



DACQ

Dynasty Academic Competition Questions

November 2007
Packet 4:
Tossups

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1. This element has the second-highest known number of isotopes, 39, but only one of these is stable. It was identified based on its bright blue (*) spectral lines by Bunsen and Kirchhoff. The first element to be discovered by spectral analysis, it is also the least common non-radioactive alkali metal. Atomic number 55, it is known for its use in atomic clocks, where its isotope 133 is used to define the second. FTP, identify this element named for its color and not for a Roman leader.

ANSWER: Caesium

2. This historical figure earned patents for then-cutting edge can designs, likely due to contact with Robert Seaman. This author of *Six Months in Mexico* was targeted by Porfirio Diaz for documenting the poverty and unrest in the country. More famous actions were undertaken at Blackwell Island, where an (*) investigation by this journalist produced *Ten Days in a Mad-House* and prompted Asylum Reform. Inspired by a Verne work, she traveled around the world in seventy-two days. FTP, identify this female reporter for the New York World.

ANSWER: Nellie Bly

3. Hapsburg monarch Charles VI was the dedicatee of his concerto collection *Le Cetra*, while he collaborated with Goldoni on *La Griselda* and with Metastasio on *L'Olimpiade*. Bernadetto Marcello attacked this man in *The Fashionable Theater*, mainly over biblical oratorios like *Judith Triumphant*. This composer of (*) *Orland Feigns Madness* spent time as violin master at a Venetian girls orphanage, while his ordination earned him the moniker "Red Priest." FTP, identify this Baroque composer of *The Four Seasons*.

ANSWER: Antonio Vivaldi

4. This poem speaks of a figure followed by "unmerciful disaster" and defies the past by describing it as "saintly days" and referencing "distant Aidenn." The speaker imagines an incense-burning angel before wondering if there is balm in Gilead. The title (*) figure's eyes "have all the seeming of a demon's that is dreaming" and is cursed back to "Night's Plutonian shore" by the speaker, who is unnerved by its monotonous refrain. FTP, identify this poem about a titular avian who repeats "Nevermore," a work of Edgar Allan Poe.

ANSWER: The Raven

5. Some accounts state that this figure was the boy resurrected by Elisha, and following his most famous exploits, God created and then destroyed a plant covering his makeshift sack. This namesake of the tenth Sura was trying to (*) evade a divine command to head to Nineveh when his journey to Tarshish was interrupted during a violent storm at sea. FTP, identify this namesake of a biblical book, a prophet who was swallowed by a great fish.

ANSWER: Jonah

6. This company sold Ernest Hemingway the shotgun he used to commit suicide, and it outfitted Teddy Roosevelt for his safaris before switching to apparel. Current CEO Mike Jeffries has created RUEHL and (*) Hollister Co., but has also drawn criticism for racist hiring practices and a somewhat pornographic “quarterly” magazine. FTP, identify this “prep” clothing retailer named for its two founders.

ANSWER: **Abercrombie and Fitch Co.**

7. This monarch spearheaded the creation of the first Armed Neutrality League against the British navy, and organized the Treaty of Teschen as mediator of the Potato War. One of the opponents of this signatory of the treaties of Varala and Jassy nearly won at Dubienka. In addition to creating the Targowica Confederation to oppose Kosciuszko and conducting the (*) Third Partition of Poland, this monarch sponsored Diderot after usurping her husband, Peter III. Often used as an example of enlightened despotism, FTP, identify this most famous female ruler of Russia.

ANSWER: **Catherine II or the Great (or Yekaterina Velikaya or Sophie Augusta Frederica)**

8. Therapy for this body part may possibly include manipulation of the BMP-14 gene, which strengthened it in lab rats. It is separated from the talus by the peroneus longus and touches the small saphenous vein, near where it links the soleus muscle with the (*) calcaneus bone. Also connecting to the gastrocnemius muscle, it is the thickest and strongest tendon in the body. FTP, identify this tendon located above the heel, named for a Greek warrior.

ANSWER: **Achilles Tendon (accept Calcaneal Tendon or Tendocalcaneous)**

9. Pierre Bourdieu's *Distinction* is subtitled as this kind of critique on taste. Talcott Parsons formulated the AGIL criteria in a work examining the structure of this kind of action, while a work by Arrow contrasted this kind of choice with certain values. Spencer advocated these kind of “statics,” while the statement that (*) “Man is born free, and he is everywhere in chains” appears in a Rousseau work about this kind of contract. FTP, the category of this question is what kind of “sciences” or “studies,” a word generally referring to human behavior?

ANSWER: **Social**

10. This area's Queen Anula, who married a carpenter, fought against Dutthagamani. Sangamitta brought some notable plant life to this location, while its history is discussed by the Chulavamsa, Mahavamsa, and Dipavamsa texts. The Lambakanna and Chola dynasties ruled here before Francisco Almeida of (*) Portugal arrived, and in 1983 this country erupted in civil war between Sinhalese and Tamil ethnic groups. Also called Ceylon, FTP, identify this island with capital at Columbo located to the south of India.

ANSWER: **Democratic Socialist Republic of Sri Lanka**

11. Many of Whistlers *Nocturnes*, including *Blue and Gold*, are set against one of these features, a favorite subject of Alfred Sisley. Pechstein, Heckel, Bleyl, and Mueller belonged to an artistic movement bearing this name, while vandals attacked a Monet work depicting one associated with Argenteuil. Turner's (*) *Rain, Steam and Speed* is set on one, as is Munch's *The Scream*. FTP, identify these structures, examples of which include the Charles in Prague, the Peace over the Niagara, and the Golden Gate in San Francisco.

ANSWER: **Bridges**

12. Part of this work revolves around a mysterious artifact whose exact nature is unclear, although it is known that it has a lid of many colors and that it was forged by a man who marries the Maid of the North. That man, the smith Ilmarinen, defeats the wolves of (*) Tuonela in this work, which tells of the creation of the world in the first Vainamoinen cycle and of Kyllikki's relationship with Lemminkainen. Compiled by Elias Lonnrot and serving as an inspiration for Sibelius, FTP, identify this Finnish epic.

ANSWER: **The Kalevala**

13. One major criticism of it is that it does not dictate some KM-angles and masses, requiring experimental measurements. Though it incorporates quantum chromodynamics and electroweak theory, it does not account for (*) gravity, but it did predict the existence of the top and charm quarks, as well as the elusive Higgs boson. For ten points, identify this authoritatively-named physical model that describes the interactions of three of the fundamental forces with elementary particles.

ANSWER: **Standard Model**

14. A lone British ship sunk a German boat in this body of water at the onset of World War I. It includes the islands of Chizumulu and Likoma, and its major outlet is the Shire (Sheer-ay), a tributary of the (*) Zambezi. Sighted by Livingstone, it borders on Tanzania, Mozambique, and its namesake nation. FTP, identify this southern African lake, also known as Nyassa, which lies several hundred miles from Lilongwe in its namesake African country.

ANSWER: **Lake Malawi**

15. A Nathaniel West poem instructs the reader to “burn” these entities, while a fictional travelogue of Marco Polo's journeys by Italo Calvino is titled for invisible ones. George Orwell wrote about being “down and out” in two of (*) these, the same two that form the setting for a novel about Madame Defarge, Charles Darnay, and Sydney Carton. FTP, identify these entities, a tale of two of which was told in a Charles Dickens work, in which they are Paris and London.

ANSWER: **Cities**

16. The victorious general made a speech denouncing the “paid lackeys” of the “nation of shopkeepers” before this battle, at which Vandamme and St. Hilaire delivered a fatal blow. Duke Constantine was the only successful commander on the losing side of this battle, which led to creation of the Confederation of the Rhine and the signing of the Treaty of (*) Pressburg. Seeing the defeat of Francis II and Alexander I after they lost the Pratzen Heights, FTP, identify this 1805 victory of Napoleon that knocked Austria out of the War of the Third Coalition and is known as the Battle of the Three Emperors.

ANSWER: **Battle of Austerlitz (accept Battle of the Three Emperors before mentioned)**

17. This substance, discovered by Gerhart Schrader, works by inhibiting cholinesterase, which acts in counterbalance with acetylcholine. At room temperature it is a colorless and odorless liquid. Its high vapor pressure means that it evaporates very quickly, about 36 times faster than Tabun, a similar agent. Causing (*) suffocation after muscles like the diaphragm cannot be relaxed, FTP, name this chemical weapon used in a 1995 attack by Aum Shinrikyo on a Japanese subway.

ANSWER: **Sarin Gas**

18. This author of *Local Anesthetic* and *The Call of the Toad* described his time in India in *Show Your Tongue*. David Frankfurter plans to assassinate a namesake of a ship sunk by Alexander Marinesko, the *Wilhelm Gustloff*, in one novel while another details Pilez's relationship with Joachim Mahlke. This author of (*) *Crabwalk* published an autobiography, *Peeling the Onion*, that sparked controversy with his admission of membership in the SS. Best known for a collection including *Cat and Mouse* and *Dog Years*, the Danzig trilogy, FTP, identify this German author of *The Tin Drum*.

ANSWER: **Gunter Grass**

19. One of them, Capaneus, prompted his own downfall by taunting Zeus, while another fought a son of Poseidon and was a famous seer descended from Melampus, Amphiaraus. Their sons are known as the Epigoni, whose numbers included Diomedes, son of Tydeus. They were mostly Argives but were led by a foreigner whose (*) brother had refused to give up his throne as per an inheritance agreement. Led against Eteocles by Polynices, FTP, identify this numerically-named group from Greek myth who assaulted a certain city shortly after the death of Oedipus.

ANSWER: **The Seven against Thebes (accept equivalents, prompt on partial answer)**

20. It can take on an arbitrary length, and unlike other objects, it can be used with the += and the + operators. Java provides a built in tokenizer for it where you can define the delimiters. Its basic functions include trim, replace, (*) concat, charAt, and equalsIgnoreCase. A literal of this type is denoted by double quotes. FTP, name this data type, a standard class in Java, that represents an array of characters and shares its name with a physics theory stating that the fundamental universal structures are filamentous, one dimensional structures.

ANSWER: **String**



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Bonuses

1. Bonus: He will survive Ragnarok with his brother Vali, and will make his home in Ithavoll. FTPE:
[10] Identify this Norse god of vengeance, who avenges his father's death by stomping down on Fenrir's jaw and ripping the wolf in half.

ANSWER: **Vidar**

[10] Vidar's father is this chief of the Aesir, killed by Fenrir. He's also the father of Thor and Baldur.

ANSWER: **Odin or Wotan**

[10] Vidar was linked by Snorri Sturluson to this son of Aphrodite and Anchises from Greek myth, largely since Snorri identified Ragnarok with a certain conflict involving this figure.

ANSWER: **Aeneas**

2. Bonus: Identify these rocks as metamorphic, igneous, or sedimentary, F5PE;

[5] Shale.

ANSWER: **Sedimentary**

[5] Slate.

ANSWER: **Metamorphic**

[5] Granite.

ANSWER: **Igneous**

[5] Gabbro.

ANSWER: **Igneous**

[5] Marble.

ANSWER: **Metamorphic**

[5] Limestone.

ANSWER: **Sedimentary**

3. Bonus: Answer these questions about the Mongol invasion of Europe, FTPE:

[10] Batu Khan and Subotai fought the Battle of Mohi on the Sajo river against this European kingdom, led at the time by Bela IV and associated with the Magyars.

ANSWER: **Kingdom of Hungary**

[10] Baidar, Kadan, and Orda Khan fought the Battle of Legnica and obliterated Polish forces under the relatively inept leadership of a Silesian prince of this name and number. Other rulers of this name and number include a Holy Roman Emperor called "the Saint" and an English monarch married to Eleanor of Aquitaine.

ANSWER: **Henry II**

[10] Subotai was rampaging through Europe and approaching Austria when he was forced to return to attend the kurultai following the death of this third son of Genghis Khan, who had succeeded his father and conducted the first Mongol wars against Europe.

ANSWER: **Ogedei Khan**

4. Bonus: Identify these figures who factored into the 2003 California Gubernatorial Recall Election, FTPE:

[10] This democrat, a failed senate candidate, also failed miserably by being successfully replaced in office as Governor of California.

ANSWER: **Gray Davis**

[10] This current Governor of California won the election. He starred in *Predator* and *Terminator*.

ANSWER: **Arnold Schwarzenegger**

[10] This former Lieutenant Governor under Gray Davis came in second to Schwarzenegger in the election. He has a brief but impressive history of illegal campaign contributions and racism.

ANSWER: **Cruz Bustamante**

5. Bonus: She eternally wears her wedding dress, keeps a decaying feast on the table, and keeps all of her clocks stopped at twenty to nine. FTPE:

[10] Identify this character who raises Estella to break hearts after she herself is left at the altar by Compeyson.

ANSWER: **Miss Havisham**

[10] Miss Havisham, Compeyson, and Estella appear along with Pip in this novel, whose other key characters include the Pockets, Bentley Drummle, Mr. Jaggers, and Abel Magwitch.

ANSWER: **Great Expectations**

[10] *Great Expectations* is a novel by this British author of *Nicholas Nickleby* and *David Copperfield*.

ANSWER: **Charles Dickens**

6. Bonus: Identify the substance produced by these processes, FTPE, or F5PE given some of the materials involved:

[10] The Bessemer process.

[5] Molten pig iron and blown air.

ANSWER: **Steel**

[10] The Hall-Heroult process.

[5] Molten cryolite and alumina, refined from bauxite via the Bayer process.

ANSWER: **Aluminum**

[10] The Oswald process.

[5] Ammonia, oxygen, and a platinum catalyst.

ANSWER: **Nitric Acid or HNO₃ or even Aqua Fortis**

7. Bonus: Identify these economists whose names are applied to economic concepts, FTPE:

[10] This author of *The General Theory of Employment, Interest, and Money* lends his name to an entire school of economics, which advocates government spending to correct recessions and arose as a response to the Great Depression.

ANSWER: **John Maynard Keynes**

[10] This author of *Principles of Economics* is the namesake of a type of demand function that can be related to the Hicksian variety by the expenditure function.

ANSWER: **Alfred Marshall**

[10] When no further of this Italian's namesake improvements can be made, an allocation of goods achieves his namesake efficiency or optimality.

ANSWER: **Vilfredo Pareto**

8. Bonus: Plays by this author include *Mystery of the Rose Bouquet* and *Under a Mantle of Stars*.

FTPE:

[10] Identify this South American author of *Betrayed by Rita Hayworth*, *Heartbreak Tango*, and *The Kiss of the Spider Woman*.

ANSWER: **Manuel Puig**

[10] Puig is a native of this South American country, which also produced authors like Julio Cortazar and Jorge Luis Borges.

ANSWER: **Argentina**

[10] A 1982 Puig work pairs this substance with “requited love.” It also names a wedding in a Garcia Lorca work and a Meridian in a Cormac McCarthy work, while it is paired with the adjective “cold” in a famous work by Truman Capote.

ANSWER: **Blood**

9. Bonus: It is also known as Lake Khwarazm. FTSNOP:

[10] Identify this shrinking, horribly polluted sea fed by the Amu Darya and Syr Darya, home to thousands of islands including one which formally housed a leaky bioweapons facility, Vozrozhdeniya.

ANSWER: **Aral Sea**

[5,5] The Aral Sea is located on the boarder between these two former Soviet republics, with capitals at Astana and Tashkent.

ANSWER: **Kazakhstan and Uzbekistan**

[10] Groundwater flow from the Pamirs and this other central Asian mountain range, whose name means “mountains of heaven,” is helping to slow down but not eliminate the Aral Sea's reduction.

ANSWER: **Tian Shan (Mountains) (accept Tangri Tagh)**

10. Bonus: Answer these questions about Spain's Reconquista, FTPE:

[10] The Reconquista spanned the 722 Battle of Covadonga to the defeat of Boabdil at the siege of this city in Andalusia, the home of the Alhambra.

ANSWER: **Granada**

[10] The Reconquista is generally considered to have been completed in this year, also heavily associated with Christopher Columbus.

ANSWER: **1492**

[10] This founder of the Asturias kingdom is credited with beginning the Reconquista. He won the Battle of Covadonga against Alkam while fighting with Bishop Oppa.

ANSWER: **Pelayo or Pelagius of Asturias**

11. Bonus: He released the album *Ultimate* in 2006. FTPE:

[10] Identify this artist responsible for *Purple Rain*, who is currently not known purely by an unpronounceable symbol.

ANSWER: **Prince Rogers Nelson (accept The Artist Formerly Known as the Artist Formerly Known as Prince. . . or something)**

[10] In addition to working on *Purple Rain*, this prominent Prince backup band contributed heavily to *Around the World in a Day* and *Parade*. It included Dez Dickerson and Bobby Z.

ANSWER: **The Revolution**

[10] Prince claims that he actually is an amazing basketball player and did in fact defeat this brother of a noted comedian in a pickup basketball game, as depicted on a sketch from *Chappelle's Show*.

ANSWER: **Charlie Murphy**

12. Bonus: It generally refers to the Embden-Meyerhof pathway, though it can also proceed via the Entner-Doudoroff pathway. FTPE:

[10] Identify this sequence of reactions that generally precedes the Krebs Cycle, which produces two pyruvate compounds, two NADH, two hydrogen ions and two water molecules.

ANSWER: **Glycolysis**

[10] Glycolysis, as its name suggests, involves the cleaving of this sugar, which combines with galactose to form lactose.

ANSWER: **Glucose or C₆H₁₂O₆ (accept Dextrose)**

[10] This enzyme acts on glucose to create glucose-six-phosphate as part of glycolysis. It is named for its action on a certain six-carbon sugar.

ANSWER: **Hexokinase**

13. Bonus: This thinker dabbled in early information science with his Stepped Reckoner. FTPE:

[10] Identify this German thinker who developed a binary system and discovered calculus independent of Newton.

ANSWER: **Gottfried Wilhelm Leibniz**

[10] One of Leibniz's major theories revolved around these "mini-soul" metaphysical particles that compose everything. This term was also used by Gnostics to discuss the base aspect of God.

ANSWER: **Monads (accept word forms like Monadology or something)**

[10] Leibniz famously served as the basis for Dr. Pangloss in this satirical work by Voltaire.

ANSWER: **Candide**

14. Bonus: With Georges Braque, this Spanish artist is generally credited with founding Cubism. FTPE:

[10] Identify this artist of *Guernica* whose works include *The Marriage of Pierrette*, *Dora Maar with Cat*, and *Nude on a Black Armchair*.

ANSWER: **Pablo Ruiz Picasso**

[10] Picasso's African influence period is best exemplified by this work, which depicts five French prostitutes.

ANSWER: **Les Demoiselles d'Avignon or The Young Ladies of Avignon**

[10] *Boy With a Pipe*, *Girl with a Goat*, and *Lady with a Fan* are all works of this colorfully-named Picasso period, which was prompted by a relationship with Fernande Olivier and was notably cheerier than his other works. Circus performers were frequent subjects.

ANSWER: **Rose Period**

15. Bonus: Identify these local colorists from American literature, FTPE:

[10] Pioneer life was the subject of this author, famous for works like *The Luck of Roaring Camp* and *The Outcasts of Poker Flat*.

ANSWER: **Bret Harte**

[10] Though generally considered to have exceeded local colorism, this really famous author of *The Mysterious Stranger* and *Pudd'nhead Wilson* profoundly influenced the genre with works like *Life on the Mississippi*.

ANSWER: **Mark Twain or Samuel Langhorne Clemens**

[10] This author of *The White Heron* created the seminal work of Maine colorism in *Country of the Pointed Firs*.

ANSWER: **Sarah Orne Jewett**

16. Bonus: Identify the figures who issued these historical decrees, FTPE:

[10] The Pragmatic Sanction of 1713.

ANSWER: **Charles VI (or Charles III of Spain)**

[10] The Edict of Nantes.

ANSWER: **Henry IV of France or Henry (III) of Navarre**

[10] With Licinius, the Edict of Milan, providing for religious toleration in the Roman Empire.

ANSWER: **Constantine I or the Great or Flavius Valerius Aurelius Constantinus**

17. Bonus: It sits on land once owned by the Custis family, having been converted on the suggestion of Union Army quartermaster Montgomery Meigs. FTSNOP:

[10] Identify this Virginia landmark which lies across the Potomac from the Lincoln Memorial and near the Pentagon.

ANSWER: **Arlington National Cemetery**

[10] Land for Arlington National Cemetery was seized from the family of Mary Custis, wife of this confederate general defeated by Meade at Gettysburg.

ANSWER: **Robert Edward Lee**

[5,5] Four Supreme Court Justices are buried in Arlington National Cemetery, all of whom were active on the court during the 1970s. Name any two, F5PE:

ANSWER: **Thurgood Marshall, Potter Stewart, William O. Douglas, Harry Blackmun**

18. Bonus: It can occur in positive or negative varieties. FTPE:

[10] Identify this type of radioactive decay in which an electron or positron is emitted.

ANSWER: **Beta Decay**

[10] In Beta minus, a neutron becomes a proton due to this fundamental force, governed by the exchange of W and Z bosons. It is described by Fermi's theorem.

ANSWER: **Weak Nuclear Force**

[10] When proton saturation occurs below the positron emission energy threshold, this type of Beta decay occurs. It involves the namesake particle, usually from the K or L shell.

ANSWER: **Electron Capture**

19. Bonus: It begins with a gift from Herr Drosselmeyer. FTPE:

[10] Identify this Tchaikovsky ballet that includes scenes like "The Waltz of the Flowers" and characters like the Rat King.

ANSWER: **The Nutcracker**

[10] This girl embarks on a magical vision-journey into a land dominated by gigantic candy after receiving the Nutcracker.

ANSWER: **Clara Stahlbaum**

[10] This famous dance from *The Nutcracker* is frequently performed by itself. It is named after the sort-of leader of the crazy animated sugar products.

ANSWER: **Dance of the Sugar Plum Fairy**

20. Bonus: It contains works such as “A Painful Case” and “Ivy Day in the Committee Room.” FTPE:
[10] Identify this short story collection that also includes *Araby* and *Evaline*, and which closes with a story about Gabriel Conroy.

ANSWER: **Dubliners**

[10] This Irish author wrote *Dubliners* as well as *Finnegans Wake* and *Ulysses*.

ANSWER: **James Joyce**

[10] This is the final story of *Dubliners*, which deals with Gabriel Conroy's discovery his wife's unresolved issues over her dead suitor Michael Furey and conclusion regarding the snow in Ireland.

ANSWER: **“The Dead”**