

DACQ Dynasty Academic Competition Questions

January 2008 Packet 2: Tossups

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- 1. One section of this work draws modern criticism over its recommendation that one strike and beat fortune, because fortune is like a woman. It discusses useless, mediocre, and ideal forms of intelligence, and claims that strong leadership is more important than the innate qualities of those who are led, citing the (*) armies of Hannibal and Scipio. The author derides the use of mercenaries by his home country in this work, written for the Medici family and possibly based on Cesare Borgia. FTP, identify this treatise on military and political power, written by Niccolo Machiavelli.

ANSWER: The Prince

2. Schrodinger's What is Life? uses this to comment on the theory of abiogenesis, while the problems of using it to examine other statements is called Loschmidt's Paradox. First discussed in Carnot's Reflections on the Motive Power of Fire as a consequence of the relationship between (*) work and decreasing heat, Claudius stated its simplest form, that heat cannot spontaneously flow from a colder body to a hotter one. FTP, identify this numbered law of thermodynamics which states that entropy is always increasing.

ANSWER: Second Law of Thermodynamics

3. Its secondary form is created by the vascular cambium, while its primary form arises from apical meristem. Its function is modified in the practice of girdling, and it consists of ribosomerich albuminous cells and sclerieds. Ordinary, transfer, and intermediary Companion cells perform its primary function along with (*) Sieve Tube cells, and it is generally located on the periphery of the plant and in the bark on trees. FTP, identify this plant transport system responsible for moving nutrients, proteins, and other substances, often constrasted with xylem.

ANSWER: Phloem

4. It saw the chaotic Council of Peoples' Commissioners under the sort-of rule of Friedrich Ebert, and it signed a notable treaty in Compiegne Forest. Rosa Luxembourg led the communist Spartacist League against this entity, whose constitution guaranteed the rights of foreign groups and a disastrous proportional voting system that led to party (*) splintering. Huge inflation inflicted by the Dawes Plan ended its Golden Era, and led to events like the Beer Hall Putsch. Ending with the ascent of the Nazis, FTP, identify this German Republic which ruled in the years between the two World Wars, named for a city in Thuringia.

ANSWER: Weimar Republic or Government (prompt on something like "Germany")

5. This compound was created after an aberrant attempt to synthesize hydrastatin, though its similarity to Piperonal has led to false claims that it was first made by Haber. It contains a substituted amphetamine core, like most entactogens, and its hydrochloride crystalline form cannot be naturally compacted, leading to practices like "parachuting." Produced through the Wacker Process by starting with Safrole oil, it chiefly acts on (*) Serotonin Transporters. Often coming in candy-like tablets, FTP, identify this party drug associated with the rave scene, technically known as MDMA but popularly known as "E."

ANSWER: <u>Ecstasy</u> (or <u>Methylenediioxymethamphetamine before mentioned, prompt on reasonable slang terms)</u>

6. Mahler moved the third of a series of overtures written for this work to the middle of Act II, where it is most commonly performed today. That overture is named for a participant in the quartet "A wondrous feeling fills me," in which she is joined by Rocco, Jaquino, and Marzelline. Don Pizarro is locked in his own (*) prison as this work concludes, after Leonore successfully frees Florestan. FTP, identify this work, Opus 72, best-known for being the only opera by Ludwig von Beethoven.

ANSWER: Fidelio (accept Beethoven's Op. 72 early)

7. This man is rumored to have once gotten into a fistfight with Ernest Hemingway in the same location that inspired his poem beginning with the line "She sang beyond the genius of the sea." This man described the "slovenly wilderness" in another poem, which depicts the titular object on a hill in Tennessee. The author of "The Idea of Order at Key West" and "Anecdote of the (*) Jar," he used religious images in his "Sunday Morning." Best known for describing multiple perspectives on a certain bird and the "roller of big cigars," FTP, identify this American poet who wrote "Thirteen Ways of Looking at a Blackbird" and "The Emperor of Ice Cream."

ANSWER: Wallace Stevens

8. When these compounds react only with each other, only one 8-atom molecule can ever be created and new molecules may exhibit properties not seen in any of these compounds. They may increase lipid permeability and the largest named one experiences alpha decay and does not as readily form a strong acid when paired with (*) hydrogen, and is called astatine. The only group that has members in all three phases at room temperature, FTP, iodine, bromine, fluorine, and chlorine all members of what non-metal seventeenth group on the periodic table?

ANSWER: Halogens (accept Group 17 early)

9. Among the agreement violations cited by one side during this event were the Constantinople Convention and the Rhodes agreement. That side held the "Free World Allies" meeting between Lloyd, Murphy, and Pineau, which led to the Protocol of Sevre after Glubb Pasha was dismissed. A major arms purchase from Czechoslovakia raised the tensions of this event, which occurred out of a desire to gain (*) funding for the Aswan High Dam and due to support for the Palestinians. Lester Pearson won the Nobel Prize for helping to resolve, FTP, what 1956 "crisis" between Western powers, Israel, and Egypt over the namesake Egyptian canal?

ANSWER: Suez Crisis

10. In a paper discussing a certain "view" of psychology, this man rejected Thorndike's Law of Effect as well as the principles of *Bewusstseinslage* and imageless thought. His wife Mary Ickes stole love letters he wrote to his mistress, Rosalie Rayner, and published them in a newspaper, leading him to break from (*) Johns Hopkins. This man's most famous work was discussed in the paper "Conditioned Emotional Reactions," which contained the results of an experiment involving a white rodent. FTP, identify this man who terrified a small infant named "Little Albert," along with Skinner one of the leading figures of behaviorism.

ANSWER: John B. Watson

11. This god's most famous attribute may have been inherited from the war god Wepwawet, and he is strongly associated with imiut fetishes. The glittering snake Kebechet was this figure's first wife, and he was later linked with Bast and called the son of Nepthys. This "lord of the cleansing room" received Osiris's (*) internal organs in his role as an embalmer, and oversaw the weighing of the heart against Ma'at's feather. FTP, identify this Egyptian god of death and mummification, who possesses the head of a jackal.

ANSWER: Anubis (or Inpu or Anupu)

12. One ruler was overthrown after he melted down this man's sarcophagus to make coins. Due to the poison-induced brain damage of his half-brother, called Arridaeus, Craterus and Perdiccas attempted to maintain order following this ruler's death. That death led to a series of conflicts which saw the battles of Gaza, Crannon, and Ipsus among (*) Diadochi like Cassander, Antigonus, Seleucus, and Ptolemy. The winner at Issus and Gaugamela, FTP, identify this son of Philip II of Macedon, a ruler generally regarded as having been pretty good.

ANSWER: Alexander III or the Great

- 13. One legend about this man describes him as founding Naples with his magical powers, and he is the possible author of the *Catalepton* and "The Mosquito." Such questionable poems also include "The Barmaid" and "Lydia" in a namesake appendix. Maecenas sponsored his work that includes a section on beekeeping, while this other of the "Hymn to (*) Italy" focused on agriculture in two major works. Noted for the *Georgics* and the *Bucolics*, or *Eclogues*, FTP, identify this Roman poet who told of a wayward Trojan prince who meets Dido in *The Aeneid*. ANSWER: Virgil or Publius Vergilius Maro
- 14. Their presentation involved the declaration that certain lines are always solenoidal because measuring the divergence of a quantity measured in Tesla's is always zero. Stokes's theorem was used to prove one of them, which was later modified by Lenz's law, and was named by Oliver Heaviside for Micheal (*) Faraday. Also encompassing a circuit law by Ampere and Gauss's Law, they serve as the basic principles for electromagnetism. FTP, identify this group of equations named for a Scottish physicist.

ANSWER: Maxwell's Laws or Equations

15. One of these saw the capture of John West, while Tomasito was linked with one in Taos. Luther Parker created Indian Stream, Francis Nicholson opposed Jacob Leisler, and John Fries was active during the Quasi War in these kind of events. The case of *Luther v. Borden* was central to one of these events, and events viewed as a prelude to the most successful one include the Pine Tree Riot, the War of Regulation, the formation of the (*) Committees of Correspondence, and the Boston Tea Party. Rhode Island saw an example led by John Dorr of, FTP, what kind of unruly reaction to the ruling power in a certain Western-Hemisphere country, whose other examples include the Whiskey and Shays?

ANSWER: (American) Rebellions (accept anything reasonably close)

16. This man reflected on a "spiritual journey" he underwent after finishing the sloping Luce Memorial Chapel, from which this architect drew inspiration from Le Corbusier's work in India. The twisting, steel Torre Espacio in Madrid, Raffles City in Singapore, and the Bank of America building are all works of this architect, who used sloping glass sides and cylinders in his (*) Rock and Roll Hall of Fame. Best-known for his inverted glass pyramid at the Louvre in Paris, FTP, identify this Chinese American architect.

ANSWER: **Ieoh Ming Pei**

17. The poem "The Poor Night" plays a key role in this work, triggering Aglaya to embrace her hopeless love for the protagonist. An encounter with Ganya prompts that protagonist, who had arrived on a train to visit General Yepantchin, to feud with Rogozhin over his beloved, who Rogozhin ultimately stabs after the title character has an (*) epileptic seizure. The futile virtue of the lover of Nastasya Filippovna inspires the title label of, FTP, what account of Prince Myshkin, written by Fyodor Dostoyevsky?

ANSWER: The Idiot

- 18. It is home to a large chunk of a Hemlock tree referred to as the "Old Man" of this location, which was popularized due to Joseph Diller's 1902 report. Fontinalis grows prominently here, despite high saline content due to the andesite and rhyodacite contents of the former Mount Mazama, whose destruction created (*) Wizard Island and other features of this lake. The deepest lake in North America is, FTP, what Oregon lake, named for the fact that it's pretty much a big pit? ANSWER: Crater Lake
- 19. In the 1970s this present-day country provoked the creation of INTERFET due to the FRETILIN party's overtures to communist China. Nicolau Lobato founded that party's militant Falintil wing, whom Taur Matan Ruak dissolved after having earlier fought against Operation Lotus. Current political crises have endangered Mari Alkatiri, Jose Ramos Horta, and Xanana (*) Gusmao, the most prominent leaders of this recently-created country. Throwing off the rule of Portugal and an invasion by Indonesia, FTP, identify this country which occupies a certain half a South Pacific island, with capital at Dili.

ANSWER: East Timor or the Democratic Republic of Timor-Leste

20. This writer so admired Scaramouche that he sought out Tiberio Fiorelli to teach him about the Commedia dell'arte tradition, which produced The Jealous Prince and The Imaginary Cuckold. Two of his characters are named Oronte, one of whom is friend to Arnolphe in The School for (*) Wives while another loves Celimene and interacts with the title character, Alceste. The author of The Miser and Tartuffe, FTP, identify this comedic French playwright who wrote The Misanthrope.

ANSWER: Moliere or Jean-Baptise Poquelin



DACQ Dynasty Academic Competition Questions

January 2008
Packet 2:
Bonuses

1. Bonus: Energy can be extracted from one of these astronomical objects via the theoretical Penrose Process. FTPE:

[10] Identify these large, rotating bodies with masses so great not even light can escape, which feature event horizons.

ANSWER: **Black Holes**

[10] The Penrose process sees energy transferred due to a decrease in the black hole's value for this property. According to the No-Hair theorem, black holes externally exhibit only charge, mass, and this.

ANSWER: Angular Momentum

[10] Black holes may emit this thermal radiation, whose existence is supported by the Unruh Effect and the Sokolov-Ternov Experiment. It is named for a contemporary British physicist.

ANSWER: **Hawking Radiation**

2. Bonus: It was preceded by the Percy-Neville feud, and its first battle occurred at St. Albans, which saw the Duke of Somerset's forces slay Lord de Clifford and Henry Percy. FTPE:

[10] Identify this English dynastic war, fought between the houses of Lancaster and York and associated with colors of a certain thorny flower.

ANSWER: War of the Roses

[10] This man's father died at the Battle of Wakefield, and he himself became regent for the young Edward IV, whom he locked in a tower before being defeated at Bosworth Field. Shakespeare depicted him as a creepy, evil hunchback.

ANSWER: Richard III

[10] This brother and predecessor of Richard III signed the Treaty of Picquigny with France and won a decisive victory at the Battle of Tewkesbury.

ANSWER: Edward IV

3. Bonus: Among its most esteemed members are Raekwon, Inspectah Deck, and, formerly, 'Ol Dirty. FTPE:

[10] Identify this hip hop group, responsible for 36 Chambers, 8 Diagrams, and The Iron Flag, memorably drafted by the Asians in the "Racial Draft" skit on Season One of Chapelle's Show.

ANSWER: The Wu-Tang Clan

[10] This second single from *36 Chambers* features a chorus by Method Man declaring the titular domination of currency and repeating "Get the money/Dollar dollar bill, y'all."

ANSWER: C.R.E.A.M or Cash Rules Everything Around Me

[10] C.R.E.A.M. inspired the chorus of Sweetest Girl of of this ex-Fugee's Carnival Vol. II: Memoirs of an Immigrant. He might also be known for performing Hips Don't Lie with Shakira.

ANSWER: (Nelust) Wyclef Jean (either name is fine, really)

4. Bonus: This painter of *The Feast of Venus*, *The Three Graces*, and *The Judgement of Paris* capped off a ridiculously successful life by marrying 16 year-old Helene Fourment when he was 53. FTPE: [10] Identify this Baroque Flemish painter, associated with voluptuous and full-figured nudes.

ANSWER: Peter Paul Rubens

[10] Rubens painted a series of works depicting the "arrival" of this French Queen, the wife of Henry IV and mother to Louis XIII.

ANSWER: Marie de Medici

[10] Rubens painted a number of images for the ceiling of the Banquet Hall at the Palace of White Hall, one of the greatest achievements of this English architect, who also designed the Queen's House at Greenwich.

ANSWER: Inigo Jones

- 5. Bonus: It has two consituent parts, one of which governs reaction rate, the other of which governs reaction composition at equilibrium temperature. FTPE:
- [10] Identify this chemistry law, formulated by Waage and Guldberg, which uses statistical mechanics and thermodynamics to make statements about the nature of reactions.

ANSWER: Law of Mass Action

[10] The Law of Mass Action relies upon knowledge of this value, symbolized K, associated with the state at which the chemical reaction has no net change over time.

ANSWER: **Equilibrium** Constant

[10] The Law of Mass Action can be empirically extended to also apply to second order reactions due to formulations developed by this Chemist, whose namesake Free Energy is symbolized as Delta G.

ANSWER: Josiah Willard Gibbs

- 6. Bonus: Given a classic film, identify the historical leader who was the film's chief subject F15PE, or F5PE if you need another clue.
- [10] Triumph of the Will.
- [5] This leader of the Nazis is universally reviled for World War II, the holocaust, and some really bad paintings of Austrian city life.

ANSWER: Adolf Hitler

- [10] The Emperor and the Assassins.
- [5] This probably son of Lu Buwei unified China by founding the Qin dynasty, enforced legalist policy, and made black the official royal color. He is usually known by his title.

ANSWER: Qin Shi Huangdi or First (Qin) Emperor or Ying Zheng

7. Bonus: This author drew from his own experiences to publish the psychological *Inferno*. FTPE: [10] Identify this Swedish playwright of *The Outlaw* who told of Arvid Falk in *The Red Room* and the spoiled, neurotic title character in *Miss Julie*.

ANSWER: August Strindberg

[10] This Strindberg play revolves around the descent into madness of The Captain, who bears the titular familial relation to Bertha.

ANSWER: The Father or Fadren

[10] This Strinberg play features Kurt, Jenny, Edgar, and and Alice, and is titled for the allegorical medieval motif usually represented by an image of a group of skeletons engaging in the title action.

ANSWER: The <u>Dance of Death</u> (don't accept Danse Macabre or any translations, unless of course it's the Swedish <u>Dodsdansen!</u>)

8. Bonus: Identify these Pacific islands, FTPE:

[10] This sixth-largest island of the world is only the third-largest of Indonesia, though it has the distinction of being the largest island entirely controlled by that country.

ANSWER: Sumatra

[10] This island is part of the Solomons and lies near Buka and the Carterets. It is named for a French navigator and located off the coast of Papua New Guinea.

ANSWER: Bougainville Island

[10] This ancestral home of the Ainu and site of cities like Sapporo is the northernmost of the four major Japanese islands, and lies across Tsugaru Strait from Honshu.

ANSWER: **Hokkaido**

9. Bonus: Identify the biological parents of these heroes of Greek myth, F5PE:

[5,5] Heracles.

ANSWER: Zeus (father) and Alcmene or Alcmena (mother)

[5,5] Achilles.

ANSWER: Peleus (father) and Thetis (mother)

[5,5] Assuming Poseidon wasn't cuckolding anyone, Theseus. ANSWER: **Aegeus (father) and Aethra Pittheus (mother)**

10. Bonus: This condition arises when proteins become malformed and assume unnatural beta pleated-sheet structure, after which they are deposited in tissue. FTPE:

[10] Identify this condition that occurs when insoluble deposits result from the transformation of substances like Transthyretin and fibrinogen.

ANSWER: Amvloidosis

[10] Amyloidosis often occurs due to mutations in the genes governing this organelle, responsible for digestion of material in the cytoplasm.

ANSWER: Lysosome

[10] PrP amyloids are found in curiously high concentrations in the brains of those suffering from diseases like Kuru, Mad Cow, and Creutzfeldt-Jakob disease, all of which are associated with these infectious particles, possibly composed only of protein.

ANSWER: Prions or Proteinaceous Infectious Particle

11. Bonus: Two of this man's epistolary works are subtitled "Virtue Rewarded" and "the History of a Young Lady." FTPE:

[10] Identify this early British novelist of Sir Charles Grandison and Clarissa.

ANSWER: Samuel Richardson

[10] Richardson is best-known for this long novel in which the title maid resists the lustful intentions of Mr. B, at least until he agrees to marry her.

ANSWER: Pamela: Or, Virtue Rewarded

[10] This man's *Joseph Andrews* and *Shamela* were mainly intended as parodies of Richardson, but became extremely popular and helped launch the novel genre.

ANSWER: Henry Fielding

- 12. Bonus: 30-20-10, identify the word missing from these works of social science or philosophy:
- [30] Joseph Schumpeter wrote about this concept, socialism, and democracy, while Werner Sombart wrote about Jews and the "modern" form of this concept.
- [20] Milton Friedman paired this concept with "Freedom," while Lenin called this concept the highest stage of imperialism.
- [10] Max Weber wrote about *The Protestant Ethic and the Spirit of* this, while pretty much every work written by Karl Marx deals with how much he does not approve of this economic philosophy.

ANSWER: Capitalism

- 13. Bonus: This Empire lent its name to a regime founded by Pol Pot. FTPE:
- [10] Identify this Southeast Asian Empire which fell after the Thai Ayutthaya kingdom conquered it along with the Sukhothai.

ANSWER: Khmer Empire

[10] The Khmer Empire was centered around the city of Ankgor in this modern-day country, with capital at Phnom Penh.

ANSWER: Cambodia

[10] This ruler of the Khmer Empire used the kingdom of Champa as a buffer zone against Dai-Vet. He built the Beng Mealea complex but remains best-known for constructing Ankgor Wat.

ANSWER: Suryavarman II

- 14. Bonus: In this man's namesake cipher, the secret code is hidden in the way in which the message is arranged rather than in the actual message content. FTPE:
- [10] Identify this Englishmen noted more for philosophical works like *Valerius Terminus*, or the *Misinterpretation of Nature* and *Novum Organum*.

ANSWER: Francis Bacon (prompt on Bacon)

[10] Bacon expressed his utopian ideals in works like *The Advancement of Learning* and this work, which depicts a utopian society based on a certain lost, marine civilization.

ANSWER: The New Atlantis

[10] Bacon died shortly after an alcohol-fueled philosophy session with this man, who was loathed by John Wallis, who wrote *The Elements of Law, Natural and Political* and *Leviathan*.

ANSWER: Thomas Hobbes

- 15. Bonus: Identify these chemical substances related to eutrophication, FTPE:
- [10] Most of the chemicals that cause eutrophication contain this kind of group, denoted by formula PO4.

ANSWER: **Phosphates**

[10] Eutrophication, which occurs when huge algal blooms flood bodies of water, lead to reduced levels of the dissolved form of this gas.

ANSWER: Oxygen or O2

[10] Excess presence of this element in soil, usually due to organisms like *rhizobium*, also contributes to eutrophication.

ANSWER: Nitrogen

16. Bonus: This collection consists of works called "Ysobel," "Troyte," and "Nimrod." FTPE:

[10] Identify this set of works, its composer's Opus 36, whose structure is unsurprisingly shrouded in some mystery.

ANSWER: The **Enigma** Variations

[10] This composer of some incidental music for Shakespeare's *A Midsummer Night's Dream* composed the *Enigma Variations*. He's also responsible for *Pomp and Circumstance*.

ANSWER: Edward Elgar

[10] The next work Elgar completed after the *Enigma Variations* was this song cycle, drawing from poem by Elizabeth Barret Browning and his own wife among others. The poems center around a certain geographical feature.

ANSWER: Sea Songs

17. Bonus: It reflects upon the "bludgeonings of Chance" and the "fell clutch of Circumstance." FTPE:

[10] Identify this poem, which declares "I am the master of my fate/I am the captain of my soul."

ANSWER: **Invictus**

[10] This British poet of "Macaire" and "London Voluntaries" wrote *Invictus*.

ANSWER: William Ernest Henley

[10] Henley's poem "Pro Rege Nostro" inspired this author's short story "England, my England." He's better known for *Sons and Lovers* and *Lady Chatterley's Lover*.

ANSWER: David Herbert Lawrence

18. Bonus: John Hope, Fred McGhee, and William Monroe Trotter helped to found this group. FTPE:

[10] Identify this African-American organization named both for the "mighty current of change" it sought to promote and for the geographic backdrop of its first organizational meeting.

ANSWER: Niagara Movement

[10] This author of *Dusk of Dawn*, *The Quest of the Silver Fleece*, and *The Souls of Black Folk* is recognized as the chief founder of the Niagara movement. He notably clashed with Booker T. Washington over the path to black empowerment.

ANSWER: William Edward Burghardt <u>Du Bois</u> (pronounced "due boyz")

[10] The 1906 conference of the Niagara movement was held at this location, pivotal in the life of the subject of a recent biography published by Du Bois. The death of Heyward Shepherd began the events at this location that would lead to action undertaken by Robert E. Lee.

ANSWER: <u>Harper's Ferry</u> (thus, referring to John Brown's raid)

19. Bonus: It has seen twenty-four tirthankaras. FTPE:

[10] Identify this mostly Indian religion which preaches extreme nonviolence and is divided into Digambara and Svetambara schools.

ANSWER: Jainism

[10] Jainism's founder is usually cited as this man, who actually promoted the existing beliefs. He is the twenty-fourth *tirthankara*.

ANSWER: Mahavira

[10] Jainism's principle of *ahimsa*, extreme nonviolence toward all life, was a heavy influence on this political reformer and pacifist, who is known for promoting concepts like Satyagraha and for being an icon of the Indian independence movement.

ANSWER: Mohandas (or Mahatma) Gandhi

20. Bonus: Identify the authors who created these classics of Spanish literature, FTPE:

[10] *Galatea* and *Don Quixote*. ANSWER: **Miguel de** <u>Cervantes</u>

[10] Yerma, Blood Wedding, and The House of Bernarda Alba, a play in which no males appear on

stage.

ANSWER: Frederico Garcia Lorca

[10] The Painter of his Dishonor, The Mighty Magician, Life is a Dream, and The Mayor of Zalamea.

ANSWER: Pedro Calderon de la Barca