

**DACQ**  
*Dynasty Academic Competition*  
*Questions*

*December 2007*  
*Packet 3:*  
*Tossups*

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1. One thinker from this country wrote the essay collection *I Write What I Like* and discussed the “consciousness” of a certain group in a work that also mentions the “quest for true humanity.” Another published the sermon collections *No Future Without Forgiveness* and *Crying in the Wilderness*. In addition to Steven (\*) Biko and Desmond Tutu, a political figure from this nation published the autobiography *Long Walk to Freedom* after being imprisoned at Robben Island. FTP, identify this African nation, whose citizens like Nelson Mandela opposed Apartheid

ANSWER: South Africa

2. In these organisms, most functions not performed by the archaeocytes and choanocytes are routed through the osculum, and they are often used in evolutionary studies in conjunction with choanoflagellates. The only remaining parazoans, they are classified by their (\*) spicules, some of which are created by sclerocytes. Lacking muscles, nerves, or a true circulatory system, FTP, identify this marine phylum whose hole-filled skeletons are used to scrub things.

ANSWER: Porifera or Sponges

3. The protagonist of this play derides several companions for “biting their lips” and “shaking their heads,” before a herald is identified as a “servant of priapus” by Myrrhine and Calonice. Lampito suggests a shield filled with wine to seal the play’s central (\*) oath, uniting representatives from Corinth, Boeotia, Sparta, and Athens. FTP, identify this play in which the titular woman organizes a sex strike to stop Greek men from fighting in wars, written by Aristophanes.

ANSWER: Lysistrata

4. You want to find the velocity after 1 second of a particle moving along the curve  $f$  of  $x$  equals the quantity  $x$  squared plus 2, close quantity, times the quantity  $x$  minus 1. Finding velocity requires the first derivative, which with this equation will require either distribution of the quantities or the product rule of (\*) differentiation. FTP, what is the particle’s velocity? You have ten seconds.

ANSWER: 3 Units/Second (derivative is  $3x^2 - 2x + 2$ , so  $f(1) = 3$ )

5. Late in life this man relied on incorrect geographical data regarding the Hindu Kush and the Don River and ended up purposelessly slaughtering some Scythians as he marched into the Ukraine. This son of Hystaspes sent expedition under Mardonius and Datis and created the (\*) Behistun inscription, but died before his son could organize a larger invasion of Greece in retribution for the Ionian revolt. FTP, identify this Persian king whose forces lost at Marathon, the father of Xerxes I.

ANSWER: Darius I or the Great

6. Out the rear window of the room, trees can be seen, evoking more classical representations of the subject. A *cassoni* can be seen to the right of a curtain that covers half the room, and a maid in a white dress (\*) rummages through it. A dog lies at the feet of the subject, who holds flowers, reclines nude, and looks out at the viewer. FTP, name this Titian painting depicting the Roman goddess of love in an Italian town.

ANSWER: Venus of Urbino

7. This area contains part of the Gallatin, Absaroka, Madison, Beartooth, and Teton ranges. It has its highest point at Eagle Peak, although Mount Washburn is more prominent, and the continental divide runs through its (\*) southwest portion. The Lewis Canyon cuts through this park, which is actually sitting on the largest volcanic system on earth, the reason why geysers like Old Faithful can be seen here. Consisting of parts of Idaho and Montana, FTP, identify this first US National Park, located mostly in Wyoming.

ANSWER: Yellowstone National Park (prompt on “Wyoming” before “Eagle”)

8. Antisymmetry causes the formation of these kind of holes, while the highest occupied quantum state in a system of particles at absolute zero is this kind of field. The Drake equation is a “problem” named for this man, who also names a field consisting of quanta that obey statistics named for this physicist and Paul (\*) Dirac. Quarks and leptons are grouped into his namesake half-integer spin particles, and he also names a major accelerator lab in Illinois. FTP, identify this Italian physicist.

ANSWER: Enrico Fermi

9. His limited output was expanded when a number of letters he wrote, some of which discuss his amateur photography, were published as *Trading Twelves* in the model of his earlier essay collection, *Shadow and Act*. This author of *Going to the Territory* had his unfinished tale of Adam Sunraider compiled into *Three Days Before the Shooting*, originally published as (\*) *Juneteenth*, but remains famous for a story about a nameless protagonist who retreats underground after a race riot. FTP, identify this author of *Invisible Man*.

ANSWER: Ralph Waldo Ellison

10. The null one can indicate plurality for words such as fish and moose. The cranberry type can only exist in bound form and free ones can stand alone. They can be composed of either (\*) phonemes or graphemes depending on whether one is speaking or writing, and both prefixes and suffixes are examples of them. FTP, name these smallest units of language which possess meaning in linguistics.

ANSWER: Morphemes

11. Before assuming the papacy, Benedict XVI was a prefect of the Congregation for the Doctrine of Faith, which currently oversees this entity. Responsible for the Edgardo Mortara controversy, it was institutionalized by Paul III and famous men associated with it include Konrad von Marburg, who (\*) combated the Albigensians. Tomas de Torquemada most famously prosecuted, FTP, what Catholic campaign to destroy heresy, whose Spanish form might not be entirely expected?

ANSWER: The Inquisition (unfortunately, “the Spanish Inquisition” is not correct)

**12. This figure, who created an important ancestral sword, used alcohol to slay the dragon Orochi and once competed in a contest involving five beads. His origin from a nose is somewhat less dignified than his two siblings, and perhaps explains why he felt the need to go on a drunken rampage that saw him throw a severed horse head into his (\*) sister's weaving hall. That action plunged the world into darkness after that sister, Amaterasu, hid in a cave. FTP, identify this angry, angry kami, the god of storms in Shinto myth.**

ANSWER: Susano-wo or Susano'o or Susano-o-Mikoto

**13. Although the actual signatory of the Declaration of Rights and Principles, this man has challenged numerous provisions of that document, including those regarding the right to a tv station. Such objections stem from his attempt to use the Basic Law to question the legitimacy of Ismail Haniyeh and Salam (\*) Fayyad, whose Hamas party won a major electoral victory in 2006 against this man's own Fatah party. FTP, identify this successor to Yasser Arafat, the current head of the PLO.**

ANSWER: Mahmoud Abbas

**14. A dog points out the flaws of a number of characters as they climb a mountain in this work, which also sees one group suffer greatly from a rigged dice game. An appendix describing the lineage of a major figure is usually added to this work, and is called the Harivamsa, tracing the lineage of (\*) Vishnu. An avatar of Vishnu appears in its most famous section, a dialogue between Arjuna and Krishna. Telling of a war between the Kauravas and Pandavas, FTP, identify this Indian epic by Vyasa that contains the Bhagavad Gita and is even longer than the *Ramayana*.**

ANSWER: The Mahabharata

**15. This artist drew inspiration from Michael Jackson in his upcoming remake of "Wanna be Startin' Something" and from Bobby Vinson in his song "Lonely," off of his first major album, *Trouble*. This subject of the film *Illegal Alien* proclaims in one song regret for not being around for his sons and for his (\*) arrest for grand theft auto, which inspired his album *Konvicted*. That song, "Blame it on Me," also addresses his actions onstage with a minor in Trinidad. FTP, identify this Senegalese-American singer, responsible for "Don't Matter" and "Smack That."**

ANSWER: Akon or Alioune Badara Thiam

**16. Nicholas Herkimer fought a heroic action at the Battle of Oriskany to prevent troops under Barry St. Leger to reach this battle. The "Convention Army" of POWs was created following this clash, which saw action at the Bemis Heights and (\*) Freeman's Farm. Daniel Morgan's sharpshooters proved decisive in this battle, even killing Simon Fraser. General Burgoyne surrendered to Gates following the heroic action of Benedict Arnold at, FTP, what 1777 clash in New York that led to France joining America in the Revolutionary War?**

ANSWER: Battle of Saratoga

**17. When this element is paired with mercury and tellurium, it becomes the most important semiconductor not to contain silicon or gallium, and it is paired with the word "red" when it bonds with Selenium. It is mostly extracted as an impurity from zinc, and by large amount mostly used with nickel in (\*) batteries. Discovered by Friedrich Strohmeyer, this blue and white transition metal is highly toxic. FTP, identify this chemical element famous for its use in nuclear control rods, with chemical symbol Cd.**

ANSWER: Cadmium (accept Cd early)

**18. The central figure rejects the advances of The Baron as Gastone watches on in the first scene of this work, inspired by Dumas, fils's *The Lady of the Camellias*. In Act III, Dr. Grenvil informs Annina that the protagonist's tuberculosis will be fatal. Earlier, Germont forces the protagonist to end her relationship with his son, who had declared that he loved her in *Un di, felice, eterea*. This son, (\*) Alfredo, eventually holds Violetta in his arms as she dies. FTP, name this opera about the title 'fallen girl', a work of Giuseppe Verdi.**

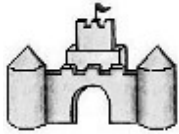
ANSWER: **La Traviata**

**19. This man's "Mutability" appears in his collection *Ecclesiastical Sketches*, while he included "Ode to Duty" and "Elegiac Stanzas" in his *Poems, in Two Volumes*. A summer vacation and stay in France form some of the fifteen chapters in his work subtitled "the growth of the poet's mind," (\*) *The Prelude*. Better known works like "The Solitary Reaper" and "Tintern Abbey" appeared in a collection co-published with Samuel Taylor Coleridge. FTP, identify this English poet whose works appear in *Lyrical Ballads*.**

ANSWER: **William Wordsworth**

**20. One of his first well-received paintings features a Victorian home located next to a set of train tracks. In addition to *House by the Railroad*, he painted a seated woman drinking a cup of coffee in *Automat*, and two women chatting at a (\*) café in *Chop Suey*. All of these paintings depict 20th century American life, as does his most famous work, in which Phillies are advertised at a diner where four people sit. FTP, name this painter of *Nighthawks*.**

ANSWER: Edward Hopper



**DACQ**  
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*Bonuses*

1. Bonus: FTPE, what kind of electrical device:

[10] Is central to Moore's law and was developed by Shockley, Bardeen, and Brattain?

ANSWER: **Transistor**

[10] Uses a wound coil and induction to transfer electrical energy from one circuit to another circuit?

ANSWER: **Transformer**

[10] Had its first example in the Leyden Jar and stores energy in the electric field between two conductors?

ANSWER: **Capacitor**

2. Bonus: Answer these questions about the beloved economic concept of stagflation, FTPE:

[10] In addition to low growth, this condition, unsurprisingly, must be present in an economy experiencing stagflation. It can occur in cost-push and demand-pull varieties.

ANSWER: **Inflation**

[10] Stagflation notably violates this economic curve, which posits an inverse relationship between inflation and unemployment.

ANSWER: **Phillips Curve**

[10] Stagflation may be explained by these events, in which the price of a good or service spontaneously changes. Oil experienced one of these during a period of US stagflation in the 1970s.

ANSWER: **Supply Shocks**

3. Bonus: Identify these Chilean authors, FTPE:

[10] This author of *Paula* and *Eva Luna* was forced to flee Chile after the death of her uncle Salvador in a 1973 coup. She may be most famous for *The House of the Spirits*.

ANSWER: **Isabel Allende Llona**

[10] This author of *Desolation*, *Tala*, *Ternera*, and *Sonnets of Death* won the Nobel Prize in 1945. Her pen name was taken from a French and an Italian poet.

ANSWER: **Gabriela Mistral** or **Lucila Godoy Alcayaga**

[10] Neftali Ricard Reyes was the birth name of this Chilean poet of *On the Blue Shore of Silence*, *Elemental Odes*, and *Twenty Love Poems and a Song of Despair*.

ANSWER: **Pablo Neruda**

4. Bonus: Identify these figures important in the history of paper, FTPE:

[10] This Han dynasty eunuch, who might have murdered Empress Jingyin, is generally credited with inventing modern paper.

ANSWER: **Cai Lun**

[10] This German inventor of movable type and namesake of a 42-line bible made having paper just that much cooler after things could actually be printed on it.

ANSWER: **Johannes Gutenberg**

[10] The establishment of the Library of Alexandria under the second Egyptian ruler bearing this name led to a national papyrus-drain, necessitating the leap from papyrus to parchment.

ANSWER: **Ptolemy**

5. Bonus: Answer these questions about heresy, FTPE:

[10] This Emperor clashed with Antiochenes while on a campaign against the Sassanids, but is more famous for preferring Paganism to Christianity and earning the epithet “the Apostate.”

ANSWER: **Julian the Apostate or Flavius Claudius Iulianus**

[10] This heresy, named for an Alexandrian priest, attacked Trinitarian beliefs and claimed the Jesus Christ was separate from God.

ANSWER: **Arianism**

[10] Arianism, and many other heresies, were denounced by this 325 council overseen by St. Alexander and called by Constantine the Great. It also saw the introduction of a namesake Creed.

ANSWER: **First Council of Nicaea**

6. Bonus: F5PE, given a university, identify that university's animal mascot:

[5] University of Wisconsin.

ANSWER: **Badgers**

[5] Penn State.

ANSWER: **Nittany Lions (prompt on partial answer)**

[5] University of Southern Illinois.

ANSWER: **Salukis**

[5] University of Oregon.

ANSWER: **Ducks**

[5] University of Michigan.

ANSWER: **Wolverines**

[5] UC Santa Cruz.

ANSWER: **Banana Slugs**

7. Bonus: Many computer science algorithms rely on representing information as a graph. Identify these terms from graph theory FTPE:

[10] These fundamental units of a graph are connected to one another by edges.

ANSWER: **Node or Vertex**

[10] This is a connected graph in which any two vertices are connected by a unique simple path. They may or may not possess leaves.

ANSWER: **Tree**

[10] This is a closed simple path with no repeated vertices except the start vertex and the end vertex.

ANSWER: **Cycle**

8. Bonus: Identify the ruler who held dominion over France when these major world events took place, FTPE. If you need a year, you'll get five.

[10] The beginning of the War of the Spanish Succession.

[5] 1701.

ANSWER: **Louis XIV**

[10] Elizabeth I of England dies.

[5] 1603.

ANSWER: **Henry IV or Henry of Navarre**

[10] The launching of the Seventh Crusade (not to mention the Eighth).

[5] 1248.

ANSWER: **Louis IX or Louis the Saint or Saint Louis**

9. Bonus: It begins act III of the second part of the Ring Cycle. FTPE:

[10] Identify this mythologically-inspired ensemble piece.

ANSWER: **The Ride of the Valkyries**

[10] This composer of the opera *The Valkyrie* always became annoyed when people requested he play "The Ride of the Valkyries" separately in between bouts of raging antisemitism.

ANSWER: **Richard Wagner**

[10] "The Ride of the Valkyries" is one of only two ensemble orchestrations in Wagner's Ring Cycle. The other occurs in this first opera, which tells of a certain treasure.

ANSWER: **Das Rheingold or The Rhine Gold**

10. Bonus: Identify these poets who were inspired by cemeteries, FTPE:

[10] This poet of "The Wild Honey-Suckle," who is often cited as the "poet of the American Revolution," wrote "The Indian Burial Ground."

ANSWER: **Philip Freneau**

[10] This author of *The Song of Hiawatha* was moved to write "The Jewish Cemetery" after visiting the oldest such institution in the United States. He also wrote about a midnight ride undertaken by Paul Revere.

ANSWER: **Henry Wadsworth Longfellow**

[10] This poet declared "the paths of glory lead but to the grave" in his "Elegy Written in a Country Churchyard."

ANSWER: **Thomas Gray**

11. Bonus: This man was the subject of a controversial MoveOn.org advertisement that demonstrated puns and politics never mix. FTPE:

[10] Identify this commander of US forces in Iraq.

ANSWER: **David Petraeus**

[10] Petraeus oddly received a promotion after breaking his pelvis following a parachute failure during a high-altitude jump during his time at this North Carolina military base, named for a Western theater Confederate general.

ANSWER: **Fort Bragg**

[10] Petraeus's first adventure with military self-injury occurred when one of his squadmates accidentally shot him in the chest, necessitating surgery performed by this former US Senator from Tennessee, who notably dissected cats from local shelters during med school and is under the impression that HIV can be transmitted through sweat.

ANSWER: **William "Bill" Frist**

12. Bonus: It occurs when light hits particles and is scattered differently depending on wavelength. FTPE:

[10] Identify this "effect" used to differentiate mixtures, named for a British scientist.

ANSWER: **Tyndall Effect**

[10] The Tyndall Effect is used to differentiate solutions and suspensions from these homogeneous mixtures which consist of both dispersed and continuous phases.

ANSWER: **Colloids**

[10] The Tyndall Effect is analogous to what kind of scattering affecting particles smaller than those governed by Mie Theory, often used to explain why the sky is blue?

ANSWER: **Rayleigh Scattering**

13. Bonus: Identify these geographic entities which border the Sea of Okhotsk, FTPE:

[10] Mount Lopatin is the highest point on this long Russian Island north of Hokkaido.

ANSWER: **Sakhalin**

[10] This long peninsula to the East of the sea is known to fans of the board game Risk.

ANSWER: **Kamchatka Peninsula**

[10] Kunashir is the southernmost of this island chain, which separates the sea from the Pacific.

ANSWER: **Kurile Islands**

14. Bonus: Identify the method by which these literary figures are dispatched, FTPE. For example, Juliet from *Romeo and Juliet* would be some variant on harming one's self with a dagger:

[10] Vladimir Lensky in Pushkin's *Eugene Onegin*.

ANSWER: **Shot in a Duel (accept either)**

[10] Beowulf, from *Beowulf*.

ANSWER: **Mauled by a Dragon (accept any horrible act of maiming as long as it is perpetrated by a Dragon)**

[10] The Clutter family in Truman Capote's *In Cold Blood*.

ANSWER: **Shot (with a Shotgun)**

15. Bonus: It is named for the joint participation of Argentina, Brazil, and Uruguay. FTPE:

[10] Identify this numerically-named war from South American history that saw the Campaign of the Hills and the battles of Mato Grosso, Itoror, and Riachuelo.

ANSWER: **War of the Triple Alliance**

[10] This other South American country, with capital at Asuncion, was slammed in the War of the Triple Alliance. It was led in the twentieth century by Alfredo Stroessner.

ANSWER: **Paraguay**

[10] This lunatic president of Paraguay was responsible for the devastation caused to his country after he entered into the war. He was killed at Cerro Cora when enemy forces threw him into the Aquidaban river and pelted him with grenades.

ANSWER: **Francisco Solano Lopez**

16. Bonus: Identify these monstrous figures from European folklore, FTPE:

[10] In France, these creatures are called *loup-garou*. They are usually associated with the lunar cycle.

ANSWER: **Werewolves or Lycanthropes**

[10] These Romanian vampire-witches take the form of old, birdlike crones and feast on human essence. They were associated with owls.

ANSWER: **Striga or Strix**

[10] These mermaid-like creatures are seals which can shed their skin to become beautiful women. They appear in Scottish and Icelandic myth.

ANSWER: **Selkies**



17. Bonus: They use mRNA to accomplish translation. FTPE:

[10] Identify these organelles, whose presence on the endoplasmic reticulum causes it to be classified as “rough” rather than “smooth.”

ANSWER: **Ribosomes**

[10] Ribosomes found in chloroplasts and mitochondria are similar to those found in prokaryotes, a fact used as evidence for what theory put forth by Lynn Margulis?

ANSWER: **Endosymbiont Theory or Endosymbiotic Theory**

[10] RNase P and “Hammerhead” are two types of this RNA molecule, which joined enzymes as the only biological catalyst.

ANSWER: **Ribozymes or RNA Enzyme or Catalytic RNA**

18. Bonus: This man published music criticism under the pseudonym “Corno di Bassetto.” FTPE:

[10] Identify this author who told of Larry Doyle and Tom Broadbent in *John Bull's Other Island* and of Lady Britomart and Andrew Undershaft in *Major Barbara*, and also penned *Arms and the Man* and *Mrs. Warren's Profession*.

ANSWER: **George Bernard Shaw**

[10] This famous Shaw play with a mythologically-inspired title centers on the tutelage of Eliza Doolittle. It was adapted into *My Fair Lady*.

ANSWER: **Pygmalion**

[10] Boss Managan and Mazzini Dunn interact with figures like Captain Shotover in this Shaw play, whose titular structure may be a metaphor for a ship.

ANSWER: **Heartbreak House**

19. Bonus: He is the “author” of the ghostwritten *The Conscience of a Conservative*. FTPE:

[10] Identify this Arizona senator who lost the election of 1964 over somewhat reasonable concerns that he would wipe out all life on planet Earth with nuclear weapons.

ANSWER: **Barry Goldwater**

[10] Goldwater lost the election to this man, who ascended the presidency after the death of John F. Kennedy and launched the Great Society.

ANSWER: **Lyndon Baines Johnson**

[10] In 1977, Goldwater lost his long, inexplicable fight against the Torrijos-Carter Treaty governing control of this entity.

ANSWER: **The Panama Canal**

20. Bonus: Identify these works of Frank Lloyd Wright, FTPE:

[10] This quintessential Prairie style home is located in Hyde Park, Chicago, adjacent to the University of Chicago.

ANSWER: **Robie House**

[10] This famous Pennsylvania structure was built on a favorite picnic spot of the Kaufman family.

ANSWER: **Fallingwater**

[10] Paintings hang from the ceiling as viewers ascend the circular ramps that comprise this modern art museum in New York.

ANSWER: **Solomon R. Guggenheim Museum**