HSAPQ State Series - 2014 Regionals
Round 13
First Period: Tossups with Bonus

1. John Hicks used this man's ideas to derive the IS/LM model in an article on this man "and the Classics." In his most famous work he argued hiring people to bury bottles full of banknotes would be a better use of resources than allowing them to sit $\left(^{*}\right)$ unused. That book sought to disprove Say's Law and more generally the notion that unemployment was self-correcting. For 10 points, name this British economist who wrote The General Theory of Employment, Interest, and Money.
ANSWER: John Maynard Keynes
121-14-101-13101
BONUS: What deadly compound, with formula "CN minus", inhibits cytochrome C in the electron transport chain?
ANSWER: cyanide
2. In one book, this writer described his observations of red and black ants fighting, and he began an essay by endorsing the motto, "That government is best which governs least." One of his essays was written after he was arrested for refusing to pay a ${ }^{(*}$ ) poll tax supporting the Mexican-American War, and his most famous book describes his time living in a cabin by the title pond. For 10 points, name this transcendentalist who wrote "Civil Disobedience" and Walden.
ANSWER: Henry David Thoreau

BONUS: This is a 30 -second calculation question. What is the length of the longest diagonal of a regular hexagon with area six times radical three square inches?
ANSWER: $\underline{4}$ inches
003-14-101-1310-11
3. The west bank of this lake is the location of a kittbutz on the En Gedi oasis. A peninsula known as "The Tongue" separates this body of water into two basins, and Mount Sodom is located at its southwestern end. Khirbat Qumran was the location of a discovery made by a (*) shepherd boy in a cave near this body of water's shores in 1947. For 10 points, name this salt lake between Israel and Jordan that is about 1,300 feet below sea level and is known for its namesake scrolls.
ANSWER: Dead Sea [prompt on Salt Sea]
030-14-101-13103
BONUS: What artist created controversy over the exhibition of his paintings Olympia and Luncheon on the Grass?
ANSWER: Edouard Manet

140-14-101-1310-11
4. This poet attacked his contemporary Colley Cibber by making him the king of dunces in his mock epic The Dunciad. He coined the sayings, "To err is human, to forgive divine," and "A little learning is a dangerous thing" in another poem. In his most famous poem, the Baron climactically (*) cuts off a piece of Belinda's hair. For 10 points, name this satirical Augustan poet of An Essay on Criticism and The Rape of the Lock.
ANSWER: Alexander Pope
5. Charlie Duke served as the CAPCOM on this mission. A member of this mission described a surface as "fine and powdery." A Jules Verne novel inspired the name of this mission's vehicle Columbia, which was piloted by Michael Collins. Two other members of this mission were transported by the (*) Eagle, including Buzz Aldrin. For 10 points, name this NASA mission during which the quote "That's one small step for man, one giant leap for mankind" was said by Neil Armstrong on the moon.
ANSWER: Apollo 11 [prompt on Apollo; prompt on such answers as first moon landing]
023-14-101-13105
BONUS: Name the US city which overlooks the Puget Sound and is home to the Pike Place Market, where the original Starbucks is located.
ANSWER: Seattle
225-14-101-1310-11
6. At the beginning of this play, a man refers to a woman as his "little squirrel." It ends with a woman saying she has "never exchanged one serious word" with her husband. A character in this play is Dr. Rank, who suffers from syphilis. The protagonist illegally (*) borrows money from her husband's work and is blackmailed by Krogstad. This play ends with a woman slamming the door as she walks out on her banker husband. For 10 points, name this Henrik Ibsen play about Torvald and Nora Helmer.
ANSWER: A Doll's House [or Et dukkehjem]
052-14-101-13106
BONUS: What Cleveland building, which houses the Ahmet Ertegun Exhibition Hall and seven floors of other exhibits, is entered through a glass pyramid designed by I.M. Pei, much like Paris's Louvre?
ANSWER: Rock and Roll Hall of Fame and Museum
019-14-101-1310-11
7. The slope of a coexistence curve is proportional to a form of this quantity divided by temperature. This quantity is the integral of the constant-pressure heat capacity with respect to temperature. It equals internal energy plus PV. The most common statement of $\left(^{*}\right)$ Hess's Law is that this quantity is a state function. For 10 points, name this quantity, the heat transferred at constant pressure, which often measures the energy change associated with a chemical reaction.
ANSWER: enthalpy [or latent heat before "heat capacity"; prompt on "heat" or "heat of reaction"]
190-14-101-13107
BONUS: What geologic period is named for a mountain range on the French-Swiss border, was dominated by sauropods, and came after the Triassic?
ANSWER: Jurassic period
228-14-101-1310-11
8. This politician noted that his top priority was "education, education, education" upon first securing high office. This "Third Way" proponent first rose through the ranks after the sudden death of John Smith. This man's government signed the (*) Good Friday Agreement with Northern Ireland. He ceded power to his Chancellor of the Exchequer, Gordon Brown, in 2007. For 10 points, name this founder of "New Labour", the British PM beginning in 1997.
ANSWER: Anthony Charles Lynton "Tony" Blair

BONUS: Name the postmodern American novelist of The Crying of Lot 49 and Gravity's Rainbow. ANSWER: Thomas Pynchon

## SET A:

1. BONUS: Identify the structure which contains the glomerulus and the loop of Henle and is the functional urine-producing unit of the kidney.
ANSWER: nephron
2. BONUS: This is a 30 -second calculation question. What is the cosine of the arcsin of negative $5 / 6$ ?

Express your answer in simplest radical form.
ANSWER: square root of 11, over 6 [or radical 11, over 6]
003-14-101-1310-12
3. BONUS: Identify the naturalist author of Sister Carrie and An American Tragedy. ANSWER: Theodore Dreiser
4. BONUS: Stacker Pentecost runs the Jaeger forces, which fight Kaijus, in what 2013 Guillermo del Toro movie?
ANSWER: Pacific Rim
023-14-101-1310-12

## SET B:

1. BONUS: William Jennings Bryan and Clarence Darrow faced off in what 1925 court case, in which a Tennessee teacher was put on trial for teaching evolution?
ANSWER: Scopes trial [or Scopes monkey trial; or The State of Tennessee v. John Thomas Scopes]
052-14-101-1310-12
2. BONUS: This is a 20 -second calculation question. If a normal distribution has a mean of 15 and a standard deviation of 3 , what is the probability, to the nearest percentage point, that a single number taken from this distribution is greater than 18 ?
ANSWER: 16\% [or 16/100; or 4/25]
132-14-101-1310-12
3. BONUS: What type of animal was the eight-legged Sleipnir in Norse mythology? ANSWER: horse
4. BONUS: What Cabinet position was first held by Thomas Jefferson?

ANSWER: Secretary of State

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9. The letter $\mathbf{c}$ is appended to the name of this function when it is divided by $\mathbf{x}$. When solving a triangle, the ambiguous case arises because this function isn't one-to-one. In triangles, this function of an angle, divided by the side $\left(^{*}\right)$ opposite the angle, is constant. The y-coordinate of the unit circle is this function of the angle. This function of pi over two radians, or ninety degrees, is one. For 10 points, name this odd function defined in right triangles as opposite over hypotenuse.
ANSWER: sine
190-14-101-13109
BONUS: Hippasus was supposedly killed by the followers of Pythagoras for discovering that the square root of two was what type of number?
ANSWER: irrational number
233-14-101-1310-11
10. This actor played a thief who teams up with Perry van Shrike in a movie whose sections are named after Raymond Chandler stories. In another film, this actor asks, 'Is it better to be feared or respected? I say, is it too much to ask for both?" This actor, who starred alongside Val Kilmer in Kiss Kiss Bang Bang, played a man who builds a device 'in a (*) CAVE! with a BOX OF SCRAPS!", to the consternation of Obadiah Stane. For 10 points, name this actor who starred as Tony Stark in Iron Man. ANSWER: Robert Downey, Jr.

BONUS: During the Second World War, which country was the site of the Altmark Incident and the rule of Vidkun Quisling?
ANSWER: Kingdom of Norway [or Kongeriket Norge]
153-14-101-1310-11
11. Two officials of this city were convicted of conspiracy and bribery in the Synagro Sludge scandal. A former mayor of this city took an early hit to his public reputation when exotic dancer Tamara Greene was murdered after performing at a wild party held at (*) Manoogian Mansion. Kevyn Orr's failure to negotiate a "haircut" led this city's current mayor, Dave Byng, to file for Chapter 9 bankruptcy in 2013. For 10 points, Kwame Kilpatrick led what Midwestern city with a bailed-out auto industry?

ANSWER: Detroit
020-14-101-13111
BONUS: What psychologist wrote The Lucifer Effect and studied the psychology of prisons in the Stanford Prison Experiment?
ANSWER: Philip Zimbardo
232-14-101-1310-11
12. Wolfram von Eschenbach claimed this object was a stone that fell from heaven during Lucifer's rebellion. The land where this object is kept was ruled by the Fisher King, who could only be healed upon the arrival of the son of his daughter Elaine. (*) Galahad is the only knight pure enough to handle it. This object was brought to Britain by Joseph of Arimathea. For 10 points, name this cup containing the blood of Christ sought by King Arthur and his knights.
ANSWER: Holy Grail

BONUS: Wan and the light spirit Raava were revealed to have defeated the dark spirit Vaatu in what popular Nickelodeon series?
ANSWER: The Legend of Korra
13. From 1966 to 2009, France boycotted the adminstrative structure of this organization, which was established by the 1949 Washington Treaty and is currently led by Danish Secretary General Anders Fogh Rasmussen. This organization's first-ever invocation of Article (*) 5 of its charter, which provides for a collective response to an attack against one member, occurred after 9/11. For 10 points, name this mutual defense alliance among the U.S., Canada, and Western Europe.
ANSWER: NATO [or the North Atlantic Treaty Organization]
019-14-101-13113
BONUS: What Midwestern city held the 1904 World's Fair in its Forest Park, celebrating the centennial of the Louisiana Purchase?
ANSWER: St. Louis
233-14-101-1310-11
14. This quantity is measured by calculating the torque required to completely revolve a submerged spindle in a rheometer. For a plate atop a fluid, this quantity is the proportionality constant between the shear stress and the shear velocity. Water has a value of (*) 1.002 centipoise for this quantity, which can be dynamic or kinematic, and which goes to zero in a superfluid. For 10 points, name this internal resistance of a fluid to flow, which is very high for honey.
ANSWER: viscosity [or dynamic viscosity; or kinematic viscosity]
190-14-101-13114
BONUS: What organelles, with a low pH of around 4.5, digest molecules in a cell?
ANSWER: lysosomes
15. A grey individual climbs a ladder up to the broken egg-shell of a 'tree-man' in this painting, whose face is the artist's. When closed, the exterior panels of this painting show the world on the third day of creation. A number of pink statues receive rivulets from a giant (*) fountain in the background of this painting, whose right depicts a hellscape, and whose left shows Adam being introduced to Eve in the title Biblical location. For 10 points, name this proto-surrealistic triptych by Hieronymus Bosch.
ANSWER: Garden of Earthly Delights
135-14-101-13115
BONUS: What literary term refers to an elaborate, extended, and often far-fetched metaphor, often seen in the 17th century metaphysical poetry of George Herbert and John Donne?
ANSWER: conceit
045-14-101-1310-11
16. This man authored most of George Washington's farewell address, and he anonymously circulated the biting pamphlet The Public Conduct and Character of John Adams, Esq. This author of Report on a National Bank advocated protective (*) tariffs and investment in infrastructure in his Report on Manufactures. For 10 points, name this man who was the first secretary of the Treasury and who was killed in a duel with Aaron Burr.
ANSWER: Alexander Hamilton

BONUS: Name the British novelist who wrote Jude the Obscure and The Mayor of Casterbridge. ANSWER: Thomas Hardy
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17. These regions are the bounding areas of horsts and grabens. These regions can create a namesake type of breccia. A theory about these regions states that they can suddenly elastically rebound. The thrust type of these regions can create mountains. These regions are split into a hanging wall and a $\left.{ }^{*}\right)$ foot wall, and can be classified as normal and strike-slip. These discontinuities in the crust release energy during earthquakes. For 10 points, identify these regions which include the San Andreas one. ANSWER: $\underline{\text { faults [or fault zones; or fault lines; prompt on convergent plate boundary] }}$

BONUS: What German author's novel The Tin Drum is part of his Danzig Trilogy? ANSWER: Gunter Grass

