



HSAPQ

High School Academic Pyramid Questions

Fall 2008
ACF-Format Set #1

Round 9

Tossups

1. The narrator of this poem says the world “seems to lie before us like a land of dreams” and claims that the “turbid ebb and flow of human misery” was brought to mind when “Sophocles long ago, heard it on the Aegean.” Beginning with “the sea is calm tonight,” it goes on to describe the setting as a “distant northern sea.” For 10 points, name this poem which ends by describing a “darkling plain / Swept with confused alarms of struggle and flight, / Where ignorant armies clash by night,” written by Matthew Arnold.

ANSWER: "Dover Beach"

2. This artist painted works like *Going West* as a student of Thomas Hart Benton. He painted *Orange Head* during his nervous breakdown, and cave paintings inspired his works *The She-Wolf* and *Guardians of the Secret*. The husband of painter Lee Krasner, his paintings *Autumn Rhythm*, *Blue Poles*, and *Lavender Mist* demonstrate his characteristic style of "action painting." For 10 points, name this American abstract expressionist, who created many works by dripping paint directly onto the canvas.

ANSWER: Jackson Pollock

3. The first four varieties of these were named based on the properties of their spectroscopic lines, and the Hartree-Fock method concerns another type. Doubling the azimuthal quantum number and adding one gives the number of these in a subshell. Molecular ones may be approximated by linear combination of atomic ones, while the Pauli exclusion principle states that their contents must have opposite spin. “Hybridized” according to the number of atoms to which an atom must bond, for 10 points, give this term for the regions in which an electron is likely to be found.

ANSWER: orbitals

4. Following the decline of the Silingi and Alani branches of this group, the Asdingi became its dominant branch, and they were Arian Christians. They were destroyed by the Byzantines following the deposition of the usurper Gelimer, and their prominent leaders included Gaiseric and Gunderic. For 10 points, identify this Germanic group that settled North Africa, whose name has become synonymous for willful destruction.

ANSWER: Vandals

5. At a sleepover in this movie, one of the central characters confesses "I love you" and then "boops" another character on the nose. This movie ends with four characters splitting up to buy cosmetic coverup and a blanket, while another episode in this film features a purchase made with an eighty-dollar bill. A masked bandit punches Fogell at a liquor store in this movie, leading to his meeting with officers Michaels and Slater, who later burn their squad car in a parking lot after shooting it. For 10 points, name this Judd Apatow flick featuring McLovin.

ANSWER: Superbad

6. One measure of this is Kendall's tau, and one form of this can be used to estimate the periodicity of a signal. A rank-order version coefficient for this is named for Spearman, though a statistic introduced by Francis Galton, Pearson's r coefficient, is the most widely used. When r equals negative one, this is said to be completely negative; this is completely positive when r equals one. For 10 points, name this measure of association between two variables, which often implies but does not equal causation.

ANSWER: **correlation** coefficient

7. Like Thomas Paine, he wrote a pamphlet entitled "The Crisis," though his was in support of building workhouses. He joined with such men as Charles Babbage to found the Statistical Society of London, though his major work uses little data. That work argues that vice, misery, and self-restraint are the only ways to prevent the arithmetic increase of food supplies from being outstripped by the geometric increase of food consumers. For 10 points, name this author of *An Essay on the Principle of Population*, who predicted inevitable starvation of the poor.

ANSWER: Thomas **Malthus**

8. Possibly at the suggestion of Nicholas Rubinstein, this piece was commissioned for the dedication of the Church of Christ the Savior. It starts with the melody of "save the people," a church chant, and uses a diminuendo to represent casualties. The Marseillaise (mar-say-AZE) heard near the start is countered later by "God save the Tsar," which is then topped by the cannon bursts in the finale. For 10 points, name this piece commemorating the Russian victory over Napoleon in the namesake year, written by Pyotr Tchaikovsky.

ANSWER: *The **1812 Overture*** [or *Festival Overture: The **Year 1812***; prompt on **Festival Overture**]

9. The idea for making this object came from Helenus, who realized his cause was lost after the theft of the Palladium. Epeius supervised its creation, and after this item was finished, its creators retreated to Tenedos and burned their tents. Sinon's explanation of this item was challenged by Laocoon (lay-AH-koh-awn), who was quickly killed by a sea serpent. Such figures as Ajax the Lesser, Menelaus, and Odysseus were concealed inside it. For 10 points, name this wooden animal idol in which Greek soldiers hid, leading to the end of a mythical ten-year war.

ANSWER: the **Trojan Horse**

10. He accepted a three hundred and twenty nine dollar loan from the Credit Mobilier, and his campaign biography was written by Horatio Alger. His administration was plagued by the Star Routes scandal, and this man's appointment of William H. Robertson to run the New York Customs House angered Roscoe Conkling. He defeated Winfield Scott Hancock in the general election, and he was opposed by the Stalwarts. For 10 points, name this President, who was assassinated by Charles Guiteau in 1881.

ANSWER: James **Garfield**

11. Professor Nikolai Stepanovitch reunites with the failed actress Katya in Harkov in this author's work "A Boring Story." One of this author's title characters declares his love for Yelena, who instead pursues Astrov. That character was first introduced in "The Wood Demon," and unsuccessfully shoots Professor Serebrakov. In another of his works, Lopakhin chops down the estate of Madame Ranevskaya. For 10 points, name this Russian author of *Uncle Vanya*, *The Cherry Orchard*, and *The Seagull*.

ANSWER: Anton **Chekov**

12. The Bergeron diagram method calculates the effects of one phenomenon called this which occurs in electrical circuits. A model named for Lambert is useful for its diffuse type, and Phong shading simulates the luminance effects related to its specular type. The total internal type occurs above the critical angle, while another law states that the angle of incidence is equal to the angle of this. For 10 points, identify this optical phenomenon whose "retro" type reverses the direction of light entirely.

ANSWER: reflection

13. This thinker used the example of a Jew failing a French poetry exam to contrast the views of the two title people in his work *Anti-Semite and Jew*. He broke from Husserl's description of the self in his *The Transcendence of the Ego*. In another of his works, historian Antoine Roquentin feels that inanimate objects encroach on his freedom and cause the title sensation. Another of his works describes "the history of negation" and "bad faith." For 10 points, name this existential philosopher of the novel *Nausea* and *Being and Nothingness* who also wrote plays like *No Exit*.

ANSWER: Jean-Paul Sartre

14. One of its few opponents in Parliament was Helen Suzman, and the BOSS bureau helped enforce it. The Sullivan Rules were an exception to it, and it was instituted by Daniel Malan. Enforced by the Population Registration Act and Group Areas Act, it was sometimes known as "separate development", and F.W. de Klerk repealed most of the legislation supporting it. For 10 points, name this state-sanctioned policy of racial segregation that was opposed by the African National Congress and Nelson Mandela in South Africa.

ANSWER: Apartheid [prompt on separate development before it is read]

15. An unattributable work by this author, "The Mosquito," comprises a namesake appendix along with the *Catalepton*. He wrote of the love between Corydon and Alexis as well as a prophecy of the coming of a Messiah in two of his *Eclogues*. Hesiod's *Works and Days* formed the basis for another of his works, which deals with cures for goat diseases, strong thoroughbred horses, and mythological bees. In addition to *The Georgics*, he wrote of Evander, Lavinia and Dido in an epic poem about the founding of Rome. For 10 points, name this author of *The Aeneid*.

ANSWER: Publius Virgilius Maro

16. A deficiency of this element results in the weakness of elastin, and can promote the formation of aneurysms, and retention of this element in the liver causes Wilson's disease. This element's sulfate salt is reduced to its corresponding oxide in the presence of aldehydes in the Benedict's test. Along with arsenic, this element is found in compounds such as Paris green, and is found along with tin in bronze. For 10 points, identify this element whose latin name is cuprum.

ANSWER: copper [accept Cu; accept cuprum before it is read]

17. It contains the islands of Olkhon and Bolshoy, and this lake's Proval Bay was created by an 1862 earthquake in the Selenga Delta. This lake is fed by the Selenga River, and the town of Listvyanka is located on it. The Angara River flows from this lake, and this lake is the home of the golomyanka fish, which gives birth to live young. Containing one fifth of the world's surface fresh water, for 10 points, name this Siberian lake, the oldest and deepest lake in the world.

ANSWER: Lake Baikal [accept Ozero Baykal; or Ozero Bajkal]

18. Conrad Grebel expositied their beliefs to Ulrich Zwingli, who allowed the Zurich council to decide between them, while Martin Luther, speaking from Wartburg, provided stiffer resistance to the ministry of the Zwickau Prophets. Under the leadership of Melchior Hoffman they orchestrated the Munster Rebellion in an attempt to establish a theocracy. For 10 points, identify this religious group that sprung out of the Radical Protestant Reformation, whose central tenet arose from the idea that religious initiation should be deferred until after infancy.

ANSWER: Anabaptists

19. One character in this work bemoans "these strange flies, these fashion-mongers, these perdonami's." When that character dies, another exclaims "fire-eyed fury be my conduct now." Balthasar unwittingly provided that character with false information, causing him to purchase poison from an apothecary. In act one, a character delivers a speech about Queen Mab on the way to a ball. The title character's refusal to duel the "prince of cats," Tybalt, leads to Mercutio's death. For 10 points, name this Shakespeare play which ends with the suicide of the title "star-crossed lovers."

ANSWER: Romeo and Juliet

20. In this opera's aria "Vecchia Zimara," Colline sings about his sorrow for selling his coat, and in "Che Gelida Manina" the tenor says he will help the soprano who comes to his apartment to find a light for her candle. Alcindoro is left with the bill at Café Momus after the mezzo-soprano sings the aria "Quando M'en Vo" where she regains the affections of Marcello, and later Musetta sells her earrings to buy medicine to help a character dying of tuberculosis in Latin Quarter. Ending with Mimi dying in the hands of Rodolfo, for 10 points, name this opera by Puccini.

ANSWER: La Boheme

21. The gene SLC2A9 encodes a transporter of this molecule, which is the starting material in the Reichstein process. Unlike humans, most animals can synthesize vitamin C in a four step process starting with it, and PET scans often use a fluorinated analog of this molecule. Together with galactose, it makes up the disaccharide lactose, and numerous molecules of this hexose make up the storage molecules cellulose and starch. For 10 points, name this sugar that is broken down into two molecules of pyruvate in glycolysis.

ANSWER: glucose [or C₆H₁₂O₆]

22. The main character of this novel borrows a book by the Brothers Goncourt from a woman who makes her black servants do her sewing because she believes it is unhealthy. That character had eloped from her strict Kentucky family to marry a man who gets angry when she ignores Reception Day. The protagonist rejects Mademoiselle Reisz's attempt to temper family obligations with an artistic talent, and has affairs with Alcée Arobin and Robert LeBrun before walking into the sea. For 10 points, name this novel about Edna Pontellier by Kate Chopin.

ANSWER: The Awakening



HSAPQ

High School Academic Pyramid Questions

Fall 2008
ACF-Format Set #1

Round 9

Bonuses

1. Answer the following about comets, for 10 points each.

[10] This comet which appears every 75-76 years features in many Chinese and Babylonian records, but is perhaps better known for being seen in 1066 and depicted on the Bayeux Tapestry.

ANSWER: **Halley's** comet

[10] The outer extent of this region defines the boundary of the Solar System. Named for a Dutch astronomer, it is the source of many long-period comets.

ANSWER: Öpik-**Oort Cloud**

[10] This term refers to the tenuous atmosphere of a comet which forms from the dust and gas around the nucleus.

ANSWER: **coma**

2. It can occur with or without "remainder," the latter only possible upon death. For 10 points each:

[10] Identify this state in Buddhist theology, whose name means "extinguishing," in which suffering and desire end.

ANSWER: **nirvana** [or **nibbana**]

[10] The pursuit of nirvana is laid out as the third of these fundamental tenets of Buddhism, the first of which is that existence causes suffering.

ANSWER: the **Four Noble Truths** [or **Catvari-arya-satyani**; or **Cattari-ariya-saccani**]

[10] In Mahayana Buddhism, those who achieve nirvana "with remainder" become these teachers, who can remain on earth after enlightenment to guide others.

ANSWER: **bodhisattvas**

3. This city was briefly ruled by the Albizzi family and it was home to Girolama Savonarola and the 1497 bonfire of the vanities. For 10 points each:

[10] Name this Italian city state ruled by the Medicis.

ANSWER: **Florence** [or **Firenze** or **Florentia** or **Fiorenza**]

[10] Between 1338 and 1351 Florence's population was almost halved by this event which killed approximately 25 million Europeans.

ANSWER: **Black Death** [accept **Black Plague**, prompt on **Bubonic Plague**]

[10] In the fourteenth century most of Florence's wealth came from this material. The 1378 Ciompi Revolt was a rebellion by people who worked with this product.

ANSWER: **wool** [accept **sheep**]

4. For 10 points each, name these people who broke with Freud.

[10] This Austrian author of *Understanding Human Nature* coined the term inferiority complex.

ANSWER: Alfred **Adler**

[10] This Swiss founder of analytical psychology wrote *Modern Man in Search of a Soul*, and introduced the concepts of introverted and extroverted types, as well as the collective unconscious.

ANSWER: Carl Gustav **Jung**

[10] This psychoanalyst, who wrote *The Myth of the Birth of the Hero*, broke with Freud after being accused of "anti-Oedipal heresy" in his book *The Trauma of Birth*.

ANSWER: Otto **Rank**

5. They peaked around the 16th century BC and are known for their intricate pottery and cult of bull leaping. For 10 points each:

[10] Identify this Bronze Age civilization, named after a legendary Labyrinth owner.

ANSWER: **Minoans**

[10] The Minoan civilization was mainly based on this fifth largest Mediterranean island, with sites like Phaistos.

ANSWER: **Crete**

[10] This main site of Minoan excavation and likely political center, famed for its palace, was excavated by Arthur Evans.

ANSWER: **Knossos**

6. One piece of art in this form, *In Advance of a Broken Arm*, is merely a snow shovel. For 10 points each:

[10] Name this type of "Found art," examples of which include *Bicycle Wheel* and *L.H.O.O.Q.*, which is a copy of the *Mona Lisa* with a mustache drawn on it.

ANSWER: **readymades**

[10] Those readymades were created by this French artist of a work dismissed as an "explosion in a shingle factory," *Nude Descending a Staircase*.

ANSWER: Marcel **Duchamp**

[10] This Duchamp readymade was simply a urinal signed "R. Mutt."

ANSWER: **Fountain**

7. His plays include *Murder in the Cathedral*. For 10 points each:

[10] Identify this poet, playwright, and critic, best known for poems like "Gerontion" and "The Hollow Men."

ANSWER: Thomas Stearns **Eliot**

[10] This man edited Eliot's masterpiece "The Waste Land." His own poetry includes "Hugh Selwyn Mauberley" and the *Cantos*.

ANSWER: Ezra **Pound**

[10] A modernist from the same period, this gay poet of *The Broken Tower*, *White Buildings*, and *The Bridge* endured frequent scathing criticism from Pound.

ANSWER: **Hart Crane** [prompt on **Crane**]

8. Just prior to the 2002 election, this state's incumbent Senator Paul Wellstone died in a plane crash, and replacement candidate Walter Mondale lost to Norm Coleman. For 10 points each:

[10] Name this state, where the Republican Coleman shares the delegation with Democrat Amy Klobuchar.

ANSWER: Minnesota

[10] This Republican governor of Minnesota was once considered as a Vice-Presidential possibility on the McCain ticket, due to his popularity in a frequently Democratic state.

ANSWER: Timothy James Pawlenty

[10] This author of *Lies and the Lying Liars Who Tell Them* and former Saturday Night Live writer moved back to his home state of Minnesota to challenge Coleman's re-election in 2008.

ANSWER: Al Franken

9. They are involved in both Raman scattering and Rayleigh scattering. For 10 points each:

[10] Name these particles that are the quantum of electromagnetic radiation.

ANSWER: photons

[10] Photons are an example of the "gauge" type of these particles named after an Indian scientist, and which obey a namesake distribution in contrast to the Fermi-Dirac distribution.

ANSWER: bosons

[10] The energy of a photon can be determined by multiplying Planck's constant and this value, and dividing the product by the wavelength.

ANSWER: speed of light [prompt on c]

10. Identify these things about music around the late Renaissance. For 10 points each:

[10] This composer wrote *Vespro della Beata Vergine* in 1610. He composed the first extant opera, *Orfeo*.

ANSWER: Claudio Monteverdi

[10] This Italian composer allegedly convinced the council of Trent not to ban polyphonic music with his *Pope Marcellus Mass*.

ANSWER: Giovanni Pierluigi da Palestrina (accept either underlined answer)

[10] Both Palestrina and Monteverdi wrote many works in this secular vocal form contrasting with motets. Monteverdi's *Combat of Tancred and Clorinda* is a theatrical example.

ANSWER: madrigal

11. Answer the following about British Overseas Territories, for 10 points each.

[10] While Argentina also invaded the South Sandwich Islands, these islands lend their name to the undeclared 1982 war over the sovereignty of Britain's South Atlantic possessions.

ANSWER: Falkland Islands [or The Falklands; or Islas Malvinas]

[10] Britain also owns this territory in the North Atlantic with capital Hamilton, the northeastern vertex of a mysterious maritime triangle.

ANSWER: Bermuda [or Somers Islands]

[10] The Sovereign Base Areas of Akrotiri and Dhekelia are located on this Mediterranean island, which has a UN Buffer Zone between its Turk and Greek controlled areas.

ANSWER: Cyprus [or Kypros; or Kibris]

12. He only has one eye because he sacrificed the other to drink from Mimir's well. For 10 points each:
[10] Name this "all father," the husband of Frey and chief god of the Norse pantheon.

ANSWER: **Odin** [or **Woden**, **Woten**, or **Wodinaz**]

[10] Odin's faithful steed Sleipnir had this many legs. It is also the number of replicas of itself that Odin's magic ring Draupnir would spawn every nine nights.

ANSWER: **eight**

[10] Odin once pierced himself with his spear Gungnir and hung from the world tree Yggdrasil in order to understand this sacred writing system.

ANSWER: **runes**

13. Known as "The Incorruptible", he was the most famous head of the Committee for Public Safety. For 10 points each:

[10] Identify this French revolutionary leader who was responsible for the Reign of Terror.

ANSWER: Maximillian **Robespierre**

[10] Also once the Committee head, this man later got on Robespierre's bad side for leading the Indulgents. He was charged with a conspiracy against the government in 1794 and guillotined.

ANSWER: Georges **Danton**

[10] Robespierre met his end during this month of the Revolutionary calendar. Its namesake 1795 "reaction" led to a suppression of the Jacobins and the establishment of the Directory.

ANSWER: **Thermidor** [or **Thermidorian**]

14. Answer the following questions about literature set in Los Angeles, for 10 points each.

[10] In this unfinished novel, Cecilia Brady pursues the title character, movie producer Monroe Stahr. He pursues Kathleen Turner because she looks like his dead wife Minna Davis.

ANSWER: *The Love of the* **Last Tycoon**

[10] This author wrote about painter Tod Hackett, who is injured at a riot during a Hollywood premiere, in *The Day of the Locust*. He also wrote *Miss Lonelyhearts*.

ANSWER: Nathanael **West**

[10] Jeremy Pordage is hired to find the secret of eternal life, in this author's novel *After Many a Summer Dies the Swan*. He wrote about John the Savage in *Brave New World*.

ANSWER: Aldous **Huxley**

15. Name these biological objects sometimes used in genetic engineering, for 10 points each.

[10] Also called jumping genes, these movable genetic elements were discovered by Barbara McClintock in maize, an organism in which they can account for more than half of the genome.

ANSWER: **transposons**

[10] Found in bacteria, these rings of extra-chromosomal DNA are often used in recombinant DNA research in order to transfer genes between cells.

ANSWER: **plasmids**

[10] Plasmids can also be found in *S. cerevisiae*, which is often known as the baker's type of this.

ANSWER: **yeast**

16. This country's independence movement was led by Alexander Ypsilanti. For 10 points each:
[10] Name this country which won its independence after a coalition of forces destroyed the Ottoman fleet at the Battle of Navarino.

ANSWER: **Greece**

[10] In 1822, Ottoman soldiers killed nearly all of the Greeks living on this island. Eugene Delacroix memorialized the carnage in a painting titled "the massacre at" this location.

ANSWER: **Chios**

[10] Greek independence was finally granted by an 1832 treaty named for this city, the capital of the Byzantine empire. In 1930, Kemal Ataturk renamed it Istanbul.

ANSWER: **Constantinople**

17. A follow-up to this work replaces the first word with *Victory*. For 10 points each:

[10] Name this 1943 painting that uses multicolored segments to represent the grid and traffic movements of New York City.

ANSWER: **Broadway Boogie-Woogie**

[10] This artist of *Broadway Boogie-Woogie* is best remembered for paintings consisting of perpendicular black lines dividing squares of primary colors.

ANSWER: Piet **Mondrian**

[10] Piet Mondrian was born in this nation, which is also the birthplace of such artists as Gerrard van Honthorst, Dirk Bouts, Willem de Kooning, and Jan Vermeer.

ANSWER: the **Netherlands**

18. It names the process by which one may calculate the relative amounts of reactants and products participating in a chemical reaction. For 10 points each:

[10] Give the term for this process, which hinges upon determining mol ratios and using formula masses.

ANSWER: reaction **stoichiometry**

[10] One may apply the methods of stoichiometry to determine the reagent of lower equivalent weight, also called this.

ANSWER: **limiting reagent**

[10] If one wished to convert from mols to particle number, one would invoke this constant, the number of atoms in twelve grams of carbon-12.

ANSWER: **Avogadro's** number or constant

19. Of the characters on the *Nellie*, only the narrator is at all interested in this man's story. For 10 points each:

[10] Name this man who tells of his time traveling up the Congo in *Heart of Darkness*.

ANSWER: Charlie **Marlow**

[10] This Polish-born British author wrote *Heart of Darkness*.

ANSWER: Joseph **Conrad** [or Jozef Teodor Konrad **Korzeniowski**]

[10] Marlow discovers this manager of an inland trading station to be gravely ill and converted to savagery. His last words are "The horror! The horror!"

ANSWER: Georges-Antoine **Kurtz**

20. Identify the following regarding the history of civil service in the United States, for 10 points each.

[10] Sponsored by a New Mexico senator, this 1940 act was passed after a scandal in the Works Progress Administration. It restricts the political activities of federal employees.

ANSWER: **Hatch** Act

[10] Although only covering ten percent of federal employees when passed in 1883, this law attempted to undermine the spoils system by installing a merit based employee selection.

ANSWER: **Pendleton** Civil Service Act

[10] Known for hosting the chaotic 1968 Democratic Convention, this mayor of Chicago controlled the city through strongarm methods and widespread use of patronage in civil service.

ANSWER: Richard **Daley**

21. The first one suggests that the sum of currents approaching a point in a circuit equals the sum of currents leaving. For 10 points each:

[10] Identify this pair of rules, named for current and voltage or for points and loops.

ANSWER: **Kirchhoff**'s circuit laws

[10] Kirchhoff's current law relies on the conservation of this quantity, a property which controls an object's electromagnetic interactions.

ANSWER: **charge**

[10] Kirchoff is known for his pioneering work in spectroscopy along with this namesake of a heating device common in chemistry labs.

ANSWER: Robert William Eberhard **Bunsen**