Bergen Academies Spring Quizbowl Tournament 2016
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Round 6: Tossups

1. In a short story by this author, a wish-granting vessel once owned by Napoleon and Captain Cook must be sold for less than Keawe paid for it. That story, "The Bottle Imp", was first published in the collection South Sea Tales, which was inspired by this author's (*) travels to New Zealand and Samoa. The narrator of one of this author's works investigates the murder of a little girl who was "trampled", and his client, Sir Danvers Carew. That novella by this author ends when Mr. Utterson discovers his friend's dual alternate identity as the title characters. Another novel by this author features Jim Hawkins and Long John Silver. For ten points, name this Scottish author of Treasure Island and Dr. Jekyll and Mr. Hyde.
ANSWER: Robert Louis Stevenson
2. Benoit Mandelbrot ["ben-WAH MAN-dell-brah"] worked early in his career at this company, where he noticed self-similarity in signal transmissions. The Zurich research center for this company saw the development of the Nobel Prize-winning scanning tunneling microscope. This company's logo was famously designed by Paul (*) Rand, and features stripes across the letters. A computer built by this company that currently operates at two healthcare facilities is named for this company's first CEO, Thomas Watson, and beat Ken Jennings at Jeopardy!. For ten points, name this multinational computer company once known as "Big Blue."
ANSWER: IBM (International Business Machines)
3. Invented by James Devonshire, John Jaques III trademarked one commonly used name for this game. In 1971, the United States team playing this game crossed from Hong Kong to the Chinese mainland, becoming the first Americans to do so since the Communist revolution. Ma Lin, a Chinese player of this game, is known for a (*) serve that spins backwards, away from the opponent; that is his "Ghost Serve." One notable doubles pairing is Timo Boll and Ma Long, both of whom are ranked in the top 10 in the world by the ITTF. For ten points, name this game played with a paddle, small plastic ball and a net on a flat surface.
ANSWER: table tennis or ping pong
4. The TUNEL assay can be used to detect the fragments produced by this process. The Annexin $V$ assay detects the occurrence of this phenomenon, which is inhibited during late stages of herpes simplex virus infections. This process can begin with the binding of Fas ligands released by a class of T cells, an event that forces the cell membrane to form (*) blebs. Proteins that mediate this are themselves regulated by the Bcl2 class of proteins. It occurs exactly 131 times during the development of C. elegans, and its failure in the human body causes webbed fingers and toes. For ten points, the mitochondrial release of cytochrome c can trigger what process of programmed cell death? ANSWER: apoptosis (prompt on "programmed cell death" before mention)
5. This man's friendship with Carlos Chávez formed a deep influence on his understanding of musical tone, inspiring his first ever international success. Chávez also conducted that piece at its premiere and gave it the name El Salón México. He composed suites like (*) Billy the Kid and Rodeo before composing a work choreographed by Martha Graham. That ballet was only exceeded in popularity by his Fanfare for the Common Man. For ten points, name this American composer of the ballet Appalachian Spring, which has a movement inspired by the Shaker hymn "Simple Gifts".
ANSWER: Aaron Copland
6. This man's service during World War II inspired his novel Love the Revolution! and the poem "Prussian Nights". Another of his novels features the intellectual Tsezar, who receives food from his family and gives some to the main character. In a related book by this author, he writes that (*) labor camps were in existence since Lenin's time and their cruelty was simply amplified during Stalin's dictatorship. Another of his works is the semi-autobiographical allegorical novel Cancer Ward. For ten points, name this author of One Day in the Life of Ivan Denisovich and The Gulag Archipelago.
ANSWER: Aleksandr Solzhenitsyn
7. This mathematical branch shares a name with a type of structure that satisfies the Jacobi identity. One of its sub-branches is based on Hilbert's nullstellensatz, and another, which uses eigenvalues in such processes as shear transformations, is motivated by solving $\left(^{*}\right)$ matrix and vector relations. One of its abstract sub-branches studies sets with operations known as groups, rings and fields. Its fundamental theorem states that every non-constant complex polynomial has at least one root. For ten points, name this branch of mathematics, which may be summarized by "find $x$ ". ANSWER: algebra, or algebraic geometry, or linear algebra, or abstract algebra
8. This body came under controversy in 2007 when it instituted a rule banning certain activities at above 2.5 kilometers. David Nakhid ran for the leadership of this body, which with the IFAB is jointly responsible for the Laws of the Game. In 2015, this organization's Ethics Committee banned Jack Warner for life in a case that also resulted in the suspension of President (*) Sepp Blatter for 90 days. A concurrent investigation concerns this organization's role in awarding events to Russia in 2018 and Qatar in 2022. For ten points, what governing body of soccer organizes the World Cup every four years?
ANSWER: FIFA (accept Fédération Internationale de Football Association or International Federation of Association Football)
9. During Reconstruction, D.N. Cooley sought out ways to cause factions to form in this group, and the United Keetoowah Band of these people is headquartered in Tahlequah, Oklahoma. This member of the "Five Good Tribes" were the plaintiffs in $\left(^{*}\right)$ Worcester $v$. Georgia, and a silversmith of this tribe worked for a year until he had developed an 86-character system. For ten points, name this Native American tribe whose writing system was invented by Sequoia.
ANSWER: Cherokee Tribe
10. This figure killed Halirrhothius, who was the rapist of his daughter Alcippe. This lover of Enyo also killed Adonis while disguised as a boar. Hermes rescued this god after he was trapped by the Aloadae in a bronze urn. During the Trojan War, he was stabbed by $\left(^{*}\right)$ Diomedes, and his scream stopped battles from both sides. In one story, this god was caught by Hephaestus while having an affair with his wife. Phobos and Deimos were the result of that affair with Aphrodite. For ten points, name this Greek god of war.
ANSWER: Ares (do not accept or prompt on "Mars")
11. This philosopher explored the experimental writing of Raymond Roussel in Death and the Labyrinth. An analysis of Las Meninas opens a work by him that describes the relationship between language and the "return of man". This author of The History of Madness described the use of the "medical gaze" by doctors to subtract patients' humanities from their bodies. Another work of his described the (*) Great Confinement while criticizing insanity. He famously used the image of Jeremy Bentham's Panopticon to describe society as a prison. For ten points, name this French postmodernist author of Madness and Civilization and Discipline and Punish.
ANSWER: Michel Foucault
12. Quintessence and phantom energy are theoretical phenomena that attempt to describe this quantity's effects cosmologically. Its time derivatives include jounce, snap, crackle and pop, though its first time derivative is called jerk. Velocity squared divided by radius gives its $\left(^{*}\right)$ centripetal form, while Newton's Second Law dictates that it force is equal to mass times this quantity, most commonly measured in meters per second squared. For ten points, name this kinematic quantity, the rate of change of velocity.
ANSWER: acceleration
13. This city's Metropolitan Crest is a monochromatic sun emanating six beams of light. Coronet was the codename for an abandoned plan to invade this location as part of Operation Downfall. This place's 5 machi and 8 mura form part of its metropolis, and in 1947, this city's $35\left(^{*}\right)$ wards were merged into 22 , with the 23 rd , Nerima, being added in August of that year. This host of the 1964 and 2020 Summer Olympics became the de facto national capital when Emperor Meiji relocated. For ten points, name this largest city in Japan, its capital.
ANSWER: Tokyo
14. In one story in this text, Caesar's daughter refutes his claim that God is a thief by arguing that it is better that Adam's rib was taken in his sleep. In another story, the only blessing a man can provide to a bountiful tree is equally bountiful offspring. A $14-$ volume codification of this text was composed by (*) Maimonides, and notable contributions included editing by Judah and scholarship by Rashi. This work is often paired with the Midrash, and consists of the Mishna and Gemara. For ten points, name this commentary on and interpretation of Jewish jurisprudence. ANSWER: Talmud (accept Talmud and Midrash before the latter's mention, at no point accept just "Midrash")
15. The Black Tom munitions explosion occurred on an island named for this concept. One work titled for this concept argues that despots like Charlemagne benefit "barbarian" nations, and denounces the "tyranny of the majority". That work was heavily influenced by its author's wife and is a (*) Utilitarian essay was written by John Stuart Mill. Rand and Ron Paul are proponents of a political ideology named for this concept, and this concept is included in the French national motto along with "égalité" and "fraternité". Patrick Henry asked for this "or ... death". For 10 points, name this concept whose "Statue" and "Bell" are American landmarks.
ANSWER: liberty (or On Liberty or liberté, prompt on "libertarian" or "libertarianism")
16. This artist painted a portrait of a man in a brown coat and white collar, his Moorish assistant who also went on to have a painting career, Juan de Pareja. That painting's composition parallels the red-toned portrait of Pope Innocent X this artist later painted. Cupid holds a $\left(^{*}\right.$ ) mirror in front of the nude title goddess in this painter's Rokeby Venus. In his most famous painting, a nun and a man on a stairwell appear in the background, while a large dog and two dwarves stand beside the title ladies-in-waiting. For ten points, name this Spanish painter of Las Meninas.
ANSWER: Diego Rodríguez de Silva y Velázquez
17. The surface of $I o$ is colored by the presence of compounds of this element. On Earth, those compounds are produced by active volcanoes and fumaroles, making Sicily a hotspot of mining this element. The most common allotrope of this element is a crown-shaped ring containing $\left(^{*}\right) 8$ atoms. It is produced synthetically by extraction from petroleum and natural gas, and amino acids containing this element form namesake "bridges" in proteins. It is critical in rubber production due to its role in vulcanization. For ten points, name this element, called brimstone in the Bible, that is known for its distinctive yellow color and for smelling like rotten eggs.
ANSWER: sulfur, prompt on "S"
18. The protagonist of this story was once called the "Golden Cicada", and is reunited with his mother after she promises to donate one hundred pairs of shoes. Another character is banished after he flirts with the moon goddess, and lives in the Cloud Pathway Cave. The conclusion of this novel sees a monk and his disciples receive scriptures from the (*) Buddha on Vulture Peak. One of those students wields the Ruyi Bang, a staff that can change its length; that character is also King of the Monkeys. For ten points, name this Great Classical Novel of China where Xuanzang and Sun Wukong travel to India.
ANSWER: Journey to the West (accept Xi You Ji)
19. One pioneer of the bebop style who played this instrument was a member of the "Trio" and "Quintet," Max Roach. One player of this instrument led the Jazz Messengers and enabled many young musicians to develop; that player was Art Blakey. As a child, bandleader (*) Buddy Rich was known as "Traps" because of his "wonder"ous ability to play this instrument. Jo Jones, a member of the rhythm section who played this instrument, threw his cymbal at Charlie Parker's feet. For ten points, name this instrument that may be played with sticks.
ANSWER: drums or drum kit or drum set, etc.
20. This author asserted that it was "dreary" to be "public - like a Frog" and "somebody" in one poem. Her works were not originally titled and many were published posthumously by her family. Along with "I'm nobody! who are you?", in another poem this author described (*) "the School, where Children strove / at Recess" that the speaker passed with the title character. She noted that the "Stillness in the Room / was like the Stillness in the Air" after doing the title action in "I heard a Fly buzz". For ten points, name this solitary "Belle of Amherst" who wrote the poem "Because I could not stop for death".
ANSWER: Emily Dickinson

Tiebreaker Question:
The Battle of the Allia in the late 4th century led to one instance of this event. In 1527, Duke Charles III of Bourbon was forced by his as-of-yet unpaid troops to perform this action. Robert Guiscard performed this action on Hildebrand's behalf in 1084 in order to counter a coup by Henry IV of Germany. Geiseric led the (*) Vandals in this action in 455, while Totila and Alaric led Gothic groups in this action in the 5th and 6th centuries. For ten points, Pope Leo I talked Attila the Hun out of performing what action involving destruction of an empire's capital?
ANSWER: invading Rome, or sacking Rome, or any equivalent having to do with capturing Rome

## Round 6 Bonuses

1. This modern-day nation is home to the region of Navarre, which lost its independence in the Convention of Vergara. For ten points each:
[10] Name this European nation, home to cities such as Balboa and Pamplona in the separatist Basque Country.
ANSWER: The Kingdom of Spain
[10] This Basque separatist organization is known for its violent tactics, and notably assassinated Prime Minister Luis Carrero Blanco with a car bomb in 1973.
ANSWER: Euskadi Ta Askatasuna (ETA)
[10] The ETA's logo features a snake, representing politics, around one of these objects, representing armed struggle. ANSWER: axe
2. For ten points each, name these birds that appear in poetry:
[10] This creature, a "light-winged Dryad of the trees" is never actually mentioned in the John Keats poem it titles.
ANSWER: the nightingale (from "Ode to A Nightingale")
[10] The only thing moving in this Wallace Stevens poem was the eye of the title bird. The speaker observes that this coal-colored avian "sat / In the cedar-limbs".
ANSWER: "Thirteen Ways of Looking at a Blackbird"
[10] This large seabird titles a poem from Charles Baudelaire's Les Fleurs du mal.
ANSWER: "The Albatross"
3. For ten points each, name the following science fiction novels:
[10] Ford Prefect, who took his name from a car model, Marvin the Paranoid Android, and Arthur Dent travel to Betelgeuse in this Douglas Adams series.
ANSWER: The Hitchhiker's Guide to the Galaxy, prompt on just "Hitchhiker's Guide"
[10] In this novel, Alex DeLarge has a predilection for "ultraviolence" and frequents the Korova Milk Bar, where he and his "droogs" drink laced refreshments.
ANSWER: A Clockwork Orange (by Anthony Burgess)
[10] In this novel, the mantra is "everyone belongs to everyone else", and is set in the year 632 "After Ford".
ANSWER: Brave New World (by Aldous Huxley)
4. Franz Boas was her doctoral advisor at Columbia University. For ten points each:
[10] Name this author of Sex and Temperament in Three Primitive Societies.
ANSWER: Margaret Mead
[10] Mead's most famous work comes from studies done on the island of Ta 'u in this location.
ANSWER: (Coming of Age in) Samoa, or Samoan Islands, etc.
[10] This anthropologist published two books criticizing Coming of Age in Samoa, including The Fateful Hoaxing of Margaret Mead.
ANSWER: Derek Freeman
5. This man's policies concerning circumcision sparked the Bar Kokhba Revolt. For ten points each:
[10] Name this "good" Roman emperor who built a namesake wall in Britain.
ANSWER: Publius Aelius Hadrianus Augustus
[10] In the Bar Kokhba Revolt, Hadrian sent his general Julius Severus to this Roman province. It was the birthplace of the historian Josephus.
ANSWER: Judea, do not accept or prompt on "Israel"
[10] 58 years before the Bar Kokhba Revolt began, the First Jewish-Roman War ended at what location, where the remaining members the the Sicarii killed themselves?
ANSWER: Masada
6. Trisecting an arbitrary angle is an impossible challenge using these objects. For ten points each:
[10] What two instruments are used in classical constructions, and allow you to draw circles and straight lines?
ANSWER: compass and straightedge (or ruler and compass)
[10] Compass-and-straightedge constructions cannot solve equations of degree 3 or higher, which is why this problem cannot be solved with only the two. It is equivalent to finding the one-third power of 2.
ANSWER: doubling the cube (accept equivalents such as "constructing a cube with twice the area")
[10] This area of mathematics was used to show that trisection and cube-doubling are impossible. It was also used to show that there is no generic formula for the roots of a fifth-degree polynomial.
ANSWER: Galois theory
7. Answer these questions about 19th century Russian literature, for ten points each:
[10] This title character of a novel by Leo Tolstoy falls in love with Count Vronsky to the dismay of her husband, Alexei Alexandrovich.

## ANSWER: Anna Karenina

[10] Alexander Pushkin wrote about this character who kills Lensky in a duel and is rejected by his earlier love Tatiana in a novel in verse. The character came to title the "stanza" of rhyme scheme and meter used in the novel.
ANSWER: Eugene Onegin
[10] This author of $A$ Hero of Our Time succeeded Pushkin following the latter's death as a leading Russian poet. Like Pushkin, he also died as a result of a duel.
ANSWER: Mikhail Lermontov
8. His namesake "folly" pertained to a purchase of land from Russia. For ten points each:
[10] Name this member of the Abraham Lincoln and Andrew Johnson cabinets who was almost assassinated on the same day as Lincoln.
ANSWER: William Henry Seward
[10] Seward held this role under both Lincoln and Johnson. Other holders of this office included the first, Thomas Jefferson, as well as Henry Clay.
ANSWER: Secretary of State of the United States of America
[10] This Secretary of State under Grover Cleveland issued his "Corollary" during a border dispute between Britain and Venezuela.
ANSWER: Richard Olney
9. It's time to Duel! For ten points each:
[10] Dark Magician and Blue-Eyes White Dragon are characters in Duel Monsters, which is the basis of this anime and manga series. It is also the name of a popular trading card game.
ANSWER: Yu-Gi-Oh!
[10] This monster, called "the Forbidden One", is split into five pieces. If a Duelist has all five in his hand, then he automatically wins the Duel.
ANSWER: Exodia
[10] The Millennium Objects, including the Millennium Puzzle, feature this Egyptian symbol of protection. It is an emblem of a falcon-headed Egyptian god.
ANSWER: The Eye of Horus (accept Wdjat or Wadjet)
10. This man's Hannibal Crossing the Alps shows very little of the title figure, instead focusing a looming snowstorm. For ten points each:
[10] Name this British painter who portrayed a rabbit and an oncoming train in Rain, Steam, and Speed.
ANSWER: J(oseph) M(allord) W(illiam) Turner
[10] Another staple of Turner's paintings were these objects, often shown battling great waves on the open ocean, or in the case of Calais Pier, docking. He also painted the sick and dying being thrown from a "slave" one of these vehicles.
ANSWER: boats (or ships)
[10] Although not showing a ship per se, this Théodore Géricault painting shows the aftermath of a shipwreck of the coast of Mauritania.
ANSWER: The Raft of the Medusa
11. When Amulius seized the throne of Alba Longa from Numitor, this woman was forced to become a Vestal Virgin. For ten points each:
[10] Name this woman, who gave birth to two boys while serving as priestess but claimed Mars was their father.
ANSWER: Rhea Silvia
[10] One of those boys went on to found this city on seven hills adjacent to the Tiber after killing his brother Remus. ANSWER: Rome (or Roma)
[10] Romulus and Remus descended indirectly from this Trojan who carried his father Anchises on his back while fleeing the city.
ANSWER: Aeneas
12. Despite the immense variety of life, almost all organisms follow similar routes to genetic reproduction. For ten points each:
[10] Name this concept in biology that describes the path of genetic information of DNA to RNA to protein.
ANSWER: central dogma of biology
[10] Some viruses, including the retrovirus family, use this protein to go backwards - from RNA to DNA. This protein thus allows them to have an RNA genome.
ANSWER: reverse transcriptase
[10] Prions are pathogens that don't even use nucleic acids at all. Instead, they cause debilitating diseases by causing surrounding proteins to misfold, including this affliction that causes sheep to itch so hard they break their skin.
ANSWER: scrapie (accept spongiform encephalopathy)
13. At Columbia University, he worked to preserve the folk music of Serbia and Croatia. For ten points each:
[10] Name this musician who wrote the ballet The Wooden Prince.
ANSWER: Béla Bartók
[10] Bartók hailed from this European nation with capital Budapest. Other composers of that same nationality included Gyorgy Ligeti and Franz Liszt.
ANSWER: Hungary
[10] Bartók's only opera was this one, based on a Hungarian folk tale, which tells of an aristocrat shunned because of his distinctive facial hair.
ANSWER: Duke Bluebeard's Castle
14. In this novel, a servant named Lee discusses the meaning of "timshel" and the brothers Charles and Adam live near Cathy Ames. For ten points each:
[10] Name this novel set in California's Salinas valley that centers on several generations of the Trask family's lives. ANSWER: East of Eden
[10] East of Eden was described as the "most ambitious novel" written by this 1962 Nobel Prize winner.
ANSWER: John Steinbeck
[10] Steinbeck also penned this novel, which chronicles the Joad family's journey from Oklahoma to California in search of work during the Dust Bowl.
ANSWER: The Grapes of Wrath
15. For ten points each, give the following about two Allied generals during World War II:
[10] In August 1943, American General George S. Patton captured this Northeastern Sicilian city, having taken a roundabout route from the landing point. This city served as a key entry point to the Italian mainland.
ANSWER: Messina
[10] Patton won the "Race to Messina" against this British general, who often clashed with Patton. He was successful at the Second Battle of El Alamein, a victory which led to his being named a Viscount.
ANSWER: General Bernard Law Montgomery,
[10] This German general, nicknamed the "Desert Fox," was vanquished by Montgomery at El Alamein and Patton at El Guettar.
ANSWER: Erwin Rommel
16. Her ferocious forms include Durga and Kali. For ten points each:
[10] Name this Hindu goddess of love and fertility, regarded as the supreme Shakti. She forms a trinity with Lakshmi and Saraswati.

## ANSWER: Parvati

[10] Parvati is the consort as well as the feminine energy of this blue-skinned Hindu god of destruction, last in the Trimurti.
ANSWER: Shiva
[10] Shiva and Parvati are popularly thought to be the parents of this deity of art and wisdom. In one version of his origin, he gained his elephant head after Shiva beheaded him in anger.
ANSWER: Ganesha
17. It's a small world after all -- or, at least, a tightly packed one. For ten points each:
[10] Cape Prince of Wales, Alaska, is 51 miles away from Cape Dezhnev, Russia across this strait connecting the Pacific and Arctic Oceans.
ANSWER: Bering Strait
[10] At 20 miles, the distance between Yemen and Djibouti is even shorter; the Arabian Peninsula is separated from the Horn of Africa by this strait.
ANSWER: Bab-el-Mandeb or the Mandeb Strait
[10] One of the shortest, however, is the distance between Morocco and Spain. Africa and Europe are separated by less than 9 miles across this strait, which are marked by the Pillars of Hercules.
ANSWER: Strait of Gibraltar
18. Electrons are very small particles, which can make them hard to find. Luckily, they are localized in specific areas. For ten points each:
[10] Give the name of these areas where electrons are likely to reside. They can have designations like " p " and " s ". ANSWER: orbitals
[10] This theory uses orbital conformation to determine the three-dimensional shape of molecules. It is often combined with molecular orbital theory.
ANSWER: valence shell electron pair repulsion theory, accept vsepr ["vesper"]
[10] Orbitals of different varieties can combine to form new ones via this process. The same term also describes a technique used to determine similarity of DNA.
ANSWER: hybridization (accept orbital hybridization or DNA hybridization)
19. The "Radiant Baby" became this artist's signature image. For ten points each:
[10] Name this New York City based pop artist and muralist known for his simple, stick-figuresque figures and bold colors. He established Pop Shops to display his work.
ANSWER: Keith Haring
[10] Haring painted this mural on a wall visible from the Harlem River Drive, inspired by an assistant who was struggling with cocaine addiction.
ANSWER: Crack is Wack
[10] The HIV-positive Haring suffered from this disease, which was the subject of later works such as Silence=Death. In that work, a pink triangle is superimposed on black figures that represented the stigma associated with this condition.
ANSWER: AIDS (accept acquired immune deficiency syndrome)
20. The lever and the inclined plane are examples of these. For ten points each:
[10] Name this group of objects commonly used to increase mechanical efficiency.

## ANSWER: simple machines

[10] Archimedes' variant of this simple machine was designed for transferring water uphill, although evidence suggests that it was in use in Assyria 350 years before Archimedes' conception of it.
ANSWER: screw
[10] The pulley is a central part of the design of this apparatus, designed in 1784 by an English physicist who sought to demonstrate the laws of classical mechanics. It can be used to model string tension.
ANSWER: Atwood machine
21. This author wrote of Basil Miller and Olive Chancellor in The Bostonians. For ten points each:
[10] Name this American-British author who used his heritage to contrast the two sides of the Atlantic in works such as The Portrait of A Lady.
ANSWER: Henry James
[10] James often told his stories through these characters whose descriptions cannot be trusted by the reader. Other examples of these characters include Humbert Humbert and Holden Caulfield.
ANSWER: unreliable narrators
[10] In this Henry James novella, the title character is courted by Winterbourne, who finds her sitting in the center of the Colosseum with Giovanelli.
ANSWER: Daisy Miller

