



DACQ

Dynasty Academic Competition Questions

August 2007
Packet 3:
Tossups

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1. The pharaoh Unas wrote a famous hymn to this practice, and it was discussed by St. Jerome in *Against Jovinianus*. One of Montaigne's *Essays* is written "on" practitioners of this, and a 1729 work advocates this practice to increase average income and lower average (*) population in Ireland. Practiced by the Donner party and discussed in *A Modest Proposal*, FTP, identify this taboo activity that consists of consuming the flesh of another human being.

ANSWER: Cannibalism

2. This mineral's Citrine, Carnelian, and Prasiolite varieties require heat treatment to form, largely due to their twinned lattice structure. Other forms of this mineral include onyx, agate, chalcedony, and the purple (*) amethyst, and it is a key constituent of granite, limestone, and sandstone. Earning a 7 on the Mohs scale, FTP, name this silica crystal known for its abundance and recognizable clear form.

ANSWER: Quartz

3. The speaker recalls that he "follow[ed] knowledge like a sinking star" and laments "how to dull it is to pause" and "to rust unburnished." Beginning with the claim "I mete and dole/unequal laws unto a savage race," its middle stanza discusses the speaker's (*) son, while the poem ends by describing hearts "made weak by time and fate." Closing with "to strive, to seek, to find, and not to yield," FTP, name this poem about a wayward king of Ithaca written by Alfred, Lord Tennyson.

ANSWER: Ulysses

4. This piece's fifth movement features distinct tempo changes every few measures, and is called "The Drunkard in Spring." Hans Bethge's translations of Chinese poetry inspired significant portions of it, and it was unnumbered due to the composer's fear of the (*) "ninth symphony" curse. Following the Tragic and Titan symphonies, FTP, identify this geologically-named work of Gustav Mahler.

ANSWER: The Song of the Earth or Das Lied von der Erde

5. This war began shortly after the *Charlemagne* breached the provisions of the London Straits Convention, despite the attempts at negotiation by Hamilton Seymour and Karl Nesselrode. Key battles involved Kronstadt and Kurekdere, and it was during this war that (*) Florence Nightingale gained fame. Seeing the battle of Balaclava and siege of Sevastapol, FTP, identify this war between Russia and the British, French, and Ottomans, named for a certain Black Sea peninsula.

ANSWER: Crimean War

6. In mathematics it can refer to the origin of a trifolium or any curve that intersects itself along a certain number of arcs. In physics, along with absolute zero, the Kelvin is defined by this property's fixed values for water: around (*) 273 Kelvin and 612 Pascals, where all three phases of water might appear. FTP, identify this combination of temperature and pressure at which a substance can coexist as a solid, liquid, and gas.

ANSWER: **Triple point**

7. In some accounts, this figure and not Hephaestus split open Zeus's head to free Athena, and he undertook his most important project in Boitia. This son of Clymene and Iapetus saved man from needing to sacrifice excessively, and his other family members include his brother (*) Atlas, son Deucalion, and sister-in-law Pandora. FTP, identify this Titan whose liver endured a very unpleasant fate after he stole fire from the Gods to give to mankind.

ANSWER: **Prometheus**

8. This state's northern portion contains the terminus of both the Ouchita and Red Rivers, and its highest point is Driskill mountain. It is bounded on the east by the Pearl River and on the west by the Sabine, and is home to the second-largest (*) salt water lake in the United States, Lake Pontchartrain. Divided into parishes instead of counties, FTP, identify this state, home to the cities of Baton Rouge and New Orleans.

ANSWER: **Louisiana**

9. His last known location was the Penny Brothers auto shop, and his family includes his wife Loretta, his daughter Kathryn, who was adopted by the Burroughs, and his mother Amanda, who worked in an asylum. He sports a (*) fedora and black-and-red striped shirt along with his most famous implement, and most recently battled with Jason Voorhees. FTP, identify this claw-wielding killer who stalks children in their dreams, played by Robert Englund in *A Nightmare on Elm Street*.

ANSWER: **Freddy Krueger (either name)**

10. In the book of Enoch, this figure spends his time binding sinners, and by some accounts he delivers the commandments to Moses and stops Abraham from slaying Isaac. In Christianity, he ferries the souls of the just, and his actions during the (*) war on heaven earned him the title "Prince of Light" and explain why he is the patron saint of soldiers and police officers. FTP, identify this leader of God's armies and companion of fellow archangels Uriel, Gabriel, and Raphael.

ANSWER: **Michael**

11. Edward Winslow's *Mourt's Relation* provides the most reliable account of it: one which references "due submission and obedience" despite no actual enforcement mechanism. Francis Cooke, Isaac Allerton, William Brewster, John (*) Alden, Myles Standish, and future governor William Bradford all signed this document in the waters off of Cape Cod. FTP, identify this 1620 "Compact" named for the ship which bore the pilgrims who signed it.

ANSWER: **Mayflower Compact**

12. Pencil and paper ready. Two answers required. Cody is skateboarding down a U-shaped ramp, and his path can be represented by a parabola that has the equation $y = 3x^2 + 14x + 8$. Find this parabola's intersections with the x-axis. This may be accomplished by setting y equal to zero and (*) factoring the equation to solve for x. FTP, what are the two zeros of this equation? You have ten seconds.

ANSWERS: $x = -4$ AND $x = -2/3$ (or $(-4,0)$ AND $(-2/3,0)$) [$0 = (3x+2)(x+4)$]

13. This author discussed his stay in Europe with *A Letter to my Countrymen* and while there published sea novels like *The Bravo*, *The Waterwitch*, and *The Red Rover*. He created characters like Harry March, Major Heyward, and David Gamut, which appear in a (*) series that includes *The Prairie*, *The Pioneers*, and *The Deerslayer*. FTP, identify this author of the Leatherstocking Tales, which include his famous novel, *The Last of the Mohicans*.

ANSWER: James Fenimore Cooper

14. One of this man's works sets Christ above a Menorah while a fire and revolutionaries dot the background. In addition to *The White Crucifixion*, he created murals like *Four Seasons* and stained glass works in Jerusalem and New York. His best-known painting shows laboring (*) peasants in the background while a green-faced man stares at a sheep. FTP, identify this Russian-born painter of *I and the Village*.

ANSWER: Marc Chagall

15. The "braking" variety of this phenomenon occurs when charged particles deflect each other and is known as *bremsstrahlung*. Another example causes a "blue glow" and occurs when a charged particle breaks the speed of light in an insulator, and is known as (*) Cherenkov. Generally coming in ionizing and non-ionizing varieties, FTP, identify this type of energy whose other examples include microwave, ultraviolet, infrared, and X-ray.

ANSWER: Radiation

16. After leaving his most famous post, this man met a friend from Princeton in Philadelphia who would introduce him to Harman Blennerhassett. Along with that man, Jonathan Dayton, and James Wilkinson, he became involved in a land (*) purchasing scheme and was tried for treason, three years after he had shot a Treasury Secretary. FTP, identify this Vice President under Jefferson who famously duelled with Alexander Hamilton.

ANSWER: Aaron Burr

17. Paul Samuelson cited this concept as the ideal economic theory, and the Hecksher-Ohlin model discusses the importance of factors of production in determining it. Though Robert Torrens first described it relating to the Corn Laws, (*) David Ricardo is credited with its most famous formulation. Stating that specialization is preferable even if one party possesses complete superiority, FTP, identify this economic theory usually paired with absolute advantage.

ANSWER: Comparative Advantage

18. The penultimate scene of this play sees the arrival of Raynell, prompting the separation of the main character and his wife, and the departure of that character's athletic son, who joins the Marines. That scene ends with the protagonist taunting death with a (*) baseball bat in front of one of the title objects, having earlier bailed out his handicapped brother Gabriel. Centering on Rose, Cory, and Troy Maxson, FTP, identify this August Wilson play named for a type of barrier.

ANSWER: **Fences**

19. One symptom associated with it is excessive bilirubin production, which leads to gallstones. Wild-type molecules polymerize following a point mutation substituting valine for glutamic acid, leading to deformed beta-chain (*) hemoglobin molecules. Associated with resistance to Malaria, FTP, identify this disorder prominent among those with African ancestry, characterized by the deformation of red blood cells into the namesake shape.

ANSWER: **Sickle Cell Anemia or Disease**

20. This man's writings include *Innocency with her Open Face* and *The Sandy Foundation Shaken*, though more lasting documents were prepared aboard the *Welcome*, including his *First Frame of Government*. His treaty with the Leni Lenape was unusual in its (*) demonstration of benevolence toward Native Americans, perhaps due to his Quaker principles. FTP, identify this namesake and founder of an Eastern state with capital at Harrisburg.

ANSWER: **William Penn**



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Bonuses

1. Bonus: It was first isolated after William Brande and Humphrey Davy used electrolysis on this element's oxide. FTPE:

[10] Identify this alkali metal with atomic number 3 and symbol Li.

ANSWER: **Lithium**

[10] Lithium was first produced in significant quantities by this man, who worked with Kirchoff and produced a namesake laboratory heating device.

ANSWER: **Robert Bunsen**

[10] Lithium salts are frequently used to treat this psychological disorder, characterized by mood swings between mania and depression.

ANSWER: **Bipolar Affective Disorder**

2. Bonus: Arnold Rothstein and Abe Attell bankrolled a 1919 operation in which members of an MLB team conspired to deliberately lose the World Series. FTPE:

[10] Identify that team, whose members included Eddie Cicotte and Arnold Gandil.

ANSWER: **Chicago Black Sox (either name)**

[10] This illiterate outfielder claimed his innocence for many years after the incident. A persistent story exists about a young child asking this player to "say it ain't so" following the trial.

ANSWER: **"Shoeless" Joe Jackson**

[10] The character Meyer Wolfsheim, who appears in this 1922 novel, claims to have been responsible for fixing the games.

ANSWER: **The Great Gatsby**

3. Bonus: It included such provisions as the Immorality Act and the Group Areas Act. FTPE:

[10] Identify this policy of racial discrimination that led to heavy international sanctions for its practicing country, particularly after the Sharpeville massacre.

ANSWER: **Apartheid**

[10] The racial policies of apartheid divided this country for almost fifty years.

ANSWER: **South Africa**

[10] South Africa's white government was the only country to recognize the "sovereign" status of these entities, generally poor areas set aside as population centers for blacks. They included Transkei and Venda.

ANSWER: **Bantustans**

4. Bonus: It is a geological remnant of the Tethys Sea, along with the nearby Black and Aral seas. FTPE:

[10] Identify this largest lake in the world, which borders Iran and Azerbaijan.

ANSWER: **Caspian Sea**

[10] This capital of Azerbaijan owes its considerable oil reserves to its position on the Caspian.

ANSWER: **Baku**

[10] In addition to the Volga, this river flows into the Caspian. It is named for a Western Russian mountain range often cited as the boundary between Europe and Asia.

ANSWER: **Ural River**

5. Bonus: FTSNOP, answer these questions about particle physics:

[10] This term refers to the unique quantum numbers used to identify and distinguish particles; for quarks, there are six.

ANSWER: **Flavors**

[5,5] These two third-generation quarks were originally called beauty and truth.

ANSWER: **Top and Bottom Quarks**

[10] After the top and bottom quarks, this quark is the most massive, at 1.3 GeV (giga-electron volts). It was discovered along the J/psi-particle, and is of the same generation as the Strange quark.

ANSWER: **Charm Quark**

6. Bonus: Given some works of world literature, identify the single nationality their authors share. If you need those authors, you'll get five points:

[10] *Silent Cry*, *Patriotism*, *The Sound of the Mountain*.

[5] Oe Kenzaburo, Mishima Yukio, Kawabata Yasunari.

ANSWER: **Japanese**

[10] *Rayuela* (or *Hopscotch*), *Ficciones*.

[5] Julio Cortazar, Jorge Luis Borges.

ANSWER: **Argentina or Argentine**

[10] *Middaq Alley*, *Palace Walk*, and *Sugar Street*, which comprise a trilogy.

[5] Naguib Mahfouz.

ANSWER: **Egyptian**

7. Bonus: Identify these members of the Mighty 5, FTPE:

[10] This friend of Victor Hartman is famous for works like *Boris Gudonov*, *Night on Bald Mountain*, and *Pictures at an Exhibition*.

ANSWER: **Modest Mussorgsky**

[10] This synesthete composed *Kaschey the Immortal*, *Snowmaiden*, and *The Tale of Tsar Sultan*, which contains "The Flight of the Bumblebee."

ANSWER: **Nikolai Rimsky-Korsakov**

[10] This man composed numerous mazurkas and sonatas, as well as his *Islamey: An Oriental Fantasy for Piano*. He is considered the leader of the group.

ANSWER: **Mily Balakirev**

8. Bonus: Answer some questions about Viking history, FTPE:

[10] This explorer continued the work of his father, Erik the Red, and sailed well west of Greenland.

ANSWER: **Leif Ericson**

[10] The Maine Penny is often regarded as an artifact from this settlement, supposedly founded in Newfoundland where Leif Ericson landed.

ANSWER: **Vinland**

[10] Similar to their lupine counterparts, the Ulfhednar, these Norse warriors dressed in bear pelts and fought with legendary savagery and disregard for personal safety.

ANSWER: **Berserks or Berserkers**

9. Bonus: Their natural forms include rarities of acetic and phenylacetic acids. FTPE:

[10] Identify these substances, which in plants are responsible for lateral expansion and elongation and thus are responsible for phototropism.

ANSWER: **Auxins**

[10] Auxins are one of the “plant” varieties of these substances, which also include gibberellins, cytokinins, and abscisic acid. Examples in the human body include estrogen and the “human growth” variety.

ANSWER: **Hormones (prompt on “Plant Growth Regulators”)**

[10] In plants, growth takes place in these regions of undifferentiated cells. Types of this tissue include apical and lateral.

ANSWER: **Meristems**

10. Bonus: Identify these German philosophers, FTPE:

[10] This author of *Elements of the Philosophy of Right* is best known for his iteration of the dialectic and for popularizing the terms thesis and synthesis.

ANSWER: **Georg Wilhelm Friedrich Hegel**

[10] This Prussian-born philosopher of *Thoughts on the True Estimation of Living Forces* is better known for works like *Critique of Pure Reason* and *Critique of Practical Reason*.

ANSWER: **Immanuel Kant**

[10] This author of *Logical Investigations* and *Experience and Judgment* is often regarded as the father of Phenomenology.

ANSWER: **Edmund Husserl**

11. Bonus: Answer the following about the works of Walter Scott, FTPE:

[10] Scott may be best known for this work, in which the title character rescues the Jew Rebecca, is assisted by the Black Knight, and winds up with Rowena.

ANSWER: **Ivanhoe**

[10] *Castle Dangerous*, *Quentin Durward*, *Guy Mannering*, and the “Tales of my Landlord” appear in this series of Scott novels, named for the first such work, subtitled *Tis Sixty Years Since*.

ANSWER: **Waverly Novels**

[10] Frank Osbaldistone is the protagonist of this Scott novel, named for a famous Scottish outlaw.

ANSWER: **Rob Roy**

12. Bonus: The mythology of these people includes an underworld known as Xibalba, ruled by Hun Came, as well as the rain god Chaac and the thunder god Bacab. FTPE:

[10] Identify this group, which occupied cities like Chichen Itza and was centered on the Yucatan Peninsula.

ANSWER: **Mayans**

[10] This Mayan epic describes the journey of the twin brothers Hunahpu and Ixbalanque into Xibalba, where they are attacked by the bat god Camazotz.

ANSWER: **Popol Vuh**

[10] The Mayan figure Kukulcan is usually associated with this Aztec god, who also shared serpentine and aviary qualities.

ANSWER: **Quetzacoatl**

13. Bonus: Identify the following awards, FTPE:

[10] This prize was the product of a Swedish inventor's regret over his lasting contribution being the creation of dynamite. Categories include Economics, Literature, and Peace.

ANSWER: **Nobel Prize**

[10] J.M. Coetzee's *Life and Times of Michael K* and Yann Martel's *Life of Pi* have both won for their authors this literary prize, awarded annually to the best full-length novel by a writer from the Commonwealth.

ANSWER: **Man Booker Prize**

[10] Philip Johnson was the first winner of this prestigious architecture prize, awarded by the Hyatt Foundation.

ANSWER: **Pritzker Architecture Prize**

14. Bonus: It states that the volume of an ideal gas divided by that gas's temperature is equal to a constant value. FTSNOP:

[10] Identify this gas law.

ANSWER: **Charles's Law**

[10] Although named for Jacques Charles, the law was published by this fellow Frenchman, who names two laws, one of which is also known as the Law of Combining Volumes.

ANSWER: **Joseph Louis Gay-Lussac (pronounced "guy lew-sack")**

[5,5] Gay-Lussac's other gas law relates these two properties.

ANSWER: **Temperature (Kelvin) and Pressure**

15. Bonus: Name the president from vice presidents on a 10-5 basis:

[10] John C. Calhoun

[5] Martin Van Buren

ANSWER: **Andrew Jackson**

[10] Henry Wilson

[5] Schuyler Colfax

ANSWER: **Ulysses S. Grant**

[10] Henry Wallace

[10] John Garner, Harry Truman

ANSWER: **Franklin Delano Roosevelt (or FDR)**

16. Bonus: Some of his most famous works include *Primitive Art* and *Race, Language, and Culture*. FTPE:

[10] Identify this German-American pioneer of anthropology, whose students included Ruth Benedict and whose masterwork is *The Mind of Primitive Man*.

ANSWER: **Franz Boas**

[10] Boas famously served as a mentor to numerous budding anthropologists while at this Ivy League university, located in Manhattan.

ANSWER: **Columbia University**

[10] One of Boas's best-known students was this author of *Mules and Men* and *Their Eyes Were Watching God*.

ANSWER: **Zora Neale Hurston**

17. Bonus: Answer the following about literary duels, FTPE:

[10] This title figure of a Pushkin novel kills his friend Lensky in a duel. He feels bad about it afterwards.

ANSWER: **Eugene (or Yevgeny) Onegin (either name)**

[10] *The Duel* describes the lifelong dueling of the two protagonists of a story by this Polish-born author of *Nostromo*, *Under Western Eyes*, and *Lord Jim*.

ANSWER: **Joseph Conrad**

[10] Barban and McKisco fight a duel in this author's *Tender in the Night*. He's also known for *This Side of Paradise* and for creating narrator Nick Carraway.

ANSWER: **Francis Scott Key Fitzgerald**

18. Bonus: Humans and computers speak very different languages. Identify these terms FTPE.

[10] This type of program translates high-level languages into machine code before the source program is executed.

ANSWER: **Compiler**

[10] This program is similar to a compiler, but translates some small amount of source code and executes it, repeating this process iteratively. It often runs more slowly because translation occurs during each execution.

ANSWER: **Interpreter**

[10] Even if the code compiles successfully, a program might crash during execution due to this type of error. A classic example is attempting to divide by zero.

ANSWER: **Run-Time Error**

19. Bonus: Identify these classic American paintings, FTPE:

[10] A sole black figure sits on a boat with a broken mast, caught in a tumultuous storm with sharks swimming ominously around him in this Winslow Homer work.

ANSWER: **The Gulf Stream**

[10] The two title figures appear in the foreground as one attempts to eat the other in this Copley work set in Havana Harbor.

ANSWER: **Watson and the Shark**

[10] Grant Wood's sister Nan and his dentist were the models for the figures in this classic work, set in front of an Iowa farmhouse.

ANSWER: **American Gothic**

20. Andrea Alciato's engraving is the source of this city's symbol, the boar. FTPE:

[10] Identify this commercial center of northern Italy, noted for its prominence in the fashion industry and located in Lombardy.

ANSWER: **Milan**

[10] Milan spent extensive time under the control of this Italian family, whose name means "force" and whose members include Ludovico il Moro.

ANSWER: **Sforza**

[10] Ludovico was, for a time, a patron of this artist of *Ginevra de' Benci*, at least until Ludovico took the bronze meant for one of his sculptures and used it to make weaponry. This artist's better-known patrons include Francis I of France.

ANSWER: **Leonardo da Vinci (grudgingly, accept "da Vinci")**