary biology for ten points apiece.

1. The red- and white-eyed specimens of this species of Diptera were the subject of Thomas Hunt Morgan's pioneering work on genetics.

Answer: Drosophila melanogaster Accept: fruit fly

2. H.B.D. Kettlewell's study of this melanic mutations of this species of Lepidoptera allowed him to explain its prevalence near smoggy cities.

Answer: Biston betularia Accept: peppered moth

3. This well-studied beetle evolved defenses against DDT in 7 years, azinphosmethyl in 5 years, carbofuran in 2 years, pyrethroids in 2 years, and synergist in 1 year.

Answer: Leptinotarsa septemlineata Accept: Colorado potato beetle

12. Identify the following classes of particles for ten points apiece.

1. These are particles with half-integral spin like quarks and leptons.

Answer: _fermions_

2. These are any particles with are comprised of quarks.

Answer: _hadrons_

3. These are hadrons which consist of a paired quark and anti-quark.

Answer: _meson_

13. Given the programming language and the operator, give the symbol used to represent it for ten points apiece.

1. Pascal, pointer deference

Answer: ^ (_caret_, _circumflex_)

2. FORTRAN, unequal

Answer: _ne_

3. C, remainder from integer division

Answer: % (_percent_ sign)

14. Identify the following monarchs of Sweden for ten points apiece.

1. This 16th century noble led the movement to break with Denmark and Norway and, in 1523, was named first king of an independent Sweden.

Answer: King _Gustavus I_ Vasa of Sweden

2. This queen is primarily remembered for contributing to Descartes' death by demanding philosophy and mathematics lessons at five o'clock every freezing morning.

Answer: Queen _Christina_ of Sweden

3. He ruled from 1697-1718 and initially made Sweden one of the great powers in Europe, but lost its overseas possession in the Great Northern War with Peter the Great.

Answer: _Charles XII_ of Sweden

15. Given a fossil find of a early human ancestor, identify it for ten points apiece each.

1. Named for the lake at the southern end of the Rift Valley where it was found in the mid-80's by Richard Leakey, it was the remains of a nine-year-old Homo erectus and was used to calculate pelvis size in that species.

Answer: _Turkana_ boy

2. Found in 1974 by Maurice Taieb and Donald Johanson, it was the remains of a mature female who lived over 3 million years ago.

Answer: _Lucy_

3. Found in the early 1900's, it was believed to have been over 250,000 years old, but later investigation showed it to be jaw of an orangutan colored to make it look old and the teeth filed to make them look more human.

Answer: _Piltdown Man_

16. Answer the following questions about the election of 1824 for ten points apiece.

1. There were originally four Democratic-Republicans running against John Quincy Adams, but one dropped out early and was elected vice president. Name him.

Answer: John C. _Calhoun_

2. Four men received electoral votes, but none a majority, so Congress had to choose from the top three. Who was eliminated at this step?

Answer: Henry _Clay_

3. Name the other two Democratic-Republicans that had run.

Answer: Andrew _Jackson_ and William H. _Crawford_

17. Given a line of poetry identify the poet for ten points each. If you need an additional clue, you will receive five points.

1. (10) From 1966's Digging, "By God, the old man could handle a spade / Just like his old man / My grandfather cut more turf in a day / Than any other man on Toner's bog."

2. (5) He won the 1995 Nobel Prize for Literature.

Answer: Seamus Heaney

3. (10) "I hold it true, whate'er befall; / I feel it, when I sorrow most; / 'Tis better to have loved and lost / Than never to have loved at all."

4. (5) The above lines were written upon the death of the author's dearest

friend, Arthur Henry Hallam.

Answer: Alfred, Lord _Tennyson_

5. (10) "Apeneck Sweeney spreads his knees / Letting his arms hang down to laugh, / The zebra stripes along his jaw / Swelling to maculate giraffe."

6. (5) The author's most famous poem begins. "April is the cruelest month, breeding / Lilacs out of the dead land,"

Answer: Thomas Stearns _Eliot_

18. Name these philosophical terms, 10 each:

1. This is an empty or vacuous statement composed of simpler statements in a fashion that makes it logically true whether the simpler statements are factually true or false, for example: "Either it will rain tomorrow or it will not."

Answer: A _Tautology_

2. A form of reasoning consisting of a major premise, a minor premise, and a conclusion: "All human beings are mortal. Tom Waters is a human being. Therefore Tom Waters is mortal."

Answer: A _Syllogism_

3. To frame an argument in such a way that the conclusion is hidden among the premises.

Answer: _Beg the Question_ or _circularity_

19. Given each island, identify the body of water in which it can be found for ten points apiece.

1. Majorca and Minorca

Answer: _Mediterranean_ Sea

2. Belcher and Mansel

Answer: _Hudson Bay_

3. Chios and Rhodes

Answer: _Aegean_ Sea

20. It is usually possible to separate mixtures of liquids with different boiling points by repeatedly collecting and separating vapor, liquefying it, and vaporizing again. Answer the following questions about the process for ten points apiece.

1. What name is given to it?

Answer: _fractional distillation_

2. Fractional distillation works when this law is obeyed; it states that the composition of vapor above a mixture has the same make-up as the solution itself.

Answer: _Raoult's Law_

3. If Raoult's law is violated such that the actual composition graph has a minimum of maximum, then fractional distillation cannot be used. What kind of solution whose most common example is 95% ethyl alcohol, 5% water--is formed at those points?

Answer: _azeotrope_