

# DACQ

*Dynasty Academic Competition  
Questions*

*August 2007  
Packet 2:  
Tossups*

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1. One of this ruler's advisors was an architectural genius who helped create the Red Chapel and the famous "Sublime of the Sublimes" colonnade. Other achievements include an expedition that successfully transplanted frankincense trees from the land of (\*) Punt and the reconstruction of trade routs damaged by the Hyksos. Originally serving as a regent for Thutmose III, FTP, name this pharaoh whose remains were recently identified, one of Egypt's most famous female rulers.

ANSWER: Hatshepsut

2. In one of this author's works, the title character provokes the ire of Ascanius and dies along with Iarbus, and his historical subjects include the St. Bartholomew's Day Massacre and a man born in the Chaghadai Khanate, though he published only six (\*) plays before being stabbed by Ingram Frizer in 1593. The creator of the scheming Barabbus, FTP, identify this contemporary of Shakespeare and author of *Edward II*, *The Jew of Malta*, and *Doctor Faustus*.

ANSWER: Christopher Marlowe

3. Glutathione helps recycle this compound in the body, and its key functions include serving as a cofactor for enzymes like collagen hydrolase. The ability to break down uric acid usually co-evolves with the ability to synthesize this, and it was unknowingly harvested from *arbor vitae* when (\*) Jacques Cartier attempted to treat his suffering sailors. Also known as ascorbic acid, FTP, identify this vitamin that prevents scurvy and is found in citrus fruits.

ANSWER: Vitamin C (accept Ascorbic Acid or Ascorbate early)

4. Palamades famously impeded the path of this man's plough, and he would go on to retrieve the arrows of Heracles from Philoctetes. He was responsible for bringing Neoptolemus into the Trojan War, and, through a vow he arranged, for (\*) beginning the war itself, which along with some addictive plant life and a mishandled bag of winds delayed his homecoming. FTP, identify this cunning husband of Penelope whose return to Ithaca is documented in a famous work by Homer.

ANSWER: Odysseus

5. A nun and a priest stand in discussion on the right hand of this work, while a figure in black with a red symbol on his chest stands opposite them, staring at the viewer. That figure, actually the (\*) artist, is staring at the parents of the central figure, the Infanta Margarita, who is surrounded by a dog, a dwarf, and the titular maids. FTP, identify this work of Diego Velazquez.

ANSWER: Las Meninas (or The Maids of Honor)

6. He matched numbers with abstract concepts such as justice and virginity, and he believed that odd numbers were masculine and even numbers feminine. He discovered that ratios of frequencies correspond to certain (\*) musical intervals, which he then applied to planets through his concept of “music of the spheres.” FTP, name this mathematician from the sixth century BC, best known for his namesake theorem about right triangles.

ANSWER: Pythagoras of Samos

7. His license plate reads NCC-1701 and he once sought to implement seven-year breeding cycles, noting that for him, it would be “much, much more.” His possessions include a Sean Connery picture signed by Roger Moore and a *Mary Worth* advising a friend to commit suicide. His real name is (\*) Jeff Albertson and he has sold such items as *Sax on the Beach* and an Alf pog to the likes of Lisa and Milhouse. FTP, identify this obese proprietor of the Android’s Dungeon on The Simpsons.

ANSWER: Comic Book Guy (Accept Worst Question Ever; accept Jeff Albertson early)

8. In 1999 this man led his former followers in the performance of one of his plays, *Twister*. His time with those followers is described in *Sometimes a Great Notion*, and they included Jack Kerouac and Neal Cassidy. The characters Billy Bibbit, Chief Bromden, (\*) Nurse Ratched, and Randle McMurphy appear in his most famous work, set in a mental asylum. FTP, identify this leader of the Merry Pranksters and author of *One Flew Over the Cuckoo’s Nest*.

ANSWER: Kenneth Eldon Kesey

9. Pencil and paper ready. Eddie is having a paternity test done and he is looking closely at the patterns in his genetic code. Assuming a set of only four codons, A, T, C, and G, determine the probability that any two adjacent bases will be the same but neither will be A. This can be found by determining the probability for each event and (\*) multiplying them. FTP, what is the probability of such a sequence? You have ten seconds.

ANSWER: 3/16 [(3/4)\*(1/4)]

10. One of the first major reformers of the NYPD, this man’s historical writings include *The Winning of the West*, which inspired Turner’s Frontier Thesis, and *The Naval War of 1812*, which led to his appointment under John D. Long and de facto control as Assistant Secretary of the (\*) Navy. He resigned from that post to organize a cavalry unit with Leonard Wood, which led to a charge up San Juan Hill. FTP, name this 26<sup>th</sup> president and conservationist who succeeded McKinley.

ANSWER: Theodore “Teddy” Roosevelt (prompt on “Roosevelt”)

11. This school of thought was challenged by the Logicians, who attacked it for advocating inequity and class strife, and who were associated with the Mohists. Its founder sought to “rectify names” and advocated what can be translated as “humanness,” the principle of (\*) *ren*. Also emphasizing filial piety and leading to years of bureaucratic rule in China through service exams, FTP, identify this philosophy whose beliefs were laid down in the Analects of its namesake creator.

ANSWER: Confucianism

**12. Peaks in this range include the amusingly named Camel's Hump and its tallest, Mount Mansfield. Home to the headwaters of the Walloomsac River, it lies to the north of the Taconics and is bordered by the Berkshire and (\*) White Mountains. The Adirondacks lie across Lake Champlain from this range, which inspired the name of a military group founded by Ethan Allen. FTP, identify this colorfully-named mountain range that also inspired the state nickname of Vermont.**

ANSWER: Green Mountains

**13. This author wrote about a man who is overcome with emotion upon discovering that his house is still standing in *Civil Peace*, and his other short stories include *The Sacrificial Egg*. In one novel, Christopher and Beatrice react to the dictator His Excellency Sam in Kangan, while he wrote of the (\*) grandson of his most famous character in *No Longer at Ease*. The author of *Anthills of the Savannah* and creator of Okonkwo, FTP, name this Nigerian novelist of *Things Fall Apart*.**

ANSWER: Chinua Achebe

**14. The end of this opera's first act, the entrance of Monostatos, often causes orchestra problems since a flautist is required to double on the piccolo. In one aria, the character Papageno proclaims that he is a birdcatcher, and in the finale, the (\*) palace of the Queen of the Night is destroyed. Pamina and Tamino pass through ordeals with the help of the titular enchanted instrument in, FTP, what Mozart opera?**

ANSWER: The Magic Flute

**15. This man warned of the appeals of German race purism in a work examining religion, *The Future of an Illusion*. He also dealt with religion in a work tracing the history of guilt following the death of a biblical figure, *Moses and Monotheism*. More famous for works like (\*) *Beyond the Pleasure Principle*, *Totem and Taboo*, and *The Ego and the Id*, FTP, identify this Austrian to whom a cigar was just a cigar, the coiner of the term "Oedipal Complex" and founder of psychoanalysis.**

ANSWER: Sigmund Freud

**16. The *Fiches* affair was an attempt by Emile Combes to impede members of this organization, and the instigators of the *Vendee* revolt sought to represent it. A famous campaign against this organization was named by Rudolf Virchow in the (\*) Prussian Parliament in 1873. The target of Bismarck's *Kulturkampf*, FTP, identify this religious organization which signed the Lateran Accords with Mussolini and is currently headed by Benedict XVI (16) from Vatican City.**

ANSWER: The Roman Catholic Church

**17. When PEPcase is used, these structures are less necessary, and they are completely absent in submerged plants. Their function is facilitated by the exit of protons and the influx of K<sup>+</sup> molecules, and in CAM plants they function only at (\*) night. Allowing the exit of oxygen from Parenchyma cells and operated by guard cells on either side, FTP, identify these pores on plant leaves that facilitate gas exchange.**

ANSWER: Stomata (prompt on "Guard Cells" before mentioned)

**18. Ethnic prostitution in this city is largely outlawed, though this area's leader faces UN criticism over conditions of East Asian workers, largely along (\*) Sheikh Zayed Road. The home of the world's tallest hotel and the largest high rise tower along with the artificial Palm Islands, FTP, identify this commercial mega-city of the United Arab Emirates.**

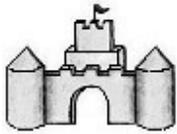
ANSWER: Dubai

**19. One of the main characters is warned against resenting Eponine and Azelma, the daughters of the Thenardiers. Later, that character falls in love with a companion of Enjolras and Gavroche, and at the climax of this novel, a battle at the barricades leads to the protagonist carrying (\*) Marius through the sewers, after which Javert throws himself into the Seine. Centering on Cosette and the outlaw Jean Valjean, FTP, identify this novel by Victor Hugo.**

ANSWER: **Les Miserables**

**20. Thomas Bearden criticized this law for failing to account for negentropy, and it is sometimes called Nernst's theorem. It states that magnetic moments of paramagnetic materials will align and other forms of randomness will disappear as a substance's (\*) entropy drops and it approaches a certain temperature. FTP, name this law of thermodynamics which discusses systems reaching absolute zero.**

ANSWER: **The Third Law of Thermodynamics**



# DACQ

## Dynasty Academic Competition Questions

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Bonuses

1. Bonus: FTSNOP, identify all of the men who have held the office of UN Secretary General from:  
[5,5] Africa.

ANSWER: **Kofi Annan, Boutros Boutros-Ghali**

[5,5] Asia.

ANSWER: **Ban Ki-moon, U Thant**

[10] The Western hemisphere.

ANSWER: **Javier Perez de Cuellar**

2. Bonus: He spent his final years almost completely blind in St. Petersburg, and was eulogized by Condorcet. FTPE:

[10] Identify this mathematician whose namesake number is the basis for the natural logarithm.

ANSWER: **Leonhard Euler**

[10] Euler proved that  $2^{31} - 1$  (read: two to the 31<sup>st</sup> minus one) was the largest yet discovered “Mersenne” variety of what type of number?

ANSWER: **Prime numbers**

[10] Euler famously solved a problem regarding the bridges of this Prussian city, now called Kaliningrad.

ANSWER: **Konigsberg**

3. Bonus: Identify these jazz greats, FTPE:

[10] He played with John Coltrane and Red Garland and is famous for *Bitches Brew*, *Kind of Blue*, and *Birth of the Cool*.

ANSWER: **Miles Davis**

[10] This saxophonist’s nickname was the inspiration for the title of his song *Ornithology*.

ANSWER: **Charlie “Bird” Parker**

[10] *When the Saints Go Marching In* and *What a Wonderful World* are hits by this trumpeter, nicknamed “Satchmo.”

ANSWER: **Louis Armstrong**

4. Bonus: Identify these novels by D.H. Lawrence from plot descriptions, FTPE:

[10] Paul Morel’s love affairs with Miriam and Clara Dawes are overshadowed by his problematic relationship with his mother Gertrude.

ANSWER: **Sons and Lovers**

[10] Connie’s wife Clifford is wheelchair-bound, prompting her to embark upon a disastrous affair with Oliver Mellors, the title character.

ANSWER: **Lady Chatterly’s Lover**

[10] This novel centers on Kate Leslie’s seduction by the mysterious figures Don Ramon and Don Cipriano in Mexico. Its title is an allusion to an Aztec god.

ANSWER: **The Plumed Serpent**

5. Bonus: It is also known as the Treaty of San Lorenzo and the Treaty of Madrid. FTPE:  
[10] Identify this treaty, named for its South Carolinian negotiator, which dealt with borders around the Flint, St. Mary's, and Chattahoochee Rivers, but more famously concerned navigation along a much larger river.

ANSWER: **Pinckney's Treaty**

[10] Andrew Ellicot surveyed the land along this river, whose navigation was granted to the US in Pinckney's Treaty. It was notably cited in 1541 by Hernan de Soto.

ANSWER: **Mississippi**

[10] Pinckney's treaty was signed with this European power, thirteen years before Napoleon would install puppet monarch Joseph I.

ANSWER: **Spain**

6. Bonus: Given some impressive mythological weaponry, name its owner, FTPE:

[10] The hammer Mjolnir.

ANSWER: **Thor**

[10] A throwable weapon given to its owner by the cyclops after that owner slew Campe and freed them from Tartarus.

ANSWER: **Zeus (the question refers to thunderbolts)**

[10] The spear Gungnir.

ANSWER: **Odin**

7. Bonus: FTPE, identify the shape of the following molecules:

[10] CO<sub>2</sub>

ANSWER: **Linear**

[10] SO<sub>4</sub>

ANSWER: **Tetrahedral**

[10] NH<sub>3</sub>

ANSWER: **Trigonal Pyramidal**

8. Bonus: This philosophy was espoused in the essay "How to Make Our Ideas Clear." FTPE:

[10] Identify this philosophical movement associated with Thomas Dewey, which began in America in the 19<sup>th</sup> century and was the subject of a namesake lecture series.

ANSWER: **Pragmatism**

[10] This man is generally regarded as the founder of Pragmatism.

ANSWER: **Charles Sanders Pierce ("purse")**

[10] This man delivered the lecture series *Pragmatism*. He also wrote *Principles of Psychology* and had a novelist brother, Henry.

ANSWER: **William James**

9. Bonus: Given a Canadian province, name its capital, FFPE:

[5] Yukon Territory

ANSWER: **Whitehorse**

[5] Alberta

ANSWER: **Edmonton**

[5] Newfoundland and Labrador

ANSWER: **St. John's**

[5] Prince Edward Island

ANSWER: **Charlottetown**

[5] Manitoba

ANSWER: **Winnipeg**

[10] Nova Scotia

ANSWER: **Halifax**

10. Bonus: Answer some questions about elementary linguistics, FTPE:

[10] These units are generally considered the smallest division of language.

ANSWER: **Phonemes**

[10] This term is applied to the study of how sentences are constructed. It can also be used to refer to the rules that govern a computer programming language.

ANSWER: **Syntax**

[10] A notable law describing the evolution of stops in Proto-Germanic languages is named for this man, the elder of a pair of brothers who are better known for collecting fairy tales.

ANSWER: **Jacob Grimm**

11. Bonus: The founder of this dynasty won the battles of Vouille and Tolbiac against various barbarian states. FTPE:

[10] Identify this Salian-Frankish dynasty established in 481 CE by Clovis.

ANSWER: **Merovingians**

[10] Clovis converted to this faith, practiced by his wife Clotilda. It remained the dominant religion of the French monarchy for a really, really long time.

ANSWER: **Catholicism**

[10] Toward the end of Merovingian power, the position of Mayor of the Palace was famously occupied by this grandfather of Charlemagne who defeated Abd er Rahman at Tours.

ANSWER: **Charles Martel**

12. Bonus: Answer the following about infection processes, FTPE:

[10] These circular, double-stranded DNA molecules are separate from chromosomal DNA and are key in conjugation.

ANSWER: **Plasmids**

[10] Many viruses employ these protein sheaths to aid in infection. Most are either icosahedral or helical.

ANSWER: **Capsids**

[10] Both plasmids and capsids can serve as this generic vehicle for the spread of an infectious agent. It shares its name with the term for physical quantities characterized by magnitude and direction.

ANSWER: **Vectors**

13. Bonus: It tells the story of John Singer, a deaf engraver, and the various characters he encounters in and around the New York Café. FTPE:

[10] Identify this novel which sees Singer's suicide after the death of his friend, Spiros Antonapoulos.

ANSWER: **The Heart is a Lonely Hunter**

[10] This author of *The Ballad of the Sad Cafe* and *The Member of the Wedding* wrote *The Heart is a Lonely Hunter*.

ANSWER: **Carson McCullers**

[10] *The Heart is a Lonely Hunter* takes place in this US state, also McCullers's home state.

ANSWER: **Georgia**

14. Bonus: It is orbited by a group of satellites called the Louisian Stars. FTPE:

[10] Identify this notably ringed planet, sixth from the sun, whose other moons include Hyperion and Enceladus.

ANSWER: **Saturn**

[10] This moon of Saturn was the subject of a recent probe dropped by the Huygens craft. It is theorized to possess hydrocarbon oceans.

ANSWER: **Titan**

[10] The probe detached onto Titan from the Huygens mission was named for this Italian astronomer, who lends his name to a division between Saturn's rings.

ANSWER: **Giovanni Domenico Cassini**

15. Bonus: Identify the movie from lines, 30-20-10:

[30] "You told me you fought a lot. . ."

"For life, not for points."

[20] "Man who catch fly with chopstick accomplish anything."

[10] "Wax on, wax off."

ANSWER: **The Karate Kid**

16. Bonus: Identify the renaissance artists from works on a 15-10 basis.

[15] *The Triumph of Galatea, La Disputa, Parnassus.*

[10] *Sistine Madonna, The School of Athens.*

ANSWER: **Raphael Sanzio (either name)**

[15] *Madonna of the Book, Saint Augustine, La Primavera.*

[10] *The Birth of Venus.*

ANSWER: **Sandro Botticelli (or Alessandro Filipepi)**

17. Bonus: Given a hometown and some works, identify the author, FTPE:

[10] Hannibal, Missouri; *Roughing It* and *Life on the Mississippi*.

ANSWER: **Mark Twain or Samuel Clemens**

[10] Terre Haute, Indiana; *The Financier, The Titan, and The Stoic.*

ANSWER: **Theodore Dreiser**

[10] Lubeck, Germany; *Buddenbrooks* and *Doctor Faustus*.

ANSWER: **Thomas Mann**

18. Bonus: Name these physical constants from descriptions FTPE:

[10] It is equal to approximately  $3 \times 10^8$  meters per second, and is abbreviated “c.”

ANSWER: **Speed of light**

[10] Also known as the electrostatic constant, it appears in a namesake law about the force between two charged particles.

ANSWER: **Coulomb’s constant**

[10] First measured by Robert Millikan, it is equal to about  $1.602 \times 10^{-19}$  Coulombs. It is the same as the charge of a proton and is abbreviated “e.”

ANSWER: **Elementary charge**

19. Bonus: Identify the following Byzantine Emperors, FTPE:

[10] This Roman Emperor is sometimes credited as the first Byzantine Emperor, and he lends his name to the capital city. He also issued the Edict of Milan.

ANSWER: **Constantine I or the Great**

[10] This emperor’s most lasting achievement was known as the *Corpus Juris Civilis* and wasn’t amended until the *Lex Ecloga*.

ANSWER: **Justinian I or the Great**

[10] This first member of the Isaurian dynasty but third emperor of his name saved Constantinople from the Ummayyads and began the policy of iconoclasm.

ANSWER: **Leo III the Isaurian**

20. Bonus: FTPE, what cell organelle:

[10] Has components called Cristae and an inner membrane crucial in the electron transport chain?

ANSWER: **Mitochondria or Mitochondrion**

[10] Has *cis* and *trans* faces and an Italian namesake who also did extensive work on the brain?

ANSWER: **Golgi Apparatus or Bodies**

[10] Is the site of translation?

ANSWER: **Ribosomes**