# 金 HSAPQ <br> High School Academic Pyramid Questions 

Fall 2008
ACF-Format Set \#2
Round 4
Tossups

1. The "network" type of this concept, according to Stephen Margolis, can be broken down into autarky and synchronization. Problems associated with them can be resolved through criminalization of an economic activity, though a Pigovian tax is more effective. Social costs are defined as private costs plus the cost of these. The free rider problem concerns positive ones, while negative ones include the Tragedy of the Commons. For 10 points, give this term from economics in which parties uninvolved in an economic decision are nevertheless affected by it.
ANSWER: externality [or externalities]
2. In the mythology of these people, the death god Cizin is inferior to Itzamma, a moon god and founder of their culture. The chief god, Hunab Ku, rebuilt the world three times according to these people, who believed that the human race was created when Hunaphu and Ixblanque defeated a pair of demons at the ball game. These people worshipped the rain god Chac and chronicled the Hero Twins' descent into Xibalba (shuh-BALL-buh) in their text, the Popul Vuh. For 10 points, name this Mesoamerican civilization that preceded the Aztecs in Mexico.
ANSWER: Mayans
3. Narcisco Lopez led a filibustering expedition in this country. Pierre Soule and John Mason were ordered by Pierce to meet with James Buchanan to draw up a document suggesting this place be taken by force that was named the "Ostend Manifesto." The CIA supplied nationals of this country arms in the disastrous Bay of Pigs Invasion here, and previously the United States had beaten the Spanish at San Juan Hill after the Maine blew up here. For 10 points, name this island where the US has tried to assassinate Fidel Castro.
ANSWER: Cuba
4. Calcium gluconate gel is used to treat exposure to a compound containing an ion derived from this element. Henri Moissan developed the electrolytic process still used today to isolate its diatomic form, and it cannot form oxyacids because it lacks a d orbital. The first noble gas compound used several molecules of this element, and it is the most electronegative element. For 10 points, name this element, the last with a partially filled $2 p$ subshell, which has atomic number 9 and atomic symbol $F$.
ANSWER: fluorine [accept $\underline{F}$ before end of question; accept hydrogen fluoride before "ion," accept hydrofluoric acid before "ion;" accept fluoride before "element"]
5. A recent study by James Elsner and Thomas Jagger of Florida State University linked hurricane intensity to the number of these objects. Variations in these objects are predicted by Sporer's law. Their numbers fell drastically between 1645 and 1715, which is known as the Maunder Minimum; however, their numbers generally wax and wane over an 11-year period. For 10 points, name these cool dark objects that are found on the surface of their namesake object, which is located at the center of our Solar System.
ANSWER: sunspots

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6. This artist showed a mass of dockworkers around a wooden pier in The Last of Old Westminster, and he painted several depictions of Old Battersea. Joanna Hiffernan stands on a wolf-skin rug while wearing the title color in his White Girl. He painted a fireworks show at Cremorne Gardens in The Falling Rocket, which led him to sue John Ruskin, and his best known work is a profile of a woman in a white bonnet sitting in a chair. For 10 points, name this painter of Arrangement in Gray and Black, a portrait of his mother.
ANSWER: James Abbott McNeill Whistler
7. One leader of these people, Cethshwayo, was a member of the Usuthu and that force defeated the Gqoza group near the lower Tugela River. That leader of these people was defeated at Ulundi, but he had crushed Lord Chelmsford at Isandhlwana. One of its leaders was called to fight for the Mtetwa Empire, and he was killed by his half-brother Dingane. That ruler of these people later led the Mfecane, or "crushing," which so depopulated the area that the Great Trek was able to pass through. For 10 points, name this people of South Africa, led by Shaka.
ANSWER: Zulu
8. In his first philosophical work, this man argued that Schelling had succeeded in completing Kant's idealism whereas Fichte had failed. He claimed that the "world spirit" hadn't yet reached Africa, and thus that the continent had no history, in his Lectures on the Philosophy of History. "Being," "The Doctrine of Essence," and "The Doctrine of Concept" are the three books in his Science of Logic, and he considers the concept of "the wrong" in his Philosophy of Right. For 10 points, name this German philosopher who wrote Phenomenology of Spirit.
ANSWER: Georg Wilhelm Friedrich Hegel
9. The maid Margaret dresses up like one of the main characters of this play at the behest of the scheming Borachio. Borachio is a follower of Don John, a bastard prince of Aragon who, after arriving at the house of Leonato, seeks to break apart Claudio and Hero. That ploy is broken up eventually after the bumbling judge Dogberry overhears it. For 10 points, name this Shakespeare play in which Don Pedro schemes to get Benedick and Beatrice to fall in love with each other.
ANSWER: Much Ado About Nothing
10. One work in this form was written by Luis Vaz de Cameos and includes characters like Vasco da Gama, and Adam Mickiewicz's Pan Tadeusz is generally recognized as Poland's leading example. Alexander Pope mocked this form in works such as The Dunciad, and it was revived in Italy to describe both an "enraged" and "enamored" hero, Orlando. Ancient examples were in dactylic hexamater; a notable one ends with the dragging of Hektor's body during the Trojan War. For 10 points name this form of poetry, presided over in Greek myth by the muse Calliope.
ANSWER: epic poetry [or national epic]
11. The final section of this work recounts how Nimrod's invention of kings led to the construction of the Tower of Babel. In its third section, one character deceives Uriel into showing him the way to the title location. That character invents artillery in its sixth book and proclaims "Better to reign in hell, than serve in heaven" before leading a council in Pandemonium. Attempting to "justify the ways of God to man," for 10 points, name this twelve-book epic poem about "man's first disobedience, and the fruit," by John Milton.
ANSWER: Paradise Lost
12. The Cimarron River empties into a river by this name, and Lake Dardanelle was created on that river. Ravenden is a town in this state with a giant statue of a raven, while more prominent cities include Jonesboro and Fayetteville. The river also passes through Pine Bluff and Fort Smith, and the civil war battle of Pea Ridge was fought in the state by this name. Naming a tributary of the Mississippi river and a state bordered by Oklahoma, Louisiana, Missouri, and Tennessee, for 10 points, identify this name given to the state containing cities like Bentonville and Little Rock.

## ANSWER: Arkansas

13. In this novel's introductory chapter, the narrator discovers a manuscript by Jonathan Pue and is burned by the title object. One character washes off her father's kiss in a stream and refuses to repeat a catechism to Governor Bellingham, whose sister, Mistress Higgins, is a witch. One character, who was thought to be killed by Indians, returns and masquerades as a doctor while trying to find the father of his wife's child. For 10 points, name this novel in which Hester Prynne is forced to wear the title piece of cloth, a work by Nathaniel Hawthorne.
ANSWER: The Scarlet Letter
14. This man sculpted an egg in his Beginning of the World, while his other white marbles include Leda and The White Negress. A symbol featuring concentric circles flanks an archway in his The Gate of the Kiss, which is installed at Târgu Jiu along with Table of Silence and a work featuring seventeen stacked rhomboids, The Endless Column. Also responsible for Sleeping Muse, he attempted to capture movement in a series of marble and bronze ovoid objects. For 10 points, name this Romanian sculptor of Bird in Space.
ANSWER: Constantin Brâncuşi
15. It is theorized that these formations cannot occur in LIPs, and they are arc-shaped and can often create back-arc basins. Seismic action in these regions is confined to the Wadati-Benioff zone, and these areas typically cause orogeny. A similar process to that which dominates these areas occurs when an oceanic plate thrusts over a continental plate, and is called obduction. For 10 points, name these regions in which the oceanic plate goes under the continental plate, causing lots of volcanic activity. ANSWER: subduction zones [prompt on convergent plate boundary]
16. The protagonist of this novel dreams of two witches killing a child after being lost in a blizzard. This novel climaxes in a chapter titled "Walpurgis Night," where the protagonist successfully pursues Clavdia Clauchat, and contrasts the radicalism of Leo Naptha with the humanism of Settembrini. The protagonist spends seven years in the central location after visiting his cousin Joachim Ziemessen, and finally leaves for the army during World War I. For 10 points, name this novel about Hans Castorp's stay in a Swiss sanatorium, written by Thomas Mann.
ANSWER: The Magic Mountain [or Die Zauberberg]
17. Yahtzee's review of this game calls the protagonist a cross between Hitler and Skeletor. The player gets the formula for the Lazarus Vector from Julie Langford, and he must take pictures of dead people to complete the masterpiece of Sander Cohen. The phrase "would you kindly" is used by Frank Fontaine to get the player to kill Andrew Ryan, and Ayn Rand inspired the setting of Rapture, an underwater dystopia. For 10 points, name this game featuring Big Daddies and Little Sisters, the spiritual successor to System Shock 2.
ANSWER: Bioshock
18. One split in this party occurred over the leadership of Michael Foot, and Stafford Cripps and George Lansbury were among its members to resign following a split over whether to place sanctions on Italy for invading Ethiopia. It experienced the Winter of Discontent under James Callaghan, while its first prime minister was Ramsay MacDonald and it came to prominence in 1945 with Clement Atlee. For 10 points, name this British political party that found a "third way" under Tony Blair, currently led by Gordon Brown.
ANSWER: Labour Party
19. MOSFET transistors can be destroyed due to a phenomenon tangentially related to this, known as the triboelectric effect. One effect which has reduced it to almost zero has been observed in graphite, and thermoplastics frequently utilize its namesake welding. Stokes' law describes the force exerted by its fluid analog, and its most common model was actually first described by Coulomb. Minimized by HDTE, nylon, and ball bearings and frequently occurring in static and kinetic varieties, for 10 points, name this force resisting motion involving two surfaces.

## ANSWER: friction

20. In the second part of this work one character saves the economy by introducing paper money and the title character has a son named Euphorion with Helen of Troy. In the first part of this work the protagonist leaves his assistant Wagner and falls in love with a girl whose brother Valentine he kills in a swordfight. After she accidentally kills her mother with a sleeping potion, Gretchen goes insane and refuses to escape with the protagonist. For 10 points, name this tragic German play about the title scholar who traded his soul to Mephistopheles, a work of Johann Goethe.
ANSWER: Faust [exact answer required]
21. Left-handed helices formed from alternating purine-pyrimidine nucleotides form a type of DNA denoted by this letter. The sex chromosomes of birds and platypuses are denoted by this letter and W. A disk denoted by this letter uses desmin-synemin heteropolymers to keep desmin fibers lined up, and a series of those disks occurs in the I band and is a line denoted by this letter. For 10 points, name this letter, which denotes a line separating adjacent sarcomeres in muscles.
ANSWER: $\underline{Z}$ [accept ZDNA before "letter"; accept zigzag DNA before "letter"]
22. A concerto for this instrument and violin was prepared by Max Schneider from a double harpsichord concerto by Bach, and some versions of this instrument include the dolzaina and heckelphone. In the opening of the Scene from Swan Lake, this instrument plays the melody, and it is closely related to the English horn. Depicting the duck from Peter and the Wolf, for 10 points, name this black conical double reed instrument that is pitched higher than its relative the bassoon.
ANSWER: oboe

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1. He ran as Vice President on the ticket with James Cox, and followed Al Smith as governor of New York. For 10 points each:
[10] Name this president, who succeeded the man who ordered the Bonus Army be put down, Herbert Hoover. He then declared a bank holiday and created two "New Deals."
ANSWER: Franklin Delano Roosevelt [prompt on FDR; prompt on Roosevelt]
[10] During Franklin Roosevelt's presidency, this term came to mean the states like Oklahoma that were affected by a severe drought. It was named for its thick, black storms.
ANSWER: Dust Bowl
[10] This New Deal program hired unmarried men to work on things like fighting forest fires and building flood barriers for thirty dollars a month.
ANSWER: CCC [or Civilian Conservation Corps]
2. Its four walls are covered by a kiswa, or curtain, and just outside this structure is the Zamzam Well. For 10 points each:
[10] Name this structure built by Ibrahim.
ANSWER: Ka'aba [prompt on Black Box]
[10] The Ka'aba is located in this city, the holiest city in Islam, to which pilgrims make a hajj.
ANSWER: Mecca [or Makka al-Mukarramah]
[10] Circling the Ka'aba seven times and kissing the Hajar Assad, if possible, is part of this ritual of the hajj.
ANSWER: tawaf
3. The asthenosphere and lower portion of the lithosphere are found in this layer of the earth. For 10 points each:
[10] Name this molten layer of the Earth, which lies below the crust.
ANSWER: mantle
[10] The mantle is separated from the crust by this discontinuity, named after a Croatian scientist.
ANSWER: Mohorovicic discontinuity
[10] Keith Bullen came up with this name for the lower part of the mantle, just above the Gutenberg discontinuity.
ANSWER: $\underline{\mathbf{D}^{\prime \prime}}$ [or D double prime]
4. The organ of Corti is found in this structure. For 10 points each:
[10] Name this snail-shaped organ that turns the movements of the ear bones into nerve impulses. ANSWER: cochlea
[10] The cochlea works via this type of cell, whose motion converts sound waves into nerve impulses. ANSWER: hair cells
[10] The ossicle located closest to the cochlea is this one, paired with the anvil and hammer, that attaches to the "oval window" near the cochlea.
ANSWER: the stirrup [or stapes]
5. The following rivers have something in common: they're all in China. For 10 points each:
[10] This river rises on the Tibetan Plateau and flows into the Yellow Sea across northern China. Its history of flooding the North China Plain has led to its name "China's Sorrow."
ANSWER: Huang He [or Huang Ho; or Yellow River]
[10] The longest river in Asia, this river also rises in the Tibetan Plateau from the Ulan Moron River, and the Qin Mountains lie between this river and the Huang He.
ANSWER: Yangtze [or Chang Jiang; or Ch'ang Chiang]
[10] This river rises in the Ch'ang-pai Mountains and its name is derived from the words for duck and greenish blue. It forms the northwestern boundary between North Korea and China.
ANSWER: Yalu [or Ya-lu Chiang; or Yalu Jiang; or Amnok-kang]
6. Name these various methods of gas exchange in different animals, for 10 points each:
[10] Atelectasis refers to the collapse of these sac-like structures, the primary sites of gas exchange with blood in many respiratory systems. These structures make up the lungs.
ANSWER: alveoli [or alveolus]
[10] Arachnids possess these respiratory structures whose alternating air pockets and hemolymph-filled tissue give them their nickname and distinctive appearance.
ANSWER: book lungs
[10] Echinoderms utilize this unique network which functions in feeding, excretion, and gas exchange. The most visible extensions of this system are tube feet.
ANSWER: water vascular system
7. In the first of these the narrator "thought once how Theocritus had sung." For 10 points each:
[10] Name this collection of poems, the forty-third of which asks "How do I love thee? Let me count the ways."
ANSWER: Sonnets from the Portuquese
[10] This author of Aurora Leigh wrote Sonnets from the Portuguese.
ANSWER: Elizabeth Barrett Browning [prompt on Browning]
[10] One of Elizabeth Barrett Browning's first literary efforts was translating this Aeschylus play about a Titan's punishment for giving fire to humanity.
ANSWER: Prometheus Bound [or Prometheus Desmotes]
8. He nominally became heir to the French throne with the Treaty of Troyes, and he faced a rebellion from Henry Percy and Owain Glyndwr. For 10 points each:
[10] Name this king of England.
ANSWER: Henry V [prompt on Henry]
[10] Henry defeated the forces of France's Charles VI at this battle of the Hundred Years' War that featured a victory won with the help of the English longbow.
ANSWER: Battle of Agincourt
[10] Henry's son, Henry VI, secured an end to the war by marrying this niece of Charles VII. She led the Lancastrian forces during the Wars of the Roses until being captured at Tewkesbury.
ANSWER: Margaret of Anjou [prompt on Margaret]
9. The only woman in the group was Germaine Tailleferre, and one work by a member depicts a train and is entitled Pacific 231. For 10 points each:
[10] Name this group of composers that included Honegger and the composer of The dialogue of the Carmelites, as well as Darius Milhaud, Georges Auric, and Louis Durey.
ANSWER: Les Six [or The Six]
[10] Les Six were all from this nation, which was where Jean-Baptiste Lully died from conducting his $T e$ Deum. Other composers from here include Georges Bizet.

## ANSWER: France

[10] This other French composer used a prelude by Bach as the accompaniment to a singer in his Ave Maria, and he also composed the Funeral March for a Marionette and the opera Faust.
ANSWER: Charles Gonoud
10. The speaker of this poem hears "time's winged chariot hurrying near." For 10 points each:
[10] Name this carpe diem poem which begins "Had we but world enough, and time, / This coyness, lady, were no crime."
ANSWER: "To His Coy Mistress"
[10] This author of "A Horation Ode Upon Cromwell's Return From Ireland," the one-time secretary to Milton, wrote "To His Coy Mistress."
ANSWER: Andrew Marvell
[10] Marvell wondered "how vainly men themselves amaze / to win the palm, the oak, or bays" in a poem named for this location. Another of his poems is named "The Mower, against" these.
ANSWER: gardens
11. The unit for this measurement had to be renamed because it conflicted with "meter." For 10 points each:
[10] Name this measurement of concentration equal to the moles of the dissolved substance over the kilogram of the solvent it's dissolved in.
ANSWER: molality
[10] Molality is less-frequently used than this other measure of concentration, which takes into consideration the liters of solution.
ANSWER: molarity
[10] One colligative property which uses molarity instead of molality is this one, which is the threshold when red blood cells lyse. It is the pressure caused by water transfer.
ANSWER: osmotic pressure
12. The following organizations attempted to unite the Communist countries of the world. For 10 points each:
[10] Officially ended in 1991, this treaty created a mutual-defense organization for the Eastern Bloc nations. Albania withdrew from it in 1968.

## ANSWER: Warsaw Pact

[10] Created in 1949, this organization attempted to coordinate econmic development in the Eastern Bloc, and it encouraged specializing the economies of its member nations.
ANSWER: Comecon [or Council for Mutual Economic Assistance; or Organization for International

## Economic Cooperation]

[10] This organization was dissolved by Stalin in 1943 to foster trust with his western allies. It attempted to spread communist revolutions worldwide.
ANSWER: Comintern [or Communist International; or Third International]
13. Name these figures important in the Titanomachy, for 10 points each.
[10] Along with the Cyclopes, these hundred-handed, fifty-headed children of Gaia were freed from Tartarus to assist the Olympians, but had earlier been banished by Uranus for their ugliness.
ANSWER: Hecatonchires
[10] This mother of the gods was the wife and sister of Cronus and hid Zeus in a cave in Mount Ida so that he would not suffer the fate of being swallowed by Cronus like his siblings.
ANSWER: Rhea
[10] This goat-figure suckled Zeus and broke off one of her horns to feed him. Some traditions hold that her skin was the basis for the aegis.
ANSWER: Amalthea
14. A poem about this place urges the reader to "arise with me, and be born." For 10 points each: [10] Name this place whose "Heights" name the seminal poem from Canto General. ANSWER: Macchu Picchu [accept "The Heights of Macchu Picchu"]
[10] This poet wrote the Elemental Odes and Twenty Love Poems and a Song of Despair in addition to Canto General.
ANSWER: Pablo Neruda [or Neftali Ricardo Reyes Basoalto]
[10] Neruda hails from this country, whose other famous writers include Gabriela Mistral and Jose Donoso.
ANSWER: Chile
15. Name these linguistic features that modern English does not have, for 10 points each.
[10] This feature is so prominent in the southern African Khoisan tongues that those languages are sometimes known for this sound, produced by rapidly inhaling air around the tongue.
ANSWER: clicks
[10] Written in Old English as a vertical line with a semicircle on the right, this archaic letter represented the sound now written as "t-h."
ANSWER: thorn
[10] Many Indian languages place meaning on this feature, eliminated from the ancestors of English by Grimm's Law, which consists of a puff of air after a consonant such as "d."
ANSWER: aspiration
16. When these have a solid metallic core, they become electromagnets. For 10 points each:
[10] Name these objects, which are basically coils of wire.

## ANSWER: solenoids

[10] This man's namesake "coil" is a resonant transformer that produces alternating current. This Serbian-American later went crazy and tried to invent a death ray.

## ANSWER: Nikola Tesla

[10] This law shows that there can be a positive or negative sign in Faraday's law, and it gives the direction of the EMF and current resulting from induction.
ANSWER: Heinrich Lenz's Law
17. The landlord Nikolai Petrovich finally gets up the nerve to marry the Fenichka. For 10 points each:
[10] Name this novel in which Arkady Kirsanov befriends Bazarov.
ANSWER: Fathers and Sons [or Ottsy i Deti]
[10] This Russian author of Rudin and On the Eve wrote Fathers and Sons.
ANSWER: Ivan Sergeyevich Turgenev
[10] Bazarov picks up this philosophical belief in nothing, popular among Russian anarchists.
ANSWER: nihilism
18. The downturn in the economy has hurt several economies worldwide. For 10 points each:
[10] This cash-strapped Asian country requested for a loan from the IMF in order to pay off its $\$ 5$ billion worth sovereign debt. It is currently led by Asif Zardari.
ANSWER: Islamic Republic of Pakistan
[10] This East Asian nation saw upwards of twenty-five percent annualized inflation and a rapid decline in its stock market, which is based in Ho Chi Minh City.
ANSWER: Socialist Republic of Vietnam
[10] Times are better in Africa. The EAC, COMESA, and SADC announced the creation of a trade bloc in a summit in this country's capital at Kampala.
ANSWER: Republic of Uganda
19. A topless woman holding a tricolor and a boy firing a pistol in the air are at the center of this painting. For 10 points each:
[10] Name this painting depicting the 1830 revolution in France, which also contains the finest depiction of a man in a tophat wielding a shotgun in all of art.
ANSWER: Liberty Leading the People
[10] This painter of The Barque of Dante and The Death of Sardanapalus painted Liberty Leading the People.
ANSWER: Eugene Delacroix
[10] A Turkish soldier on a rearing black horse is helping to perpetrate the title atrocity on some emaciated-looking Greeks in this Delacroix painting.
ANSWER: Massacre at Chios
20. The third section of this book is set during the retreat from the Battle of Caporetto. For 10 points each:
[10] Name this novel about Frederic Henry's love for Catherine Barkley during World War I. ANSWER: A Farewell to Arms
[10] This author of To Have and Have Not and The Sun Also Rises wrote A Farewell to Arms.
ANSWER: Ernest Hemingway
[10] Many of Hemingway's short stories, including "Indian Camp," "The Three-Day Blow," and "Big TwoHearted River," focus on this fictional character.
ANSWER: Nick Adams [either or both names]
21. His American birth prevented his execution after being the last commander to surrender in the Easter Rising. For 10 points each:
[10] Name this man, who was then elected president of the Sinn Fein Party before escaping Lincoln jail. He later presided over the Council of the League of Nations.
ANSWER: Eamon De Valera [or Edward De Valera]
[10] Eamon de Valera served as president and prime minister of this island nation, which rebelled against British rule. Six counties in the north here still are part of Great Britain.
ANSWER: Ireland or Eire
[10] This minister of home affairs for the Sinn Fein arranged de Valera's escape from prison, but became director of intelligence for the IRA.
ANSWER: Michael Collins

