

# DACQ Dynasty Academic Competition Questions

December 2007
Packet 2:
Tossups

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- 1. One of this work's greatest villains is Korhior, who claims that forgiveness is impossible and incites Amlici and Nehor to rebellion, which is put down by the father of Shiblon and Helamon, Alma. The Testimony of Witnesses is added as a forward to this work, whose third section centers on Jacob, brother of (\*) Nephi. Supposedly transcribed from Golden Plates as per the instructions of Moroni, FTP, identify this collection of scripture created by Joseph Smith, the primary text of the Church of Jesus Christ of Latter-day Saints.

ANSWER: The **Book of Mormon** 

- 2. Alaric's sack of this city may have created the Tsakonian language, while its more incompetent rulers included Archidamus IV, who failed to prevent an Antigonid invasion, and Cleomenes III, who was crushed at Sellasia by the Achean League. Nabis was the first to construct (\*) walls around this city, which had relied on the code of Lycurgus, a social system based on the helot slave class, and a legendary martial culture for defense. FTP, identify this rival of Athens, a city on the Peloponnesus that sent three hundred warriors under Leonidas to the Battle of Thermopylae. ANSWER: Sparta
- 3. It is filled with Amacrine cells as well as Muller cells, which can become multipotent and account for this object's swift healing rate. Cells in this body which contain melanopsin interact with the SCN and help maintain circadian rhythms. It is responsible for (\*) relaying signals to a certain nerve, and functions by the excitation of its receptors, cones and rods. FTP, identify this thin layer of cells located behind the eye, sometimes scanned for identification.

ANSWER: Retina

4. The use of high-performance liquid chromatography to analyze these entities, often referred to as the Gillett method, has indicated that the usual scale for rating them may be inaccurate for subjects like the African Birdseye or Naga Jolokia. That rating system, the Scoville scale, relies on (\*) capsaicin concentrations and applies various values to the Serrano, Habanero, and Jalapeno. FTP, identify these spicy features of certain plants, which might be described as "red hot."

ANSWER: Chili Peppers

5. It first appeared between "Cavalry Crossing a Ford" and "Bivouac on a Mountain Side" in *Drum Taps*, and features those that witness an object "grim and daring" with a "steady keel." Those onlookers, described as a "swaying mass" with "eager faces (\*) turning," are startled to find that, though the voyage is closed and done, the title figure "has no pulse or will." Elegizing Abraham Lincoln, FTP, identify this Walt Whitman poem which likens the slain President to the commander of a ship.

ANSWER: O Captain! My Captain!

6. This creator of Newborn and Maiastra created a "hymn to curvature" in his Princess X, while a gap appears in his wooden Socrates. His Table of Silence, Kiss Gate, and Endless Column comprise his Targu Jiu Ensemble, a memorial to his fellow (\*) Romanians. Better known works include the crude stone carving The Kiss and a work intended to depict flight. FTP, identify this sculptor of Bird in Space.

ANSWER: Constantin Brancusi

- 7. The Kugelrohr is a device used to achieve one form of this process, which relies on changing relative pressures to carry it out, and is called Vacuum. Changing the rate at which a substance is added determines whether it is Batch or Continuous, while it is most often governed by the Fenske equation. Solutions are called azeotropic if they (\*) cannot be separated by the fractional form of this phenomenon. FTP, identify this chemical process, the separation of a mixture into constituent parts based on their respective boiling points, which is sometimes used to purify water. ANSWER: Distillation
- 8. This nation's Black Lagoon can be found near the aptly-named Fungus Rock, which joins Manoel, Filfla, and St. Paul's Island as part of its uninhabited group. In 2007, it joined Cyprus in adopting the Euro, which depicts its Mnajdra temple. Its features include the Lunzjata valley on (\*) Gozo, the peak Ta'Djemrek, and the island Comino. FTP, identify this archipelago south of Sicily, notably controlled by a group of Knights, with capital at Valetta.

ANSWER: Malta

9. Isabelle and Ludwig engage in philosophical debates in a mental hospital in this author's *The Black Obelisk*. This creator of *Heaven Has No Favorites* and *Shadows in Paradise* wrote of Ravic, who secretly corrects other men's surgical errors, in *Arch of Triumph*. It is debated whether a novel that mentions Haie and Muller, (\*) *The Road Back*, is really a sequel to his most famous novel, which tells of Paul Baumer's experiences in World War I. FTP, identify this German author of *All Quiet on the Western Front*.

ANSWER: Erich Maria Remarque

10. It forced James W. Marshall to enter the lumber business and was abandoned after Lansford Hastings discovered that the *Savannah*, *Levant*, and *Cyane* under John Sloat had won a minor naval battle. It saw the Battle of Ompali and the rule of William Ide, who took (\*) power after the capture of Mariano Vallejo in Sonoma and the seizure of Sutter's fort. Backed by a militia led by John C. Fremont, FTP, identify this brief republic which broke from Mexico in 1846, named either for a namesake US state or its animal insignia.

ANSWER: Bear Flag Republic (or the Republic of California)

11. A recent study found that this object was too small and had inadequate metallicity to belong to the Ursa Major Moving Group, while Thomas Barker and T.J.J. See engaged in an earlier debate over Ptolemy's description of this star's red color. Bessel and Clark showed that it was a (\*) binary, while Halley described the progressions of Arcturus and this white dwarf, which the ancient Egyptians linked with the flooding of the nile. FTP, identify this brightest star of Canis Major, also the brightest star in the night sky, often called the "dog star."

ANSWER: Sirius A (prompt on Alpha Canis Majoris early)

12. Joseph Black and James Hutton published this man's treatise on astronomy, *Essays on Philosophical Subjects*. He identified Self-Love, Benevolence, and Reason as among the "nature" and "motives" of the titular concepts in one work, whose contradictions with his best-known tract inspired Oncken and Schumpeter to identify his namesake (\*) "Problem." That latter work was challenged by John Nash and J.M. Keynes, and put forth such *laissez faire* concepts as the "invisible hand." FTP, identify this Scottish author of *The Theory of Moral Sentiments* and *The Wealth of Nations*.

ANSWER: Adam Smith

- 13. Interpretation of the dialogue between Ludovico and Gratiano in this work may be altered depending on how the "clown" attached to Montano is portrayed. A key scene in this work is interrupted by loud complaints about "some minx's token" made by the minor character Bianca, who along with (\*) Emilia realizes she has been manipulated into the theft of a handkerchief from the daughter of Brabantio. Containing a discussion of the "green-eyed monster," FTP, identify this Shakespeare play in which Iago causes the murder of Desdemona by the titular Moor of Venice. ANSWER: Othello
- 14. Following the defeat of William Hull, the freedom of the priest Gabriel Richard sparked this man to deliver an ultimatum to Isaac Brock, for whom he was acting as a rear guard. He incited Menawa to form the Red Sticks and begin the (\*) Creek War, and may have been killed by Richard Johnson at the Battle of the Thames. The brother of Tenskwatawa, or "the Prophet," FTP, identify this Shawnee leader who lost to William Henry Harrison at Tippecanoe during the War of 1812. ANSWER: Tecumseh
- 15. Pencil and paper ready. You are trying to find the are of a region on a graph defined by the X-axis, Y-axis, and the line Y=-6x+24 (y equals negative 6x plus 24). Because the line has a negative slope and crosses through the first quadrant, it creates a triangle with the x and y axes with vertices at the origin and the x and y-intercepts of the line. Knowing this, you can find the lengths of the legs of the triangle, and then the area. (\*) FTP, what is the area of the sector? You have ten seconds.

ANSWER: <u>48</u> Square Units (height = 24, width = 4, 24\*4/2 = 48)

16. According to some sources, he is linked with Perseus after being sent down a river in a glass jar and discovered by the smith Mimir. This rider of Grani and father of Aslaug and Svanhild was caught up in a bizarre love quadrangle with Gunnar, Gudrun, and (\*) Brynhild, having earlier been assisted by Regin the dwarf, who created his sword Gram. FTP, identify this Norse hero who killed the dragon Fafnir, the son of Sigmund.

ANSWER: Sigurd or Sigfred or Siegfried

17. This piece's allegro motto finale heavily relies upon the timpani. It opens with a monothematic adagio, while its second movement was incorporated into *The Seasons*. The second of the (\*) London symphonies, it is its composer's Symphony 94 in G major. The sudden emergence of a loud C major andante movement gives the nickname to, FTP, what startling work of Joseph Haydn?

ANSWER: Haydn's Surprise Symphony (accept Symphony 94 in G Major early)

18. A man finds modern life devoid of religious meaning until he is shot by police in this author's *The Beggar*, while an imprisoned criminal exacts unending revenge in a novel often cited as the first Stream of Consciousness work in a certain language, *The Thief and the Dogs*. Dr. Booshy and Kirsha inhabit the titular street in (\*) Midaq Alley, while *Sugar Street* and *Palace Walk* are part of his most famous collection. FTP, identify this 1988 Nobel Prize winner, the Egyptian author of *The Cairo Trilogy*.

ANSWER: Naguib Mahfouz

19. Metamaterials, and materials with negative values for permittivity and permeability can have negative values of it. The Sellmeier equation uses wavelength to determine it, and, surprisingly, it can be less than (\*) one, as in x-rays. For water it is about 1.33, and for a vacuum it is exactly 1. FTP, name this quantity, governed by Snell's law, that measures how much the speed of light is reduced in a medium.

**ANSWER: Index of Refraction or Refractive Index** 

20. The peace of Berwick ended the first of two conflicts in his reign involving the Gordons and other Covanters, who opposed the rule of this King's deputy, Thomas Wentworth. That conflict, the Bishops' War, ended this man's Personal Rule, called the "Eleven Years of Tyranny" that had been conducted under William (\*) Laud. The Triennial act was passed by the Long Parliament under the reign of, FTP, what son of James I, most famous for losing his kingdom and his head to Oliver Cromwell in the English Civil War?

ANSWER: Charles I Stuart



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Bonuses

- 1. Bonus: The attackers called this action "General Uprising," though in the West it was named for lunar new year holiday on which it occurred. FTPE:
- [10] Identify this offensive launched by NVA and Viet Cong forces, seen as a major turning point of the Vietnam War.

ANSWER: <u>Tet</u> Offensive

[10] The Tet Offensive's primary target was this capital of South Vietnam. It is known today as Ho Chi Minh City.

ANSWER: Saigon

[10] This Vietnamese general and Defense Minister is generally considered the mastermind of the Tet Offensive. Along with Ho Chi Minh, he is regarded as the chief North Vietnamese strategist of the war.

ANSWER: Vo Nguyen Giap

- 2. Bonus: The titular figure declares that a ship has arrive from Delos, and, like Carmelo Anthony and Cam'ron, talks about how much he hates snitches. FTPE:
- [10] Identify this dialogue in that title figure attempts to persuade Socrates to flee his impending execution.

ANSWER: Crito

[10] Crito is one of many dialogues involving Socrates to be collected by this really famous student of Socrates's, who wrote *The Republic*.

ANSWER: Plato

[10] Socrates was being charged with corrupting the youth of Athens, a charge he responded to in this other dialogue that blasts Anytus, Lycon, and Meletus. Its title refers to a defense rather than an expression of remorse.

ANSWER: The Apology

- 3. Bonus: Answer these questions about Tibet's Tanggula mountains, FTPE:
- [10,10] The Tanggula mountains are home the headwaters of the Nu and Salween Rivers, as well as these two other rivers. One is the chief river of Southeast Asia, the other the longest in China.

**ANSWER: Mekong River and Yangtze River** 

[10] The mountains are home to the Tanggula Pass, the key route used to reach this capital of Tibet.

ANSWER: Lhasa

4. Bonus: Identify these writers who created closet dramas, FTPE:

[10] This author of *The Sorrows of Young Werther* wrote of a man who makes a deal with Mephistopheles in *Faust*.

ANSWER: Johann Wolfgang von Goethe

[10] This author of *Upon the Circumcision* and *Comus* wrote the closet drama *Samson Agonistes*. He's better known for works like *Lycidas* and *Areopagitica*.

ANSWER: John Milton

[10] This author created such memorably-named characters as Lady Hamilton Dalrymple in his "epic closet drama" *The Dynasts*. He's better known for creating characters like Bathsheba Everdeen and Diggory Venn.

ANSWER: Thomas Hardy

5. Bonus: Bonus: It is thought by most astronomers to be the driving force behind universal expansion. FTPE:

[10] Identify this hypothetical substance which can be dynamic or static, and which may constitute upwards of 70% of the universe.

ANSWER: Dark Energy (do not accept "Dark Matter")

[10] This constant, which can be symbolized lambda, or omega lambda when comparing energy density and critical density, was first proposed by Einstein for a stationary universe. It has been adopted by proponents of dark energy as a possible explanation for static dark energy.

ANSWER: The Cosmological Constant

[10] The idea of dark energy was first seriously considered after analysis of a type 1a supernova, which resulted from the violent explosion of one of these stars, characterized by high density and faint luminosity. Most main sequence stars will ultimately become one of these.

ANSWER: White Dwarfs

6. Bonus: Name these saints, FTPE:

[10] This apostle once denied Christ three times, but would probably prefer you remember him for being the first Pope, or at least for his fishing prowess.

ANSWER: Peter

[10] A group of angry druids beheaded this patron saint of Paris, which is probably why he is usually depicted in awesome fashion, holding his severed head in his hands.

ANSWER: **Denis** or **Dionysius** 

[10] Diocletian's soldiers tied this saint to post and killed him with a hail of arrows. Bummer.

**ANSWER: Sebastian** 

7. Bonus: Job has a dialogue with God in this man's play *The Masque of Reason*. FTPE:

[10] Identify this New England writer, better known for poems like "After Apple Picking," "The Death of the Hired Man," and "Mending Wall."

ANSWER: Robert Frost

[10] This Frost poem claims that man can find "salvation in surrender" and declares "the land was ours before we were the land's." He read it at John F. Kennedy's inauguration.

ANSWER: The Gift Outright

[10] Only the second collection published by Frost, after *A Boy's Will*, this geographically-named set of poems contained *A Servant to Servants, After Apple Picking*, and *Mending Wall*.

ANSWER: North of Boston

8. Bonus: It was described by Singer and Nicholson. FTPE:

[10] Identify this model, which maps the structure of the cell membrane and the manner in which materials diffuse through it.

ANSWER: Fluid Mosaic Model

[10] The Fluid Mosaic model relies on these ampipathic compounds. In addition to steroids, the glyco-and phospho-varieties are present in the membrane.

ANSWER: Lipids

[10] Potassium and sodium is the driving force for these entities, which control the voltage gradient along the cell membrane and are an integral part of the Fluid Mosaic model. Many neurotoxins work by interfering with their function.

**ANSWER:** Ion Channels or Channel Proteins

- 9. Bonus: It held power following the National Convention until being overthrown on the eighteenth of Brumaire. FTPE:
- [10] Identify this final governing period of the French revolution, characterized by the rule of five administrators.

### **ANSWER: The Executive Directory**

[10] The Directory was established chiefly under the plan set forth by Paul Barras, who had participated in this coup to overthrow the bloody Committee of Public Safety under Robespierre. It is named for a month of the French Revolutionary Calendar.

# ANSWER: Thermidorian Reaction or Revolt

[10] The Directory formed after civil unrest was put down by this young general, who would later do some really famous things as Emperor of France, including facing Wellington at Waterloo.

# ANSWER: Napoleon Bonaparte

- 10. Bonus: Images like *The Three Crosses* and a depiction of Christ anointing the sick, called *The Hundred Guilder Print*, comprise some of this artist's etchings. FTPE:
- [10] Identify this Dutch artist of *The Anatomy Lesson of Dr. Nicholas Tulp*.

# ANSWER: Rembrandt Harmenszoon van Rijn (first or last name is fine)

[10] This most famous Rembrandt work depicts the militia company of Captain Cocq. It was actually set during the day.

# ANSWER: The Night Watch

[10] The name of the title figure of this work is not named for the religion of a Dutch woman, but is derived from its depiction of a biblical ceremony, perhaps involving Abraham and Sarah.

### **ANSWER: The Jewish Bride**

- 11. Bonus: Name these lawyers from literature, FTPE:
- [10] This expert sharpshooter throws a glass in his futile attempt to defend Tom Robinson in Harper Lee's *To Kill a Mockingbird*.

# ANSWER: Atticus Finch (either name)

[10] This colleague C. J. Stryver defends a look-alike in a treason trial, during which he falls for one of the witnesses for whom he later makes a big sacrifice.

# ANSWER: Sydney Carton (from Charles Dickens's A Tale of Two Cities)

[10] This father of Dallas is repulsed by Julius Beaufort and Sillerton Jackson, but still ends up staying with May Welland and losing Ellen Olenska in Edith Wharton's *The Age of Innocence*.

# ANSWER: Newland Archer

- 12. Bonus: Answer some questions about the 2008 Iowa Caucus results, FTPE:
- [10] This former Baptist minister and Governor of Arkansas stunned Mitt Romney by winning the Republican nomination, aided by a wave of evangelical support.

# ANSWER: Michael Huckabee

[10] This former UN ambassador and Energy Secretary predicted a third-place finish in Iowa before garnering just 2% of the vote. He's also the current Governor of New Mexico.

### ANSWER: William Richardson III

[10] This Californian's 5% approval rating from the ACLU and 100% approval rating from Gun Owners of America might help explain the fact that he actually won a delegate in Wyoming, but won only 515 out of 100,000 votes in Iowa.

# ANSWER: Duncan Hunter

13. Many buildings that were once mosques in China are now temples to this man. FTPE:

[10] Identify this gigantic eunuch, who as a Grand Admiral of China made seven famous voyages.

ANSWER: Zheng He or Cheng Ho

[10] Zheng He served in the navy of this Chinese dynasty, noted for rulers like the Hongwu Emperor.

ANSWER: Ming Dynasty

[10] No one could really succeed Zheng He since the Ming dynasty pulled almost all naval funding following the disastrous Tumu Crisis in which the Zhengtong emperor was captured by Esen Tayasi and forces of this group, which had founded the dynasty preceding the Ming.

ANSWER: The Mongols (or the Mongolians, technically)

14. Bonus: She is considered the premiere mahavidya, or aspect of Devi. FTPE:

[10] Identify this Hindu goddess, associated with the thuggee sect.

ANSWER: Kali

[10] Kali's mount is this kind of an animal. The Egyptian god Anubis is usually cited as possessing the head of one of these creatures.

ANSWER: Jackal

[10] One hilarious story about Kali tells how she slaughtered Raktabija and danced on a bunch of corpses, but accidentally defiled the body of her husband, this "Destroyer" from Hindu myth and part of the trimurti with Brahma and Vishnu.

ANSWER: Shiva

15. Bonus: This man used only a single violin for his *Strung Out*. FTPE:

[10] Identify this American composer, noted for works like Akhnaten and Satyagraha.

ANSWER: Philip Glass

[10] Glass may be most famous for a work setting this major physicist associated with Brownian motion and the photoelectric effect "on the Beach."

ANSWER: Albert Einstein

[10] Glass's *Music in the Shape of a Square* is a tribute to this man, a leading member of the French group *Les Six* and composer of *Gymnopedie* and five pieces of "furniture music."

ANSWER: Erik Satie

16. Bonus: Identify these cycles, FTPE:

[10] This thermodynamic cycle, named for a French scientist, is the most efficient possible cycle for converting thermal energy into work.

**ANSWER: Carnot Cycle** 

[10] This four-step cycle uses intake, compression, power, and exhaust strokes and is the most commonly employed cycle in modern automobile engines. It is named for a German chemist.

ANSWER: Otto Cycle

[10] A Scottish scientist is the namesake of this cycle, which converts heat into work by rapidly creating water vapor. It is the basis for nuclear reactors, as well as most coal-based power generators.

ANSWER: Rankine Cycle

17. Bonus: Identify these Egyptian pharaohs, FTPE:

[10] Often considered Egypt's greatest female ruler, this regent of Thutmose III established numerous trading routes and began a campaign of Egyptian expansion.

ANSWER: **Hatshepsut** 

[10] This pharaoh is regarded as the pharaoh from whom Moses freed the Hebrews in Exodus.

Historically, he's famous for his architecture, as well as his victories over the Sherdan but loss to the Hittites at Kadesh.

ANSWER: Ramesses II or the Great

[10] This ruler is known for constructing the smallest of the great Pyramids of Giza, as he evidently was not as cool as Khufu or Khafra.

ANSWER: Menkaura

18. Bonus: Identify these minerals from the mohs scale, given their values and the minerals which appear before an after them, FTPE:

[10] Seven, between orthoclase feldspar and topaz.

ANSWER: Quartz

[10] Eight, between topaz and diamond.

ANSWER: Corundum

[10] Two, between talc and calcite.

ANSWER: Gypsum

19. Bonus: Answer the following concerning the illustrious dramatic career of Tony Shalhoub, FTPE:

[10] Shalhoub played Jeebs, a resilient pawn shop owner and illegal arms trader, in the two installments of this film franchise.

ANSWER: Men in Black

[10] Shalhoub is probably best known for his portrayal of this Obsessive-Compulsive detective in an eponymous USA show.

ANSWER: Adrian Monk

[10] Shalhoub starred with Denzel Washington and Bruce Willis in this thriller about Islamic terrorists conducting the titular campaign against New York, interestingly created well before 9/11.

ANSWER: The Siege

20. Bonus: It opens with June Woo receiving an invitation to take her mother's place in a Mah-Jong game. FTPE:

[10] Identify this 1989 novel told as a frame-tale, centering on two generations of Chinese-American women.

ANSWER: The Joy Luck Club

[10] This author of *The Hundred Secret Senses* and *The Opposite of Fate* wrote *The Joy Luck Club*.

ANSWER: Amy Tan

[10] In this other Tan novel, Pearl reconciles with her mother Winnie and learns the dark secrets of her family's past over the course of a series of traditional Chinese ceremonies.

ANSWER: The Kitchen God's Wife