PRISON BOWL IX

Questions written and edited by Hunter College High School (Gilad Avrahami, Sam Brochin, Christopher Chilton, David Godovich, Lily Goldberg, Ada-Marie Gutierrez, Diane Hwangpo, Joshua Kwan, Chloe Levine, Alice Lin, Brian Lu, Helen Lyons, Daniel Ma, Albert Tai, Luke Tierney, and Rachel Yang), with contributions from Rohan Nag and Jeff Xie

Round 03

Tossups

- 1. In this work, spirits representing Iris, Ceres, and Juno appear to bless a wedding. One character in this work proclaims, "O, I have suffered / With those that I saw suffer!" Another character in this play is described as "not honour'd with a human shape" and is the child of Sycorax [SICK-o-racks]. Yet another character in this play sees humans other than her father for the time, exclaiming, "O brave new world, / That has such people in it!" That character is Miranda, whose father causes a shipwreck for Antonio. For 10 points, name this play centering on the sorcerer and rightful Duke of Milan, Prospero, written by William Shakespeare.

 ANSWER: *The Tempest* <CC>
- 2. This team was originally based in Buffalo and named the Braves, though they were moved to San Diego eight years later and renamed after the large ships that passed by the city. In 2015, this team became the first to have a head coach coach his own son. That son was named Austin Rivers. One current member of this team famously jumped over a Kia sedan, and another is well known for terrible free-throw shooting, DeAndre Jordan. This team was embroiled in controversy when its owner, Donald Sterling, was banned from the NBA for a history of racist remarks. For ten points, name this basketball team with All-Star players like Chris Paul and Blake Griffin.

ANSWER: Los Angeles <u>Clippers</u> [prompt on <u>LA</u> or <u>Los Angeles</u>] <SB>

- 3. Hepatocyte death in Wilson's disease has been linked to the destruction of these structures due to the buildup of copper. Ion transmission in these structures is signified by "Ca 2-plus puffs", and they're tethered to the MAM region of the endoplasmic reticulum. In these organelles, Complexes III and IV are traversed by cytochrome C. Along with chloroplasts, these organelles were considered a separate organism in the endosymbiotic theory. Protons are pumped across the cristae in against a concentration gradient in these organelles to power ATP synthase. For 10 points, name this organelle, the powerhouse of the cell.

 Answer: mitochondria <JK>
- 4. One composer opened a string piece about this phenomenon with a unison fortissimo D and a triplet figure. A collection about this phenomenon by Richard Strauss features pieces like"When Falling Asleep," "At Sunset," and "September. Franz Liszt used themes from the *Dies Irae* to depict this phenomenon in *Totentanz*. Rachmaninoff was inspired by an Arnold Böcklin painting to write a piece titled "The Isle of" this phenomenon, while a Franz Schubert quartet depicts the interaction between a maiden and it. The *Danse macabre* is a "dance of," for 10 points, which phenomenon commemorated by Chopin's Funeral March?

 ANSWER: death (or logical equivalents like dying, accept *Death and the Maiden* before "Richard Strauss") <GA>
- 5. British "proprietors" from Barbados like John Colleton founded colonies in this state. This state's Senator Edward Rutledge argued against the Townshend Acts. Slaves giving their children African names in this state created the Gullah dialect. Elizabeth Lucas Pinckney introduced indigo to this state in 1744. Most slaves in this state were from "Rice Coast" countries like Gambia, and many went to the Sea Islands that this state shares with Georgia. The Stono Rebellion occurred in this state, whose senator Robert Hayne debated with Daniel Webster in 1830 over a nullification crisis. For 10 points, name this state that contains Charleston.

 ANSWER: South Carolina <LT>
- 6. A rail extension for this event was funded by a loan from the BNDES development bank, and the logo for this event shows three blue, orange, and green people holding hands. One controversy surrounding this event was the discovery of a "super-bacteria" producing KPC beta-lactamases off Flamengo Beach. AIBA president Ching-Kuo Wu announced a lack of head guards at this event, and Russia may not participate in this event after accusations of systematic doping. Golf and rugby will return to this event, after being cut for 112 and 92 years, respectively. For 10 points, name this upcoming quadrennial tournament in Rio de Janeiro, Brazil. ANSWER: 2016 Summer Olympics [accept Rio 2016 until "Rio"]<RY>
- 7. An Amancio Williams house resembling one of these structures is known as La Casa del Arroyo, while another one of these entities famous for its triangular paintings is the "Kapell" one and is located in Switzerland. One of these structures was completed by Emily Roebling after the original architect was injured in Fulton Ferry. Another uses solar energy to power red, white, and green lights, the "Rainbow" one in Japan. Other examples of these structures include London's Millennium one and Paris's Pont Neuf. Exemplified by a structure which spans Manhattan and Brooklyn, for 10 points, identify these structures that have truss and suspension varieties.

 ANSWER: bridges [do not accept "stream," even early, because a stream is not a structure] <CL>

8. Along with Smoluchowski, this man names a relation concerning drift velocity and the diffusion constant, and he discovered that the conservation of electrons' angular momentum caused movement in ferromagnetic materials. This scientist theorized an energy density constant, but renounced this belief after Hubble observed the universe to be expanding. The formulator of the cosmological constant, he postulated that the speed of light is constant in all inertial reference frames, and that objects will experience length contraction at very high velocities. For 10 points, name this physicist famous for an equation describing mass-energy equivalence, E = mc squared.

ANSWER: Albert Einstein <AT>

9. The Younghusband Expedition crossed these mountains to get to one capital city. Two nations exist in "armed coexistence" along these mountains, one of which has a "Forward Policy." The Pahari people live here, and Ngawang Namgyal ("gah-WONG nam-gee-YAWL"), a Drukpa monk, founded one country in this mountain range. The McMahon Line and Line of Actual Control run through this mountain range. The British recruited Gurkha soldiers from one country within these mountains. In a 1959 uprising against China, Tenzin Gyatso ("TEN-zin gee-YAT-so") fled a region on a plateau near these mountains, Tibet. For 10 points, name this mountain range, housing the Sherpas and Mount Everest.

ANSWER: the **Himalayas**

10. He's not Ben Jonson, but this man's first play is entitled *Cataline* and is written in blank verse iambic pentameter. His plays include *Rosmersholm*, as well as one which largely takes place in Hjalmar Ekdal's apartments and features an affair between Gregers' father and Gina. This man created a character similar to the Ash Lad, and that character describes "the Buckride," a reindeer hunt. A play by this writer of *Ghosts* is about the contamination of public baths and titled *An Enemy of the People*. Edvard Grieg wrote "In the Hall of the Mountain King" for one of his plays, and this man also created Nora Helmer. For 10 points, name this Norwegian playwright of *Peer Gynt* and *A Doll's House*.

ANSWER: Henrik (Johan) Ibsen <CL>

11. Karl Marx wrote about the inevitability of this quantity, calling it a "reserve army." "Shirking" is a variable in Shapiro-Stiglitz theory, which proposes a cause for this phenomenon. It will drop one percent as gross national product rises by 3 percent, as stated by Okun's law, and NAIRU is a non-accelerating measure for this quantity. This quantity varies inversely with inflation, as plotted by the Phillips curve, and it can come in the "cyclical" variety. The "frictional" type of this phenomenon describes people transitioning between careers. For 10 points, name this quantity that measures the percentage of a population without jobs.

ANSWER: unemployment

12. This location's inhabitants were speculated to have been former Trojan warriors. A builder of a wall around this location attempted to complete it in three seasons with the help of his horse, but that horse was later seduced and led away. Described extensively in the *Prose Edda*, warriors who reside in this place are known as the *einherjar* ("in-HAIR-yar"), and an object in this place called Hlidskjalf ("hlid-SCALF") allows one to see any location in the universe. This location is located at the top end of the Bifrost, and it is generally depicted as the highest realm on the world-tree Yggdrasil. For 10 points, name this location of Valhalla, the realm of the gods in Norse myth.

ANSWER: **Asgard** (prompt on **Valhalla** before mention) <RY>

13. A set of works by this man features "Bearded" and "Beardless" prophets, and his depiction of John the Evangelist features a normally proportioned lower half and a Mannerist-inspired upper half. This creator of a Niccolo da Uzzano bust sculpted a notably realistic wooden sculpture of a woman in rags, his *Penitent Magdalene*. Another of his works features two faux doors on its base, is located in Padua's Piazza del Santo, and was heavily inspired by a Marcus Aurelius statue. His most famous work depicts an effeminate young man leaning on his sword over the head of his enemy. For 10 points, name this Renaissance sculptor of *Gattamelata* and a bronze statue of David.

ANSWER: Donatello di Niccolo di betto Bardi <AT>

14. One member of this movement said that "the human spirit" asks "with a curiosity new-kindled... What am I? And What is?" Hawthorne critiqued this movement in *The Blithedale Romance*, and a journal associated with this movement, *The Dial*, was first edited by Margaret Fuller. Members of a notable Club named for this movement included the speaker of a controversial "Divinity School Address," and a writer who advanced "confidently in the direction of his dreams" by moving out of town and wrote *Civil Disobedience*. For 10 points, identify this literary and philosophical movement exemplified by Henry David Thoreau's *Walden* and Ralph Waldo Emerson's *Nature*.

ANSWER: Transcendentalism [accept word forms] <CL>

15. Two of this planet's moons swap orbits every four years due to momentum exchange, and lag from surface water sublimation causes another one of this planet's moons, Iapetus, to posses a distinct "two-tone" coloration. Due to a prominent jet stream, this planet's north pole contains a namesake hexagon. This most oblate planet is notably less dense than water, and in 1997, the Cassini-Huygens probe was sent to observe it. Its moons include Enceladus, Rhea, and Titan. For 10 points, name this sixth planet from the Sun, known for its visually distinct rings.

ANSWER: Saturn <AT>

- 16. Falun Gong names this concept as *ye*, which is exclusively negative and is the cause of all human suffering. This concept is thought to be a substance similar to dirt in Jainism, which is attracted to the body by *asrava*. The effects of this concept are known as *vipaka*, or 'maturation' of this concept. The lotus flower exemplifies this concept because it bears seeds even when it blooms. As opposed to jnana and bhakti, yoga following this concept is based on disciplining one's actions, and *samsara*, or one's life cycle, is affected by this concept. For 10 points, name this spiritual principle, the belief that actions in one's lifetime will influence future lives. ANSWER: **karma** (accept **kamma**) <JK>
- 17. A character in one of this writer's works is "Happy to be where everyone / is as penniless as he is." A critic of this man's work *The Babylonians* was caricatured in his later plays like *The Knights*. Racine was inspired by one of this man's plays which satirizes law courts, and another work by this man opens with two wandering men looking for Hoopoe, who later claims he is molting. This writer of the *The Wasps* created a group which repeats, "Brekekekex," and in another of his works, Strepsiades enrolls himself in The Thinkery. For 10 points, name this ancient Greek "Father of Comedy" who wrote *The Birds*, *The Frogs*, and *The Clouds*. ANSWER: Aristophanes <CL>
- 18. This animal gained the nickname of "Lucanian Oxen" following an encounter with a certain people in the south of Italy. Pyrrhus of Epirus deployed units composed of this animal at the Battle of Heraclea in 280 B.C.. At the Battle of Muthul in 108 BC, Jugurtha tried unsuccessfully to deploy units composed of these creatures, and Rufus killed or routed their Numidian variety. Harun al-Rashid gave Abdul-Abbas, a pink one of these things, to Charlemagne. At Zama, the Romans successfully disoriented animals of this type, causing a stampede. Hannibal crossed the Alps with several of these animals. For 10 points, name these animals with ivory tusks. ANSWER: elephants
- 19. When the nominal mass of a molecular ion is even, it will have an even number of atoms of this element. Compounds containing this element are reacted with sulfuric acid and titrated to detect it via the Kjeldahl method. Porphyrin rings contain four atoms of this element, and some airbags utilize a reaction involving sodium azide to produce its diatomic gas. A reaction involving this element and hydrogen involves passing the reactants over four beds of an iron catalyst. That reaction is the Haber-Bosch process, and combining glycerin and this element forms a potent explosive. For 10 points, name this element that, along with hydrogen, is found in ammonia. ANSWER: nitrogen (accept N) < AT>
- 20. The Three Wise Men's report prompted this institution's Science Programme. This group's Mediterranean Dialogue led to its first Individual Cooperation Programme. The Vandenberg Resolution preceded this institution's creation. This group would implement the Deliberate Escalation phase of JFK's "Flexible Response" doctrine, and was created by the 1949 Washington Treaty. This organization intervened in Bosnia and Afghanistan, and its SHAPE headquarters was led by Dwight D. Eisenhower during the Korean War. This organization's doctrine states that an attack on one of its members is an attack against them all. For 10 points, name this Atlantic organization that the Warsaw Pact opposed.

ANSWER: NATO or the North Atlantic Treaty Organization

TB. In this artist's *Summer Interior*, a half-nude woman in a white shirt sits beside her bed. This artist also depicted a concierge watching out the window in *Hotel by a Railroad*. The subject of one painting by this artist has only removed one glove and is wearing a yellow hat. In that painting, long rows of light fixtures are reflected in the window of the title establishment as the subject stares into a cup of coffee. In addition to *Automat*, this artist created a painting in which an advertisement for Phillies is visible, and three people sit at a bar on a street corner. For 10 points, name this American realist painter of *Nighthawks*.

ANSWER: Edward **Hopper** <CL>

Bonuses

1. Stories of transformers have existed long before Michael Bay. Name some things about people who can turn into animals from mythology, for ten points each:

[10] The first one of these shapeshifting creatures was a king of Arcadia name Lycaon who attempted to trick Zeus by cooking his son Nyctimus and giving him to Zeus to eat. These creatures are also referred to as lycanthropes.

Answer: werewolf

[10] Skinwalkers, shapeshifters from the folklore of these people, typically wore the animal pelts of the creatures they were able to transform into.

Answer: Navajo (accept Native American or American Indians)

[10] This man's brother Periclymenus was a shapeshifter who was killed by Hercules at Pylos. Described as the wisest man at Troy by Homer, Telemachus asks for his advice on the whereabouts of Odysseus in Book 3 of the *Odyssey*.

Answer: <u>Nestor</u> <JK>

2. In this opera, a stone statue of the Commendatore drags the title character into Hell after singing "you invited me to dine with you." For 10 points:

[10] Name this opera buffa. Leporello recounts a list of ex-lovers in this opera's "Catalogue Aria," and Elvira sings of revenge in "Ah, chi mi dice mai."

ANSWER: Don Giovanni

[10] Don Giovanni is an opera by this Austrian composer. He's also known for the comedic operas The Marriage of Figaro and "Cosi fan tutte."

ANSWER: Wolfgang Amadeus Mozart

[10] In this Jacques Offenbach work, *Don Giovanni* is performed by Stella in an opera-within-an-opera. This opera's first act sees the title character fall in love with the automaton Olympia, and was based on the short story "Der Sandmann."

ANSWER: *The Tales of Hoffman* (or *Les contes d'Hoffman*) <AT>

3. This nation was "partitioned" into spheres of influence in the Great Game until the pro-western Pahlavi dynasty came to power. For 10 points each:

[10] Name this country which used to be called Persia. It has its capital at Tehran.

ANSWER: Iran

[10] Iran shares this specific type of ecoregion with Central Asian republics like Kazakhstan. Earlier, Mongol tribes unified on this type of grassy biome using horses to travel great distances.

ANSWER: steppes

[10] This Soviet leader's "virgin lands campaign" saw the Central Asian steppes settled and eroded, as well as the draining of the Aral Sea. He opposed Malenkov's policies and hired Leonid Brezhnev as Kazakh first secretary.

ANSWER: Nikita Khrushchev

4. Its title comes from Samuel Taylor Coleridge's Work Without Hope. For 10 points each:

[10] Name this novel by Kamala Markandaya about the marriage of Rukmani and Nathan, which was arranged when the former was 12 years old. An important character in this novel is Dr. Kennington, better known as Kenny.

ANSWER: Nectar in a Sieve

[10] Nectar in a Sieve is set in this country, which is also the original home of the protagonists in The Satanic Verses. E.M. Forster wrote about A Passage to it.

ANSWER: Republic of India

[10] This contemporary Indian author wrote *Unaccustomed Earth, The Lowland, The Namesake*, and the short story collection *Interpreter of Maladies*.

ANSWER: Jhumpa Lahiri <CL>

5. A namesake quantity associated with these devices equals voltage over current, as stated by Ohm's law. For 10 points each:

[10] Name these circuit components that reduce current flow.

ANSWER: resistors

[10] When resistors are placed in this configuration, calculating the total resistance in the circuit involves adding the inverses of each individual resistor's resistance. It is contrasted with the series configuration.

ANSWER: parallel

[10] This electrical circuit can be used to calculate the resistance of a resistor when it is unknown. It consists of the mystery resistor and three other resistors connected in a square-like configuration.

ANSWER: Wheatstone bridge <AT>

6. One of this man's most famous quotations is "I think, therefore I am," and he developed a namesake coordinate system. For ten points,

[10] Name this French philosopher, who hypothesized an evil demon who is "clever as he is deceitful" who presents the illusion of an external world to the individual mind.

ANSWER: Rene Descartes

[10] The concept of the evil demon appears in this Descartes work, which is subtitled *In which the existence of God and the immortality of the soul are demonstrated*. It is made up of six of the titular thoughts, in which Descartes claims that all things not known for certain are unbelievable.

ANSWER: Meditations on First Philosophy

[10] Descartes was also a proponent of this philosophical position, which holds that the mind and body are separate and distinct. British philosopher Gilbert Ryle described this position as "the ghost in the machine."

ANSWER: mind-body <u>dualism</u> <RY>

7. Amazon.com temporarily banned the sale of a type of device with this name after receiving reports of it catching on fire. For 10 points:

[10] Name this word that names a dual-wheeled gyroscopic vehicle manufactured by Swagway. Marty McFly uses a device of this name to escape bullies.

ANSWER: hoverboard

[10] Marty McFly and his pink hoverboard appear this film franchise, where he travels through time in Dr. Emmett Brown's DeLorean Time Machine.

ANSWER: Back to the Future (accept Back to the Future Part II or Back to the Future Part III)

[10] As Harry Osborn, this actor rode a hoverboard in Spider-Man 3. His film about the production behind Tommy Wiseau's *The Room, The Disaster Artist*, will be released in Fall 2016.

ANSWER: James Franco <AT>

8. He was named Admiral of the Ocean Sea by the Capitulations of Santa Fe, which he signed in Granada. For 10 points each:

[10] Name this explorer erroneously credited with the discovery of America when he crossed the Atlantic in 1492. He was notably the first European to reach the island of Hispaniola.

ANSWER: Columbus

[10] Columbus received support from this Portuguese ruling family. It later included Henry the Navigator and continued until the crown was passed to Philip II of Spain following the disappearance of Sebastian I.

ANSWER: House of **Aviz**

[10] This ruler supported Columbus' journeys, and also quashed a rebellion in Segovia. Both supporters of this ruler and supporters of Alfonso V and Joanna claimed victory at the Battle of Toro.

ANSWER: Isabella I of Castile [do not accept "Ferdinand II of Aragon"] <CL>

9. This novel helped establish public perception of pirates with a backdrop of tropical islands, parrots sitting on their shoulders, and maps where X marks the spot. For 10 points each:

[10] Identify this Robert Louis Stevenson novel about Jim Hawkins. In it, the crew of a ship searches for some valuables, but only two men reap the rewards, one of whom is Ben Gunn.

ANSWER: <u>Treasure Island</u>, or the Mutiny of the Hispaniola

[10] In *Treasure Island*, this one-legged pirate is the main antagonist. He owns a parrot named for Captain Flint, who this character claims never feared a man besides him.

ANSWER: Long John Silver [prompt on partial]

[10] This other *Treasure Island* character scares Billy Bones at the Admiral Benbow Inn. He is missing two fingers and Long John Silver later tricks Jim by throwing this character out of the Spy-Glass.

ANSWER: Black Dog <CL>

10. Some of this quantity will result in boundary work if volume is not constant. For 10 points:

[10] Name this quantity symbolized A and given by the equation U minus TS. The negative of the difference of it equals the amount of work that can be performed by a closed thermodynamic system.

ANSWER: Helmholtz free energy (or Helmholtz energy)

[10] One can also use the product of temperature and entropy to calculate this more commonly computed form of free energy, symbolized delta G. If this quantity of a reaction is negative, the reaction will occur spontaneously.

ANSWER: Gibbs free energy (accept Gibbs energy)

[10] In the Gibbs free energy equation, temperature times entropy is subtracted from this quantity. Whether it increases or decreases depends on whether a reaction is endothermic or exothermic.

ANSWER: enthalpy (accept H or delta H) <AT>

11. This contemporary American sculptor's *Equilibrium* series featured some basketballs floating in water, and in 2014 his hedge-sculpture *Split Rocker* was installed in New York's Rockefeller Center. For 10 points:

[10] Name this artist known for his stainless steel reproductions of ordinary objects. His *Tulips* were each more than two meters high and five meters long.

ANSWER: Jeff Koons

[10] A collection of sculptures by Jeff Koons is comprised of five giant depictions of these party objects in magenta, blue, red, orange, and yellow. In 2013, the orange one of these sculptures notably sold for 58.4 million dollars.

ANSWER: balloon dogs (prompt on dogs, accept clear knowledge equivalents like dogs made of balloons)

[10] Jeff Koons included a white and gold porcelain sculpture of this man reclining with his pet chimpanzee, Bubbles, in the *Banality* series. Diana Walczak sculpted a 30-foot-tall statue of this singer of "Smooth Criminal" and "Man in the Mirror."

ANSWER: Michael <u>Jackson</u> (accept <u>Michael Jackson and Bubbles</u>) <RY/AT>

12. Examples of these manifestations of musubi include the spirits of ancestors, animals, and other forces in nature. For 10 points each:

[10] Name these beings, greater examples of which include Amaterasu, the sun goddess.

ANSWER: kami

[10] Kami are gods in this Japanese religion. This religion's shrines are periodically rebuilt with new wood, and they frequently feature daruma with unpainted eyes and Torii gates.

ANSWER: Shinto

[10] This other type of Japanese spirit can refer to malicious demons or the spirits of deceased ancestors. Examples of these spirits include Tengu and the umbrella-inhabiting Kasa-obake.

ANSWER: <u>yokai</u> (accept <u>ayakashi</u>, <u>mononoke</u>, or <u>mamono</u>) <JK>

13. Surfaces, surfaces everywhere. For 10 points each, name some things about mathematical constructs involving infinitely large surfaces.

[10] If specified without constraint, these entities extend infinitely far. In three dimensions, they are generalized by the equation a times x plus b times y plus c times z equals d.

ANSWER: planes

[10] The cubular Menger sponge, an example of one of these mathematical sets, has infinite surface area and zero volume. These sets are usually self-similar at every scale.

ANSWER: fractals

[10] This figure, which is taken by rotating the graph of one-over-x around the x-axis, has infinite surface area, but finite volume. An apparent contradiction related to this shape is sometimes known as the painter's paradox.

ANSWER: Gabriel's horn (or Torricelli's trumpet) <AT>

14. This clause was used in *Swift*. vs. *United States* and in *Gibbons* v. *Ogden*, the latter of which ruled that this clause could regulate monopolies. For 10 points each:

[10] Name this clause from Article 1, Section 8 of the U.S. Constitution. It applies to one type of activity within states, between states, and with foreign nations.

ANSWER: Interstate **Commerce** Clause [accept **ICC**]

[10] The Interstate Commerce Commission Act of 1887 was signed by this president using authority gained under a Supreme Court decision relating to the Interstate Commerce Clause. He held two non-consecutive terms.

ANSWER: Stephen Grover Cleveland

[10] The 1905 case *Swift v. US* was about this city's meatpacking trust, broken under the Sherman Antitrust Act. A novel set in this city has the protagonist Jurgis ("YER-gis") Rudkus, a Lithuanian immigrant.

ANSWER: Chicago <LT/CL>

15. This novel begins with the phrase "124 was spiteful," and concerns the fugitive slave Sethe's flight from the South. For 10 points: [10] Name this novel in which Sethe escapes from Sweet Home Plantation and in which the title character, a murdered child, haunts Sethe, Denver, and Paul D.

ANSWER: Beloved

[10] Beloved is written by this African-American author of *The Bluest Eye* and *Tar Baby*. She won the Pulitzer Prize in 1988.

ANSWER: Toni Morrison [accept Chloe Ardelia Wofford]

[10] In this Toni Morrison novel, Shadrack invents National Suicide Day and the protagonist accidentally drowns Chicken Little. This novel's title character is a daughter of the Peace family who has a signature birthmark on her eyelid.

ANSWER: Sula <LG>

16. This composer's Christmas Oratorio features an "echo aria" comprised of an oboe and a soprano voice. For 10 points each:

[10] Name this composer of the *Brandenburg Concertos*. He composed two books entitled *The Well-Tempered Clavier*, which explores every single major and minor key and is collectively known as "the 48".

ANSWER: Johann Sebastian Bach [prompt on Bach; prompt on Johann Bach]

[10] Bach composed this work specifically for harpsichord, but it can be played on the piano. It consists of thirty sections which follow the same bass line and chord progression, in addition to the exact same aria played once at the beginning and once at the end.

ANSWER: Goldberg Variations

[10] In 1723, J.S. Bach was appointed the director of a boys' choir in this city's St. Thomas Church. His *Mass in B minor* was possibly first performed in this city, though the legitimacy of that claim is still being debated by scholars.

ANSWER: Leipzig <GA>

17. This component of microfilaments is commonly used in processes such as cytokinesis. For 10 points each:

[10] Name this molecule which is often paired with myosin, forming a cross-bridge with it during muscle contraction.

Answer: actin

[10] This class of molecules transport cellular cargo by anterograde transport. it is believed that they are responsible for proper mitotic spindle length and the sliding of microtubules during metaphase of mitosis.

Answer: **kinesins**

[10] Actin-myosin actions are driven by an action potential caused by calcium 2+ (two-plus) ions, which are stored in the "sarcoplasmic" type of this organelle. It's also responsible for detoxification.

ANSWER: smooth endoplasmic reticulum (or smooth ER, do not accept "rough endoplasmic reticulum") <JK>

18. Albert Camus ("ca-MOO") was the ultimate rebel, partly because he rejected the label of existentialism for his work, and partly because he wrote an essay entitled "The Rebel". For 10 points each, identify some of his works.

[10] This Camus book follows a French-Algerian man before and after he murders an Arab. Meursault opens this book by saying, without grief, "Today, maman died."

ANSWER: The Stranger

[10] This other Camus book recounts the effect of the title condition on the people of Oran, Algeria. Dr. Bernard Rieux reveals himself to be the narrator in the fifth section, despite the deaths of Tarrou and Paneloux, among others.

ANSWER: *The Plague*

[10] This first Camus novel, like *The Stranger*, features a murderous French Algerian clerk named Patrice Meursault. However, this novel's Meursault has a specific motive for killing the rich invalid Roland Zagreus: he wants his money.

ANSWER: A Happy Death <CL>

19. Suleiman the Magnificent "Turkified" this country's city of Pecs ("petch"). For 10 points each:

[10] Name this country whose king Louis II died at the battle of Mohacs ("MO-hatch") before the 1529 siege of Vienna.

ANSWER: **Hungary**

[10] Suleiman was a sultan of this empire, which fought Austria for control over Hungary and the Balkans. It bombarded and captured Constantinople in 1453.

ANSWER: Ottoman Empire

[10] Ottoman Hungary was initially mostly Lutheran, but switched to this religion. The 1881 Synod of Debrecen was the start of the Hungarian Reformed Church of this religion.

ANSWER: Calvinism (accept word forms; prompt on **Protestant**ism)

20. Answer these questions about polls in the United States. For 10 points:

[10] Name this type of unofficial, non-binding poll used in political caucuses to determine the state of public opinion. Its name comes from holding up a plant stalk to see "which way the wind blows."

ANSWER: straw poll

[10] This type of poll isn't used to measure public opinion, but to influence the views of voters under the guise of a poll.

ANSWER: **push** poll

[10] This man's rigorous statistical survey sampling helped him predict Franklin D. Roosevelt's 1936 victory over Alf Landon. His namesake polling firm remains well-known in the US.

ANSWER: George Horace Gallup

TB. This writer of *Martin Eden* joined the Klondike Gold Rush, which was the setting of some of his first successful works. For 10 points,

[10] Name this author of the dystopian novel *The Iron Heel*, who also wrote a novel entitled *White Fang*.

ANSWER: Jack London

[10] The protagonist of this Jack London novel is Buck, a dog who is owned successively by Mercedes, Hal, and Charles. He answers the title summons after his most beloved owner is killed by Native Americans.

ANSWER: The Call of the Wild

[10] London wrote two short stories with this title. In one, a man travels on the Yukon, alongside a husky dog. Although his mouth is frozen shut due to the freezing temperature, he continues to travel, which leads to his death by hypothermia.

ANSWER: **To Build a Fire** <RY>