**2019 National All-Star Academic Tournament**

**Round 7 – Tossups**

1. The *Moderato e risoluto* first movement of a G major sonata by this composer introduces the “Grand Motif.” A piece by this composer quotes the chansonette *Il faut s'amuser, danser, et rire* and includes a three-note phrase referencing the name of the soprano Desiree Artot. Hans von Bulow premiered that piece by this composer in Boston when its original dedicatee rejected it. This composer included a barcarolle inspired by June in a set of twelve character pieces, entitled *The Seasons*. Van Cliburn's version of this composer's B-flat minor concerto, which opens with three descending horn figures, helped him win the piano section of the inaugural 1958 iteration of an international competition that is named for this composer and held every four years in Moscow. For 10 points, name this composer who also wrote the *1812 Overture*.
ANSWER: Pyotr Ilyich **Tchaikovsky** [or Peter Ilyich **Tchaikovsky**; or **Tchaik**]
*<Arts Music - Smith>*

2. Queer readings of this novel draw attention to a passage which states “it had taken him, loved him, embraced him.” This novel compares one character to “a man who is lying at the bottom of a precipice where the sun never shines.” The narrator of this novel, who is told that he is in the “gang of virtue,” describes two lazy men with the images of a “papier-mâché Mephistopheles” and a “flabby, pretending, weak-eyed devil.” This novel lauds the “restraint” of a group of “cannibals,” which it contrasts with a group of “pilgrims” who travel to the Inner Station. This novel describes the “blank spaces on the Earth” in its frame story set aboard a boat on the Thames. The essay *An Image of Africa* criticizes this novel's portrayal of a “Manager's boy” who delivers the line “Mistah Kurtz— he dead.” For 10 points, name this novel about Charles Marlowe's journey into the Congo by Joseph Conrad.
ANSWER: ***Heart of Darkness***
*<Literature British Non-Shakespeare - French>*

3. A speech about this country by California Rep. Ed Royce was later found to have been read from a script given to him by a lobbyist from a neighboring country. The second veto of Donald Trump's presidency was against a resolution involving this country. This country was the site of the first killing of an American citizen without due process by drone strike. The victim of that attack was a preacher who opposed this country's government, Anwar al-Awlaki. Bernie Sanders and Mike Lee co-sponsored a resolution attempting to invoke the War Powers Act regarding this country, in which the USS *Cole* bombing took place. The US military intervention in this country is backed strongly by its neighbor, Saudi Arabia. For 10 points, name this country where groups including the Houthis are fighting for control of the capital of Sana'a.
ANSWER: Republic of **Yemen** [accept Jamhuriya al-**Yaman**iyya]
*<Current Events US - Myers>*

4. These people split into two kingdoms after the “King of the Right”, Bi, refused to attend his brother's coronation. Some sources claim that the founder of this confederation of people came to power by ordering his men to kill Touman, his father. A group of Tocharian people migrated and established the Kushan empire after a war with these people ended with their king having his skull turned into a drinking cup. The ballad “Li Ling thinks of Han” is named for a general who was captured by these people. These people, who were led by a king called a *chanyu*, split in a schism that produced the Hephthalites after a defeat by proto-Mongols. Princesses were sent to marry kings of these people in exchange for peace on the frontier according to an agreement they made with the Han Dynasty. For ten points, name this early Central Asian people who were likely the ancestors of the Huns.
ANSWER: **Xiongnu** [accept **Hsiung-Nu**, **Red Huns**, prompt on Huns, Huna]
*<History World - Jankov>*

5. One essay describes crying at a Michael Cimino film “for” this author and explores the role of the forest in homoerotic bonding in this author's work. That essay on this author describes him as “our worst, best, wickedest, and truest laureate.” Another essay on this author quotes and later attacks “Prof. Lounsbury” of Columbia and “Prof. Brander Matthews” of Yale. A Leslie Fiedler essay titled for this author describes him as a prototypical “good bad author.” Another essay accuses a novel by this author of “accomplish[ing] nothing and arriv[ing] in thin air” and lays out 18 rules of literature including “eschew surplussage” and “use the right word, not its second cousin”. This author commits 114 of the title violations in an essay by Mark Twain titled for this author's “literary offenses”. For 10 points, name this author whose “Leatherstocking Tales” included *The Last of the Mohicans*.
ANSWER: James Fenimore **Cooper**
*<Literature American - Myers>*

6. The modular forms “g sub 2” and “g sub 3” are defined as the coefficients of one of these functions that is applied to the Weierstrass elliptic function in a differential equation. Any curve defined by one of these functions that passes through a given set of eight points must pass through a fixed ninth point, according to a common application of Bezout's theorem. *y* squared is set equal to one of these functions of *x* in the Weierstrass normal form of an elliptic curve. The discriminant of one of these functions simplifies to “negative 4 a cubed minus 27 b squared” when the function is both depressed and monic. Gerolamo Cardano published an exact formula for the roots of these functions in terms of radicals. The derivatives of these functions are quadratic polynomials. For 10 points, name these polynomials whose highest term has degree three.
ANSWER: **cubic** polynomial [prompt on polynomial]
*<Science Math - French>*

7. Oengus of the Déisi **(day-shee)** clan had an epithet referring to one of these objects before going to war with Conn. The owner of one of these objects called the Luin of Celtchar left it in a cauldron of blood to prevent it from catching on fire. That object of this type may have been conflated with one of the Four Jewels of the Tuatha Dé Danann **(too-ah-hah day dun-an)** owned by Lugh. A barbed example of these objects was fashioned out of the corpse of the sea monster Coinchenn **(kin-ken)** by Scathach **(ska-hakh)**, which Cú Chulainn used to kill Ferdiad. While commissioning the sons of Ivaldi to make new hair for Sif, Loki receives one of these objects that never misses its target, which he gives to Odin. Odin's Gungnir and Cú Chulainn's Gae Bulg are examples of, for 10 points, what long weapons sometimes used during jousting.
ANSWER: **spear**s [accept synonyms like **lance**, **polearm**, or **javelin**]
*<RMP Non-Greek/Roman Myth - Hijazi>*

8. J. Russell Sprague founded a county Republican machine in this state that would later become the most lucrative in the United States. One senator from this state published the report *The Negro Family*, which blamed high rates of illegitimacy for black poverty. Irving Ives and Kenneth Keating were a duo of progressive Republican senators from this state. This state's secretary of state, Francis Valeo, was the defendant in a Supreme Court case in which a third-party senator from this state attempted to challenge campaign finance regulations. That senator from this state was James Buckley. One politician from this state who was the namesake of a faction of liberal Republicans crushed this state's Attica Riot as its governor. For 10 points, name this state home to Nelson Rockefeller, whose largest city elected conservative mayor Rudy Giuliani.
ANSWER: **New York**
*<History American (1945-present) - Myers>*

9. A compound containing this metal reacts with acetic anhydride in the presence of phosphoric acid in a variant of the Friedel-Crafts reaction. The organophosphide compound dppf contains this metal. A compound containing this metal was discovered accidentally after it was created in an attempt to synthesize fulvalene. Keeley and Pauson synthesized a compound containing this metal by reacting a Grignard reagent with this metal's anhydrous chloride. Because of its ability to undergo electrophilic aromatic substitution, a compound containing this metal may be used as a more reactive substitute to benzene than aluminium. Two cylcopentadienyl rings are bound on opposite sides of this metal in the earliest discovered sandwich compound. This metal catalyzes the reaction between hydrogen and nitrogen in the Haber process. For 10 points, name this transition metal that is found in ferrocene.
ANSWER: **iron**
*<Science Chemistry - French>*

10. Paul DiMaggio and Walter Powell used a phrase coined by this thinker to title a paper that developed the idea of institutional isomorphism. This thinker's work inspired the Merton thesis on the origin of experimental science. He prophesied that an ascetic order may determine the lives of men until “the last ton of fossilized coal is burnt.” This thinker reviewed Richard Baxter's work in a chapter titled for “aesthetics and” one concept. That book was first translated to English by Talcott Parsons and developed the concept of “the calling.” He foresaw a “polar night of icy darkness” in a book that says that people in Western societies are trapped in systems based on efficiency and rationality, a situation he termed an “iron cage.” For 10 points, name this German sociologist who wrote *The Protestant Ethic and the Spirit of Capitalism*.
ANSWER: Max **Weber** [or Maximilian Karl Emil **Weber**]
*<Social Science Sociology - Kothari>*

11. Robert Graysmith alleged that this film, which is the subject of the documentary 78/52 **(seventy eight slash fifty two)**, used the Playboy model Marli Renfro. A painting of Susannah and the Elders specially created for this film covers a consequential hole in the wall. A piece of steak and a casaba melon were used to create sounds for a scene in this film, whose original screenings were preceded by the warning that “No one will be allowed in after the picture starts.” Francois Truffaut got the director to confess that he made it for one scene, which urban legend says was directed by Saul Bass. The all-string music in that scene from this film, which ends with a vortex transitioning into a dead woman's eye, is “The Murder” by Bernard Herrmann. For 10 points, name this movie whose crew used Bosco chocolate sauce instead of fake blood for a scene in which Marion Crane is stabbed by Norman Bates while showering.
ANSWER: ***Psycho***
*<Arts Film - Smith>*

12. An epic poem about the father of one ruler with this name describes his captivity by Turks who debate whether to marry him to a Turkish woman or kill him. One ruler of this namesent an army to suppress a rebellion in another country by Bardas Sclerus. One ruler of this name took his nickname from his grandfather, Constantine IX Monomachus. A city of this name was united with Suzdal after serving as the seat of its region's Grand Princes in the 12th and 13th centuries. A story about one ruler of this name refusing to convert to Islam because of his love for alcohol originates in Nestor the Chronicler's *Primary Chronicle*. The Byzantine fort of Chersoneus was besieged by another ruler of this name, who took the name Basil after his baptism in the Volga River. For 10 points, give this name of a Grand Prince of Kiev nicknamed “the Great”, who converted the Kievan Rus' to Christianity.
ANSWER: **Vladimir** [accept **Volodomyr**, **Vladimir**-Suzdal, **Vladimir** III Igorevich, **Vladimir** II Monomakh, **Vladimir** I the Great]
*<History European to 1400 - Myers>*

13. De Georgia et. al ran a pilot study to reduce lesions from these events by inducing hypothermia, a technique they called COOL AID. One type of these events is treated with permissive hypertension 24 hours after. The TOAST criteria can be used to categorize these events, whose areas of impact can be viewed from hyperintense regions on a diffusion weighted image. The two largest categorizations of these events are ischemic and hemorrhagic. Transient ischemic attacks are sometimes described as a “mini” one of these events. The mnemonic FAST is used for these events as they are often accompanied by pronator drift, facial drooping, arm weakness, and speech difficulties. These events are alternatively referred to as “cerebrovascular accidents.” For 10 points, name these events where brain tissue is deprived of oxygen.
ANSWER: (vascular) **stroke**s [accept **cerebral (infarction/accident/incident)**, **cerebrovascular accident**, or **CVA** until “cerebro-” prompt afterwards; prompt on brain attack]
*<Science Biology - Etzkorn>*

14. One poem titled for one of these places describes people “taught in the school of patience to endure/ the life of anguish and the death of fire.” One poem named for one of these places ends “The Lord survives the rainbow of His will” and contains only one section with a separate title, “Our Lady of Walsingham.” One poem set in one of these places has its stanzas interspersed with couplets about leaves that “flying, plunge and expire.” In a poem set in one of these places where “an aged elm aspires,” “the children of the forest” no longer live there, but “the hunter still the deer pursues” and “reason's self shall bow the knee to shadows and delusions.” The most famous poem of Allen Tate is set in one of these places. A Robert Lowell poem describes a Quaker one of these places in Nantucket that housed veterans of the whaling industry. For 10 points, name these places, an Indian one of which is inhabited by ghosts in a Philip Freneau poem.
ANSWER: **cemetery** [accept **graveyard**, **burying-ground**, equivalents; accept **”The Jewish Cemetery at Newport”**, **”The Indian Burying-Ground”**, **”The Quaker Graveyard in Nantucket”**]
*<Literature American - Myers>*

15. As narrated in a surah named for this person's father, Muhammad is said to have cursed a group of people from Najran during the Event of Mubahalar; that surah also mentions how this person was often found with fresh fruit from Allah while praying in a cloistered room. A possible inspiration for the ruku while performing salat concerns this person being commanded to “Bow down in prayer with those men, who bow down.” The 19th surah is named for this daughter of Imran, who is saved from starvation by finding a date tree to feed her and her newborn son. This woman is referenced as being “free from the touch of men”, a doctrine that parallels the Immaculate Conception in Christianity. The greatest woman in Islam is, for 10 points, what mother of Jesus?
ANSWER: **Maryam** [or Virgin **Mary**]
*<RMP Non-Christian/Bible Religion - Hijazi>*

16. After being cursed out by Harry Truman, this man said “I have never been spoken to like that in my life,” whereupon Truman responded “carry out your agreements and you won't be spoken to like that.” This man's Jewish wife, Paulina, was deported after being accused of being a “Zionist Spy.” After his marginalization within his party, this man was appointed ambassador to Mongolia. This man's tenure in his most prominent position was interrupted by that of Andrei Vyshinsky. This man's advocacy for the Winter War led Finnish partisans to nickname a type of bomb his “bread baskets.” This man made a secret plan to partition Poland in a pact he signed with Joachim von Ribbentrop. For 10 points, name this Soviet foreign minister who names an explosive “cocktail” made from a bottle and a gasoline-soaked rag.
ANSWER: Vyacheslav **Molotov**
*<History European 1914-present - Myers>*

17. A philosopher from this country defended women's education in *The Learned Maid* and wrote about her religious conversion in *Euklerion*. A later thinker from this country argued that the romanticism of the title time was a defence mechanism against rising rates of violence in his book *The Autumn of the Middle Ages*. Its not Spain, but one thinker from this country drew on the work of de Vitoria for a book that influenced the development of International Law Theory: *On the Laws of War and Peace*. In a book subtitled “Foundations of the Abundant Style,” another philosopher from this country gave instructions for rewriting older works and incorporating them into modern texts. That author of *Copia* also wrote a satirical essay where the title figure claims to be the daughter of Plutus and Youth. For 10 points, name this country home to Hugo Grotius and the author of *In Praise of Folly*, Erasmus of Rotterdam.
ANSWER: Kingdom of the **Netherlands** [accept **United Provinces**, do NOT accept or prompt on **Holland**]
*<RMP Philosophy/Thought - Myers>*

18. The cross section of a form of scattering caused by this force is proportional to the ratio of “one plus cosine theta” and “one minus cosine theta.” The energy at which this force is most likely to be overcome is called the Gamow peak. This force is accounted for by a term approximately equally to “Z squared over the cube root of A” in the semi-empirical mass formula. Exponential screening of this force’s potential gives the Yukawa potential. Fusion only occurs if particles pass this force's namesake barrier. The proportionality constant for this force is equal to “one over four pi epsilon-nought.” The value of this force on a test charge assigned to each point in space is the electric field. For 10 points, name this force between charged particles that is described by an inverse-square law named for a French physicist.
ANSWER: **Coulomb** force [or **electrostatic** force; accept **Coulomb** repulsion or **Coulomb** attraction]
*<Science Physics - French>*

19. This man had Friedrich de la Motte Fouqué adapt his own fairy-tale novella for the libretto for one of his operas. Due to a printer's error, the story of one of this man's creations is mixed with that of a biography of a Kappelmeister. Writings on music by this composer of a German-language *Undine* were collected as *Kreisleriana*. This man changed one of his names to “Amadeus” to create his pseudonym for *Ritter Gluck*. This author's “The Doll” was combined with his story about a woman who is only able to say “Ah, ah!” for the libretto to a ballet by Leo Delibes. In a novella by this author of *The Life and Opinions of Tomcat Murr*, Drosselmeyer gifts the title toy to Clara; the elder Dumas' translation of that book was adapted into a Tchaikovsky ballet. For 10 points, name this author of *The Nutcracker and the Mouse King* and “The Sandman.”
ANSWER: E. T. A. **Hoffmann** [or Ernst Theodor Amadeus **Hoffmann**; or Ernst Theodor Wilhelm **Hoffmann**]
*<Literature European - Smith>*

20. In one sculpture, a pair of artists from this country depicted a pile of dead bodies beneath crucified figurines of Ronald McDonald. Vases depicting the female alter-ego “Claire” have been sculpted by a cross-dressing artist from this country. The curator Nicholas Serota is ridiculed in works by an “anti-anti-art” movement from this country, the Stuckists. An artist from this country did no direct work on a series in which he hired other people to paint neat rows of colored dots. Another artist from this country created the conceptual work *Everyone I Have Ever Slept With 1963—1995*, a tent with names on it. An artist from this country bisected a cow and a calf vertically down the middle for a series that also includes *The Physical Impossibility of Death in the Mind of Someone Living*, a shark in formaldehyde. For 10 points, name this home country of Tracey Emin and Damien Hirst.
ANSWER: **United Kingdom** of Great Britain and Northern Ireland [or Great **Britain** or **UK**; accept **England**]
*<Arts Painting - French>*

21. The second movement of a concerto for this instrument is a scherzo-like *Vivo, con moto preciso*. That concerto was first recorded by Frederick Riddle and originally dedicated to Christabel McLaren. A fugato based on “The Cuckoo Sat on the Fence” is part of a “Concerto from Old Folk Songs” for this instrument that is usually named for a folk song about an organ grinder. Lionel Tertis and William Primrose played this instrument, for which *Trauermusik* and *Der Schwanendreher* were written. Paul Hindemith premiered a concerto for this instrument by William Walton. The commissioner rejected a symphony that features this instrument for having too many rests in the solo part. That piece, which ends with the “Orgy of the Brigands,” is *Harold in Italy*. For 10 points, name this instrument that uses the alto clef, unlike the smaller violin.
ANSWER: **viola**
*<Arts Music - Smith>*

**2019 National All-Star Academic Tournament**

**Round 7 – Bonuses**

1. The Keres were a set of spirits mothered by this goddess, who also mothered the god of old age, Geras. For 10 points each:
[10] Name this goddess, also the mother of Hypnos, who often flees to this goddess for protection from Zeus. With Erebus, this goddess mothered Hemera, a goddess who acted in opposition to her.
ANSWER: **Nyx**
[10] Nyx is also the mother of these goddesses, which consists of Clotho, Lachesis, and Atropos. These are responsible of spinning and cutting the threads of life which determines the lifespan of each human.
ANSWER: **Fates** [or the **Moirai**]
[10] Another set of children of Nyx are the Oneiroi, who are messengers of this phenomenon. The type of this phenomena the Oneiroi bring depends on whether they exit the underworld through a gate of horn or of ivory. Morpheus, a grandson of Nyx, frequently causes these phenomena in order to send messages for the gods.
ANSWER: **dream**s [prompt on sleeping]
*<RMP Greek/Roman Myth - Shanmugam>*

2. Configuration State Functions are linear combinations of these expressions that are also eigenfunctions of the spin operator. For 10 points each:
[10] Name these expressions often used to represent antisymmetric wavefunctions of many electron systems using a set of one-electron states.
ANSWER: **Slater determinant**s
[10] Slater determinants preserve the anti-symmetry predicted under exchange of this general class of particles. These particles with half-integer spins obey the Pauli Exclusion Principle.
ANSWER: **fermion**s
[10] For two-particle systems, Slater determinants are the sum of two direct products of wavefunction energies named for this man. An energy unit defined as half of the binding energy of an electron of a hydrogen atom in the ground state is named for this man.
ANSWER: Douglas **Hartree**
*<Science Chemistry - Shanmugam>*

3. Answer the following about 20th century Caribbean leaders, for 10 points each:
[10] Since he suspected that a rival transfigured himself into a black dog, this dictator ordered all black dogs in his country to be put to death. This dictator and *houngan* claimed to have killed John F. Kennedy by placing a curse on him.
ANSWER: **F**rançois **Duvalier** [or **Papa Doc** Duvalier; prompt on Duvalier]
[10] Papa Doc's friend, Fulgencio Batista, was overthrown as President of Cuba by this communist revolutionary. US-backed forces attempted to oust this dictator in the Bay of Pigs invasion.
ANSWER: Fidel **Castro**
[10] The “Bayou of Pigs” invasion, on the other hand, is the name given to a 1981 white supremacist-backed plot to overthrow Eugenia Charles, then the Prime Minister of this country, and restore her predecessor, the former soccer player and army colonel Patrick John.
ANSWER: **Dominica** [do not accept “Dominican Republic”]
*<History World - French>*

4. The first poem in this collection onomatopoeically describes “ospreys, on the islet in the river”, and the critic Ted Gioia argues that it was adapted from erotic folk music originally performed in its country's South. For 10 points each:
[10] Name this collection of 305 poems, including one that describes a group of archers digging ferns for food while thinking of home. Its first half includes 160 “Airs of the States,” and it also includes “Major Court Hymns” and “Eulogies”.
ANSWER: *The* ***Classic of Poetry*** [or ***Book of Songs***, ***Book of Odes***, or similar translations; or ***Shijing***]
[10] The length of the *Classic of Poetry* inspired the later anthology *Three Hundred Tang Poems*. This poet of “Song of the War Chariots” had the most poems included in the anthology with 39.
ANSWER: **Du** Fu [accept **Tu** Fu, **Du** Shaoling, **Du** Gongfu]
[10] “Drinking Alone by Moonlight,” a poem collected in *Three Hundred Tang Poems*, opens by considering a cup of this substance “under the flowering trees” and compares type of this intoxicant to “a saint” and “a sage.”
ANSWER: **wine**
*<Literature World - Krol>*

5. This critic coined the term *tachisme*, although it wasn't used regularly until about sixty years later when Pierre Guéguen applied it to French post-war abstract art. For 10 points each:
[10] Name this art critic. This critic holds a cane, a top hat, and a white flower in front of a colorful, swirling background in a portrait by Paul Signac.
ANSWER: Félix **Fénéon**
[10] Fénéon used the term “Neo-Impressionism” to refer to the art of Signac and Seurat, who used this style of brushwork in which single dots of color were added to the canvas one mark at a time.
ANSWER: **pointillism**
[10] The division of color achieved via pointillist brushwork was a Neo-Impressionism technique based on the color theory of this French chemist. The Delaunays' paintings of abstract patches of color were inspired by this chemist's theory of “simultaneous contrast.”
ANSWER: Michel Eugène **Chevreul**
*<Arts Painting - Santanam>*

6. This machine did not immediately replace the cottage industry, since it could only produce a long, coarse thread. For 10 points each:
[10] Name this machine, developed by Richard Arkwright. Samuel Crompton combined it with James Hargeaves' spinning jenny to create the spinning mule.
ANSWER: **water frame** [or **spinning frame**]
[10] The water frame was one of many new devices produced during this technological “revolution” that occurred around the turn of the 19th century.
ANSWER: **Industrial** Revolution [accept Second **Industrial** Revolution]
[10] This Industrial Revolution engineer designed a tunnel beneath the Thames. He also led the construction of the Great Western Railway.
ANSWER: Isambard Kingdom **Brunel**
*<History European 1400-1914 - French>*

7. This choreographer's namesake “step,” a sequence beginning with an *arabesque* and ending with a *pas de chat*, is used in most of his ballets. For 10 points each:
[10] Name this choreographer. In his staging of *La Fille Mal Gardée*, this man re-choreographed the ballet's Fanny Elssler *pas de deux* to incorporate eight ribbons.
ANSWER: Frederick **Ashton**
[10] Frederick Ashton choreographed Reginald Mills' *The Tales of Beatrix Potter*, a piece in this medium. Mills earlier helped to create such other works in this medium as *The Red Shoes*, to which 2010's *Black Swan* has been compared.
ANSWER: **film**s [or **movie**s; or **video**s; or clear equivalents]
[10] Ashton attributed his love of ballet to seeing a performance of this prima ballerina, who was also the first to preform what became known as the “Fred Step.” This woman was the first to perform Mikhail Fokine's *Dying Swan*.
ANSWER: Anna Pavlovna **Pavlova**
*<Arts Ballet/Dance/Musicals - Husar>*

8. Answer the following about philosophers associated with the University of California, San Diego. For 10 points each,
[10] A husband-and-wife pair of Canadian philosophers with this surname are professors emeriti at UCSD. They are supporters of eliminative materialism, a position the husband, Paul, expressed in his book *Scientific Realism and the Plasticity of Mind*.
ANSWER: **Churchland** [accept Patricia **Churchland** or Paul **Churchland**]
[10] This Frankfurt School member and author of *One-Dimensional Man* had his office attacked repeatedly while serving as a professor at UCSD. This thinker examined the potential impact of collective memory on social revolution in *Eros and Civilization*.
ANSWER: Herbert **Marcuse**
[10] Marcuse, and the rest of the Frankfurt School, espoused the Western form of this school of thought, which sought to combine this school of thought with western democratic institutions. This school’s namesake founder laid out its basic ideas in works such as *Das Kapital*.
ANSWER: **Marxism** [accept word froms; do NOT accept or prompt on “communism”]
*<RMP Philosophy/Thought - Myers>*

9. The central couple in this play reconcile by pretending to be a bear and a squirrel. For 10 points each:
[10] Name this 1956 play whose protagonist, Jimmy Porter, cheats on his wife, Alison, with Helena Charles. This play helped coin the name of a movement that is associated with kitchen sink realism.
ANSWER: ***Look Back in Anger***
[10] John Osborne, the author of *Look Back in Anger*, was a member of the Angry Young Men along with Kingsley Amis, who wrote about a man with this profession giving a drunken lecture on “Merrie England” in the novel *Lucky Jim*.
ANSWER: university **professor** [accept answers related to **teaching** or word forms thereof]
[10] An Angry Young Man with this surname described the stoning of a baby in *Saved*, a play that was influential in abolishing theatre censorship in the United Kingdom. This is also the surname of the protagonist of Kingsley Amis' novel *Colonel Sun*.
ANSWER: **Bond** [accept Edward **Bond** or James **Bond**]
*<Literature British Non-Shakespeare - McCullar>*

10. The perpendicular component of force scales by this factor, unlike the parallel component, which scales by this factor cubed. For 10 points each:
[10] Name this factor, equal to “one over the square-root of one minus beta-squared.” The rest energy plus the kinetic energy of an object equals this factor times “m c squared.”
ANSWER: **Lorentz** factor [or **gamma**]
[10] The Lorentz factor appears in this field of physics, which studies objects moving at near the speed of light.
ANSWER: **special relativity** [prompt on relativity]
[10] In addition to introducing the Lorentz factor, special relativity also modifies the usual velocity composition law. According to the Einstein addition formula, the composition of the velocities *u* and *v* is equal to *u* plus *v* all divided by what quantity? You may take the speed of light to equal one.
ANSWER: **one plus *u* dot *v*** over c-squared [or ***u* dot *v* plus one**; accept “the dot product of *u* and *v*” or “the inner product of *u* and *v*” in place of “*u* dot *v*”; accept answers that switch the order of *v* and *u*]
*<Science Physics - French>*

11. An amnesiac member of this profession named Guy Roland tries to remember his pre-World War II identity in Patrick Modiano's novel *Missing Person*. For 10 points each:
[10] Name this profession. A member of this profession named Wallas murders Daniel Dupont and searches for one of the title objects in Alain Robbe-Grillet's novel *The Erasers*.
ANSWER: **detective** [accept private **investigator** or similar answers]
[10] Modiano's *Missing Person* won this most prestigious award in French literature in 1978. The male-dominated juries that decided this award in its early years inspired the creation of the Prix Femina, whose jury consists entirely of women.
ANSWER: Prix **Goncourt** [or **Goncourt** Prize]
[10] Robbe-Grillet's *The Erasers* is a major example of an experimental style of French novel described by this adjective, a phrase coined by Émile Henriot. Robbe-Grillet also collaborated with Alain Resnais, a director associated with a French film “wave” described by this adjective.
ANSWER: **new** [or **New** Novel; or French **New** Wave; or **Nouveau** Roman; or La **Nouvelle** Vague]
*<Literature European - Morrison>*

12. This general burned the house of John Ross in Tahlequah during one raid by a unit of “mounted rifles” he commanded. For 10 points each:
[10] Name this general who led the pro-Confederate faction of the Cherokee Civil War in addition to commanding his Mounted Rifles in several battles in the Trans-Mississippi Theater.
ANSWER: Stand **Watie** [accept **Stand Firm**, **De Gata Ga**]
[10] The largest native American contingent of any Civil War battle fought at the Battle of Pea Ridge in this state where the Union post of Fort Smith was seized after the outset of the war.
ANSWER: **Arkansas**
[10] The Iroquois soldier Ely Parker, a close friend of Ulysses S. Grant, was selected due to his perfect handwriting to draft the treaty that ended the Civil War at this Virginia town where Robert E. Lee surrendered.
ANSWER: **Appomattox Court House** [prompt on Appomattox]
*<History American (pre-1865) - Myers>*

13. This river, nicknamed the “Ganges of the South”, is the subject of a long-running water dispute between two Indian states it flows through. For 10 points each:
[10] Name this river that supplies the water for cities including Bangalore, but may go dry within 10 years due to water overuse by farmers and hydropower.
ANSWER: **Kaveri** River [accept **Cauvery** River]
[10] One of the states threatened by the Cauvery water crisis is this one that contains Bangalore and lends its name to a violin-heavy style of South Indian music. This state is also the namesake of a region between the Eastern and Western Ghats.
ANSWER: **Karnataka** [accept **Carnatic**]
[10] The other party to the Cauvery dispute is a state named for this ethnic group. This ethnic group established the Chola and Pandya Empires, and the capital of their namesake state, whose name includes the word “Nadu”, or “country”, is Chennai.
ANSWER: **Tamil**
*<Geography World - Myers>*

14. If the marginal private cost is shifted upwards by this quantity, then it and the marginal social cost will intersect marginal revenue at the same point. For 10 points each:
[10] Name this quantity. It is the price at which the marginal social cost intersects the marginal social benefit.
ANSWER: **optimal Pigouvian tax** [accept descriptions that mention **Pigouvian tax**es and make clear that it's the best level; prompt on Pigouvian tax, optimal tax, and synonyms]
[10] Taxing at the optimal Pigouvian tax is one way to address these market inefficiencies. Pollution is the prototypical example of the “negative” variety of these inefficiencies.
ANSWER: **externalities**
[10] Another way to address externalities is by this system, in which the government assigns permits that firms may exchange amongst themselves. The US government uses this system to regulate emissions that lead to acid rain.
ANSWER: **cap and trade**
*<Social Science Economics - French>*

15. These phenomena are often divided into 'horizontally' and 'vertically' polarised subtypes, and in terms of the Lamé constants they have speed-squared equal to lambda over density. For ten points each:
[10] Name these linear phenomena that arise in elastic solids. Since they are *transversely* polarised, they have two possible polarisation states and travel slower than a similarly-named counterpart.
ANSWER: **S** waves [or **secondary** or **shear** waves]
[10] P and S waves are often studied in this subfield of science, which measures their strength and arrival times in order to record and study earthquakes.
ANSWER: **Seismo**logy [or **seism**ometry or similar word forms]
[10] This most destructive kind of surface wave occurs when a horizontally-polarized S wave reaches the surface. Unlike the similar Rayleigh waves, their production does not require interference from P waves.
ANSWER: **Love** waves [or **Q** waves]
*<Science Earth Science - Krol>*

16. Lorenzo Valla determined that the author of *On the Divine Names* was not really a figure nicknamed for this location. For 10 points each:
[10] Name this place, where a man named Dionysius was converted upon hearing a sermon now named for it. That sermon named for this place was prompted by an inscription “To The Unknown God.”
ANSWER: the **Areopagus** [or the ***Areios Pagos***; or **Ares Rock**; or **Mars' Hill**; prompt on Athens; accept (Pseudo-)Dionysius the **Areopagite**]
[10] Pseudo-Dionysius' writings distinguish Neoplatonic *henosis* from this mystical process, in which humans become like unto God or united with God.
ANSWER: **theosis** [or **divinization**; accept **apotheosis**; accept **deification**]
[10] An incremental approach to theosis is described in *The Ladder of Divine Ascent*, which was written by a man with this first name. Another man with this first name began his namesake gospel by equating Jesus to *Logos*, or “the Word.”
ANSWER: **John** [or **Johannes**; accept **John** Climacus]
*<RMP Christian/Bible Religion - Smith>*

17. For 10 points each, name these axioms from set theory.
[10] This axiom states that, given a set of sets *S*, there exists a set whose elements are precisely the elements *of the elements* of *S*. This axiom shares its name with a set-operation that is denoted with a large, upright 'U.'
ANSWER: axiom of **union**
[10] The first Hilbert problem asked for a proof of this hypothesis; however, it was shown by Gödel and Cohen to be independent of ZFC, meaning that it can be taken as an axiom of Zermelo-Fraenkel set theory. This axiom states that any set with cardinality strictly smaller than that of the real numbers is countable.
ANSWER: **continuum** hypothesis [or **CH**]
[10] This axiom states that, for a poset *P* satisfying the countable chain condition, a *D*-generic filter exists on *P* for any set *D* with cardinality less than the continuum. Like the continuum hypothesis, this axiom is independent of ZFC.
ANSWER: **Martin**'s axiom [accept **MA**]
*<Science Math - French>*

18. In this play, Santiago tells his wife that he sees “a line of little ants carrying breadcrumbs on their backs,” but the crumbs they are taking are his “dignity.” For 10 points each:
[10] Name this play. Juan Julian is shot in this play as he reads, in Spanish, the line “what logic can there be in killing a man to regain harmony with a woman...” as part of his job as a lector in a cigar factory.
ANSWER: ***Anna in the Tropics***
[10] *Anna in the Tropics* is by Nilo Cruz, an author of this ethnicity. Cesar and Nestor Castillo perform on *I Love Lucy* in a novel by Oscar Hijuelos, another author of this ethnicity.
ANSWER: **Cuban**-American [prompt on American, Latino, Hispanic] [The novel is *The Mambo Kings play Songs of Love*.]
[10] In *Anna in the Tropics*, the lector Juan Julian reads the cigar factory workers *Anna Karenina*, a novel by this Russian author of *War and Peace.*
ANSWER: Leo **Tolstoy**
*<Literature American - French>*

19. The climax of this piece is marked “High point of the Allegro” in the score. For 10 points each:
[10] Name this piece whose revised version was premiered and later recorded by Daniel Hope. It was commissioned by Louis Krasner and dedicated “to the memory of an angel.”
ANSWER: Alban **Berg**'s **Violin Concerto** [accept **VC** in place of “Violin Concerto”; prompt on partial answer]
[10] Berg was a member of this city's “second school.” Other members of that school from this city, which originated the twelve-tone technique, include Arnold Schoenberg.
ANSWER: **Vienna**, Austria [accept Second **Viennese** School]
[10] The “angel” in the dedication of Berg's violin concerto was the child of an architect and this person. This person inspired a happy theme in an Austrian composer's “Tragic” symphony.
ANSWER: **Alma** Mahler [or **Alma** Gropius; or **Alma** Werfel; or **Alma** Maria Schindler; prompt on surnames alone]
*<Arts Music - Smith>*

20. Eugene Genovese's *Roll, Jordan, Roll* is subtitled for “the world that” people in this condition “made”. For 10 points each:
[10] Name this condition also studied in historical works such as Ira Berlin's *Many Thousands Gone*. Eric Foner's most famous work covers the period immediately after its abolition.
ANSWER: **slavery** [accept being a **slave**]
[10] The methods of this subdiscipline were applied to slavery in Robert Fogel's *Time on the Cross*, which was published as a response to *Roll, Jordan, Roll*. This subdiscipline co-founded by Fogel and named for a Muse applies economic methods to the study of history.
ANSWER: **Cliometrics**
[10] This author of *From Slavery to Freedom* and *Reconstruction: After the Civil War*, a professor at Duke University, helped prepare a pivotal legal brief in favor of the plaintiffs in *Brown v. Board of Education*. This man also served as the first black president of the American Historical Association.
ANSWER: John Hope **Franklin**
*<History American (1865-1945) - Myers>*

21. A man named Manjiro is the first known person of this ethnicity to immigrate to the United States. For 10 points each:
[10] Manjiro was born in this country before getting shipwrecked and rescued by American seaman. This country was closed to most external trade under the Tokugawa Shogunate.
ANSWER: Empire of **Japan** [or **Nippon**]
[10] The *John Howland* brought Manjiro to this Massachusetts city, a center of the US whaling industry in the 19th century. This city on Massachusetts's south coast has one of the United States' largest Portuguese communities.
ANSWER: **New Bedford**
[10] After returning to Japan, Manjiro passed on his western knowledge to Iwasaki Yataro, who founded Mitsubishi, one of the first of these companies. This Japanese term means “wealthy clique” and also included Mitsui.
ANSWER: **zaibatsu**
*<History American (1865-1945) - Bentley>*