

DACQ

D ynasty A cademic C ompetition Questions

August 2007 Packet 1: Tossups

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- 1. This figure's actions include solving an architectural dispute by encouraging four leaders to lift sides of a cloth that held a stone, and his first male supporter may have been his ten year-old cousin, or the first of the rashidun. It was at Mount (*) Hira that Jibrail transmitted to him the basmala, which would be come the first sura. FTP, identify this Meccan who received the verses of the Our'an and founded Islam.

ANSWER: Muhammed

- 2. Sections of this range include the Graian, Julian, and Dolomites, and its eastern portion contains the Flsych zone and the Brenner pass, where a famous pact was declared. This range's southern portion is often named for its limestone composition, and Lake Cuomo and Lake (*) Maggiore both border it. Its highest peak is Monte Cervino, better known as the Matterhorn. FTP, identify this mountain range that borders Lake Geneva, Italy, and Switzerland. ANSWER: The Alps
- 3. Pencil and paper ready. Dren wants to know the maximum amount of ice cream he can possibly cram into one cone, given that the cone is fifteen centimeters high and its opening has a diameter of six centimeters. Knowing that the equation for the volume of a cone is (*) one third times height times radius squared times pi, FTP, find the volume of the ice cream cone. You have ten seconds

ANSWER: $\underline{40 \text{ pi}}$ cubic centimeters [V=(pi)*(1/3)*(15)*(3)²]

4. The Cosmati floor design evident in this work was inspired by the artist's studies of Westminster Abbey, and an iron crucifix is visible at top left. Two Johannes Walthers hymns are the subject of an open book, which lies next to a T-square and a (*) lute, while the shelf above contains scientific instruments and an astrolabe against a green curtain. FTP, identify this Hans Holbein work depicting an amorphous skull and the two titular diplomats.

ANSWER: The (French) Ambassadors

5. This country's literary output includes an account of the famous guide Malintzin, penned by the same author who created *The Book of Emotions* and told of Tita's passionate cooking in *Like Water for Chocolate*. Besides Laura (*) Esquivel, authors from this country have produced *The Old Gringo*, about Ambrose Bierce's death here, and *Sun Stone*, inspired by the Aztec Calendar. Carlos Fuentes and Octavio Paz are native sons of, FTP, what most populous Spanish-speaking country? ANSWER: Mexico (accept Mexican)

6. An equation named for this man and Duhem describes changes in chemical potential in a system, and he names a range of statistical constructs as well as the statistical mechanical entropy of thermodynamic system. Like Helmholtz, he names a type of (*) thermodynamic potential, which this American described in *On the Equilibrium of Heterogeneous Substances*. FTP, identify this chemist best known for his eponymous phase rule and free energy.

ANSWER: Josiah Willard Gibbs

- 7. Hyman Rickover and Charles Vreeland were among those who examined it, and after the latter's report it was moved a substantial distance. The findings of William Samson, who had won a victory on the opposite side of the island, supported the (*) coal bunker fire theory, though Hearst's "yellow journalism" stirred outrage. FTP, identify this US ship whose sinking in Havana Harbor was "remembered" during the Spanish-American war, named for a northeastern state. ANSWER: (Sinking or bombing of the) USS Maine
- 8. One of this man's creations threatens to "sine your pitty on the runny kine" in an eponymous 2001 comedy inspired by a TV character. He has portrayed Onski next to Chris Farley's B Fats as well as the militant Nat X. His first success came with *Bring the Pain* and he notably discusses the (*) Champagne Room in another show, while his most recent was 2004's *Never Scared*. Known for the comedy special *Bigger and Blacker* and roles in *Head of State* and *Dogma*, FTP, identify this comedian whom everybody hates in a UPN show about his formative years.

ANSWER: Chris Rock

- 9. Towards the end of his life, his writings became political with the *Patriot* series, which largely responded to colonists. He wrote of Nekayah and Imlac, who accompany the titular prince of Abyssinia in *Rasselas*, and this author rose to fame by publishing *The* (*) *Rambler*. He is chiefly known for an epic mass-biography of writers, *Lives of the English Poets*, and for his own biography by James Boswell. FTP, identify this man who compiled in 1755 a *Dictionary of the English Language*. ANSWER: Samuel Johnson
- 10. This work's publication was delayed since the publishing organization had recently squandered its budget on a book about the history of fish. John Flamsteed's data was cited extensively in it, and Chandrasekhar published an "updated" version of this tract after being irked by its use of antiquated (*) Euclidean reasoning. With sections including "On the system of the world" and "On the motion of the bodies," FTP, identify this master work of Isaac Newton. ANSWER: Principia Mathematica
- 11. Funds for this event were secured by Tom Clarke, who spent it huddled in a concrete room in a post office, which served, along with Four Points, as headquarters for its instigators. Germany failed to provide the arms needed for it to (*) succeed, and Roger Casement was unable to reach Eoin MacNeill in time to warn him, leading to a risky raid at Phoenix Park. Led by Patrick Pearse and James Connelly, FTP, identify this 1916 rebellion by Irish republicans, named for a Christian holiday. ANSWER: Easter Rising (or Eiri Amach na Casca, in theory)

- 12. Distance measurements by Allen Pearson were key in creating it, and in 2007 this scale was retooled, correcting for variations in structural integrity and applying no upper limit for wind speed for its highest realized value, (*) five. A value of four is required to destroy well-built structures, but storms with a value of two will demolish mobile homes. FTP, identify this scale that measures Tornado strength, named either for its Japanese formulator or for the first letter in his name. ANSWER: Fujita Scale
- 13. This poem speaks of "truth's fiery reflection" which "smiles at the explorer" and of those who enter "fire drunk/thy sanctum." Later, the speaker asks if the millions fall before God and if the world recognizes its creator, and refers to the titular property as (*) "beautiful spark of the Gods" and "daughter of Elysium." FTP, identify this ode by Friedrich Schiller, famously set to music in Beethoven's 9th symphony.

ANSWER: Ode to Joy

14. This figure fathered the morbid architect Cycnus and a giant noted for his man-eating mares, Diomedes, both of whom were slain by Heracles. The giants Ephialtes and Otus trapped him in a jar for a year, and his more famous children include Penthesilea and (*) Hippolyta, queens of the Amazons. He angered Hephaestus after fathering two children with Aphrodite, Phobos and Deimos. FTP, identify this counterpart of the Roman Mars, the Greek god of war.

ANSWER: Ares (Mars is at no point correct)

15. They are prone to suffer Aspergillosis and Pebrine, and extracts from 500,000 of them allowed for the characterization of the first known pheromone, bombykol, named after this species' latin name bombyx mori. They are called *beondegi* when (*) boiled, and their own diet consists mainly of White Mulberry. However, it is for the single strand that makes up their cocoons that they are best known. FTP, identify these caterpillars whose fibers were exported from China on a namesake "road."

ANSWER: Silkworm

- 16. In this work, the well-read prostitute Marya dates Nikolai, a social democracy advocate and brother of one of the protagonists. That protagonist uses a word game to apologize to and win the heart of his beloved Kitty, while (*) Sergei's father yells at him over his mother's suspected betrayal. The affair of Dolly's husband mirrors the title figure's relationship with Count Vronsky, in, FTP, what Leo Tolstoy novel whose tragic heroine ultimately throws herself under a train? ANSWER: Anna Karenina
- 17. Ligand field theory effects are limited due to the strong shielding of their partially filled 4f orbitals. Their preferred oxidation state is three plus, and their atomic radii tend to be smaller than expected, an effect known as their namesake "contraction." Lutetium, ytterbium, (*) promethium, and cerium are all members of, FTP, what series, which appears above the actinides and is named for element with symbol La?

ANSWER: Lanthanides

- 18. Raymond of Tolouse conceded defeat in one treaty of this name, which ended the Albigensian Crusade. Another established the Black Sea as a neutral territory and embarrassed Nicholas I following the Crimean War. Three were signed in a period of (*) five years, with the latter being signed by David Hartley, John Jay, and Benjamin Franklin in 1783. FTP, identify this city which lends its names to treaties ending the Seven Years War, the American Revolution, and many, many others. ANSWER: Treaty/Treaties of Paris
- 19. This poem's structure is mirrored in the poet's later "The Draft Horse," which uses the phrase "crack of a broken shaft" in place of the "sweep/of easy wind" but follows the same AABA/BBCB pattern. The second stanza describes the setting as (*) "between the woods and frozen lake" and notes that it is "the darkest evening of the year." FTP, identify this poem which begins by wondering "whose woods are these I think I know," penned by Robert Frost. ANSWER: Stopping by Woods on a Snowy Evening
- 20. As governor of Hispania, this man instituted several debt reform laws, perhaps inspired by his own considerable debt that had been amassed when he was elected Pontifex Maximus and which was covered by one of his rivals, who had lost at Carrhae. This leader would go on to defeat (*) Vercingetorix, described in his *Commentaries on the Gallic War*. Forming the first triumvirate along with Crassus and Pompey, FTP, name this Roman leader, assassinated by Brutus and Cassius.

ANSWER: Gaius Julius Caesar



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August 2007
Packet 1:
Bonuses

1. Bonus: Identify the following prominent Americans who attended Bowdoin College in Maine during the 19th century, FTPE:

[10] This American author graduated in 1825, and is famous for works like *A Psalm of Life* and *The Song of Hiawatha*.

ANSWER: Henry Wadsworth Longfellow

[10] This dark horse candidate took 35 ballots to earn the 1852 Democratic nomination. He met close friend and biographer Nathaniel Hawthorne at Bowdoin.

ANSWER: Franklin Pierce

[10] This 1850 graduate suffered two humiliating defeats at Chancellorsville and Gettysburg, but gained fame for his role as commissioner of the Freedmen's Bureau and for lending his name to a black university.

ANSWER: Oliver Otis Howard

2. Bonus: Answer the following about a philosophical school, FTPE:

[10] This doctrine, a form of consequentialism, evaluates the merit of an action based on the positive and negative impact it can have.

ANSWER: <u>Utilitarian</u>ism

[10] This famous proponent of Utilitarianism wrote the fittingly titled *Utilitarianism*. He also wrote *On Liberty*.

ANSWER: John Stuart Mill

[10] This man wrote *Introduction to the Principles of Morals* and is sometimes called the founder of Utilitarianism.

ANSWER: Jeremy Bentham

3. Bonus: His first name is Mohun, and he strives desperately to escape his domineering Tulsi in-laws. [10] FTP, identify this Indo-Trinidadian who seeks a house for himself in the title of a 1961 novel.

ANSWER: (Mr.) Mohun Biswas (either name)

[10] This Trinidadian winner of the 2001 Nobel wrote *A House for Mr. Biswas*, as well as *The Enigma of Arrival* and *A Bend in the River*.

ANSWER: V(idiadhar) S(urajprasad) Naipaul

[10] Naipaul's *A Bend in the River* partially serves as a commentary of this novel by a Polish-born author, in which Marlow searches for the crazed ivory merchant Kurtz.

ANSWER: Heart of Darkness

4. Bonus: Pencil and paper ready. You will have ten seconds per answer. You are arranging twelve identical square tiles to form rectangles of different shapes. FTPE:

[10] What is the longest perimeter of rectangle you can make with twelve tiles?

ANSWER: 26 units [a 12x1 rectangle]

[10] What is the shortest perimeter you can make?

ANSWER: 14 units [a 4x3 rectangle]

[10] How long is the diagonal of that rectangle?

ANSWER: 5 units [3-4-5 triangle]

5. Bonus: Two prominent composers both used the term "pathetique" to title notable compositions. FTSNOP:

[10,10] Identify those two composers, one of whom created works like *The Creatures of Prometheus* and the *Eroica* symphony, while the other is responsible for works like the *Winter Dreams* symphony and the opera *The Queen of Spades*.

ANSWER: Ludwig van Beethoven and Pyotr Ilyich Tchaikovsky

[5,5] In order, what kind of compositions are the works entitled *Pathetique* by Beethoven and Tchaikovsky?

ANSWER: (Piano) Sonata and Symphony (order, of course, matters)

6. Bonus: Answer the following about a famous 1957 novel, FTPE:

[10] The disintegration of antihero Dean Moriarty is central to this work, which takes its narrator Sal Paradise from California to Mexico to New York, among other places.

ANSWER: On the Road

[10] This author of Big Sur and Visions of Cody wrote the Beat classic On the Road.

ANSWER: Jack Kerouac

[10] Sal's best friend in *On the Road* is this man, who represents Allen Ginsberg.

ANSWER: Carlo Marx (either name)

7. Bonus: Identify the following rulers who were (or still are) completely out of their minds, FTPE:

[10] In between beheading subordinates for amusement and various unspeakable acts, this Roman emperor decided to have his horse Incitatus appointed high priest and consul.

ANSWER: Caligula or Gaius Julius Caesar Augustus Germanicus

[10] According to this man's official biography, he was born from a rainbow on mount Baekdu despite numerous photos of his youth in an impoverished Russian fishing village. This North Korean Leader also kidnapped a South Korean actress to star in his "award-winning" movies.

ANSWER: Kim Jong-Il (prompt on "Kim")

[10] This architecturally-obsessed Bavarian is fittingly called "the Mad" and reportedly enjoyed dropping things from his highest towers. On occasion, those things were his own peasants.

ANSWER: Ludwig II "the Mad" of Bavaria

8. Bonus: Identify these 2008 Democratic presidential candidates from comments they probably wish they could take back, FTPE:

[10] This Delaware senator landed in hot water for claiming that an Indian accent was required to shop at 7-11 and for referring to Barack Obama as the first mainstream black candidate who was "clean and a nice-looking guy."

ANSWER: Joe Biden

[10] During an NAACP debate, this candidate accidentally denounced her opponents as "not serious" into an open mic. She's a former first lady.

ANSWER: Hilary Rodham Clinton

[10] Actually, this Alaskan doesn't have much of anything to take back, mainly because his youtube video campaigns feature him staring in disturbing silence at the camera for three full minutes then throwing rocks or starting fires.

ANSWER: Mike Gravel

9. Bonus: FTPE, given some geographical features, identify the celestial body it is located on:

[10] Olympus Mons ANSWER: <u>Mars</u>

[10] Maxwell Montes, Isthar Terra

ANSWER: <u>Venus</u>
[10] Gilgamesh Crater
ANSWER: <u>Ganymede</u>

10. Bonus: This work coined the term "conventional wisdom." FTPE:

[10] Identify this 1958 work of political economy which criticized America for growing income disparities and the private sector's rise over the public sector.

ANSWER: The Affluent Society

[10] This Canadian-born economist penned A Short History of Financial Euphoria and The Affluent Society.

ANSWER: John Kenneth Galbraith

[10] Galbraith wrote *The Ambassador's Journal* about his time as ambassador to this country, at the time led by Indira Gandhi.

ANSWER: India

11. Bonus: This novel ends with Maximilien Morrel paired with Valentine de Villefort and the title character paired with his servant Haydee. FTPE:

[10] Identify this novel in which the title figure is inspired to his actions by the teachings of Abbe Faria.

ANSWER: The Count of Monte Cristo

[10] This author of *The Two Dianas*, *The Gold-Thieves*, and *The Three Musketeers* wrote *The Count of Monte Cristo*.

ANSWER: Alexandre **Dumas**, Pere or the Elder

[10] This one-time fiancée of Edmond Dantes ends up living in seclusion in Marseilles, having earlier married her cousin, Fernando Mondego.

ANSWER: Mercedes Herrera (either name)

12. Bonus: Identify these extremely low areas, FTPE:

[10] Bounded by the Amargosa, Panamint, Sylvania, and Owlshead mountains, this California site contains the lowest point in North America.

ANSWER: Death Valley

[10] The geological predecessor of this body of water was Lake Lisan. It is often cited as the lowest point on Earth.

ANSWER: **Dead Sea or Sea of Salt**

[10] This point northeast of Fais Island is the lowest point of the oceans, and is thus also the lowest point of the Marianas Trench.

ANSWER: Challenger Deep

13. Bonus: They are double displacement reactions in which a salt and water are created. FTPE:

[10] Identify this kind of reaction that occurs when equal amounts of a base and an acid react with one another.

ANSWER: Neutralization Reaction

[10] Analysis of the enthalpy and other properties of neutralization reactions is usually achieved by using this kind of device that measures the heat of chemical reactions. Types include constant pressure and bomb.

ANSWER: Calorimeter

[10] When a weak acid is used in a neutralization reaction, the reaction is classified as this type in which the free energy change is positive.

ANSWER: Endothermic or Endergonic or Unfavorable or Nonspontaneous

14. Bonus: James Walker, Green Clay Smith, and Samuel Cary all ran in this election. FTSNOP:

[10] Identify this 19th century election which was followed by a noted "compromise" that ended reconstruction.

ANSWER: Election of 1876

[5,5] These two men fronted the Democratic and Republican parties, respectively. One won the popular vote, but the other won the election.

ANSWER: Samuel J. Tilden and Rutherford B. Hayes

[10] In this state, a controversy over ballot design erupted, with the state's then four electoral votes going to Hayes. It wasn't the last time this state had that problem.

ANSWER: Florida

15. Bonus: Identify these Socratic dialogues, FTPE:

[10] Erixymachus, Pausanius, and Agathon discuss the nature of brotherly and erotic love over dinner in Athens.

ANSWER: **Symposium**

[10] The title figure of this dialogue warns Socrates that a ship is coming from Delos, and tells him that he will finance his escape from prison. Socrates refuses.

ANSWER: Crito

[10] This best-known work of Plato features the famous Allegory of the Cave, as well as discussing the titular ideal society.

ANSWER: The Republic

16. Bonus: Identify the following athletes who suffered head injuries in ways not usually associated with their sport, FTPE:

[10] Kermit Washington punched this Croatian Houston Rocket during a brawl in 1977, causing him to taste his own cerebrospinal fluid.

ANSWER: Rudy Tomjanovich

[10] Perhaps inspired by Kellen Winslow, this current Pittsburgh Steeler crashed his Suzuki Hayabusa while driving with an expired license and not wearing a helmet, resulting in numerous parts of face being broken.

ANSWER: Ben Roethlisberger

[10] This man, who returned to boxing after preacher Benny Hinn "healed" his heart condition, famously had two square centimeters of earlobe not so surgically removed by Mike Tyson in 1997.

ANSWER: Evander Holyfield

- 17. Bonus: Name the British author from characters, F15PE, or from works, FTPE:
- [15] Edward Ashburnham, John Dowell, Christopher Tietjens.
- [10] Parade's End, The Good Soldier.

ANSWER: Ford Maddox Ford

[15] Henry Esmond, Miss Pinkerton, Amelia Sedley.

[10] Pendennis, The Newcomes, Vanity Fair.

ANSWER: William Makepeace Thackeray

18. Bonus: Identify the following Chinese dynasties, FTPE:

[10] Han Feizei's Legalist teachings rose to prominence under Commissioner Li Si and its famous first emperor, who began the Great Wall and filled his tomb with terracotta warriors.

ANSWER: Qin

[10] It followed the Five Dynasties and Ten Kingdoms era, and brought stability by issuing paper currency. It was challenged by Wang Anshi (Aww-jah) and later by the Mongols, who toppled it.

ANSWER: Song

[10] The Xuande, Yongle, and Hongwu emperors were among the rulers of this last ethnically Han dynasty that overthrew the Yuan and preceded the Manchu. It is also known for its pottery.

ANSWER: Ming

19. Bonus: Supply the words missing in the following descriptions of famous works of art, FTPE:

[10] A sign above three men and a woman in red in Edward Hopper's *Nighthawks* proclaims these cigars are available for only five cents.

ANSWER: Phillies

[10] This name is scrawled above the date "1917" on the corner of Marcel Duchamp's *Fountain*. Hint: It's not "Marcel Duchamp."

ANSWER: R. Mutt

[10] The first and last name of the sculptor is scratched into Mary's sash next to "Florentine, made it" in the *Pieta* that was supposedly rumored to have been done by another man.

ANSWER: Michaelangelo Buonarroti (prompt on partial answer)

20. Bonus: Name these terms from evolutionary biology, FTPE:

[10] Darwin coined this two-word term for the process by which the most heritable traits are passed on, since the most fit members of a species are more likely to reproduce.

ANSWER: Natural Selection

[10] In contrast with natural selection, gene changes due to chance rather than advantage over environment or competitors characterize this phenomenon.

ANSWER: Genetic Drift

[10] Genetic drift is most influential when a population undergoes this effect, the removal of a substantial portion of a population's gene pool, which results in greatly diminished sample size.

ANSWER: **Bottleneck Effect**