



# ACADEMIC COMPETITION FEDERATION

2014 ACF NATIONALS  
PACKET 7 BY THE EDITORS

## TOSSUPS

1. This author framed a story as a letter from a painter to his former mistress asking for permission to kill and bury his canaries. This author wrote a humorous tale about a peasant committing “stylish suicide” when he succumbs to back pain while using the facilities of his rival in the pay-toilet industry. In another of his stories, a boy who scalded his shoulder on a hot ball of the title substance at a factory job resents that his beloved did not marry him, even though he gave her a handmade vase. This author of “The White Flower” wrote a story in which schoolchildren wield colorful lanterns and a boy inadvertently offers a girl a rare species of insect. This author of “Glass” and “The Grasshopper and the Bell-Cricket” wrote a story whose narrator is shocked to discover that the dancer he was trying to court is an adolescent, when he accidentally sees her naked bathing in a river. For 10 points, name this Japanese author of “The Dancing Girl of Izu” whose collection *Palm-Of-The-Hand Stories* includes an early version of his novel *Snow Country*.

ANSWER: Yasunari KAWABATA

2. Florent Calvo and Peter Schwerdtfeger did Monte Carlo simulations to prove that this element’s melting point is much lower than expected due to relativistic effects. Benzene can be converted to picric acid in one step by reacting a mixture of this element’s nitrate with nitric acid in the Wolffenstein-Boters reaction. The chloralkali industry commonly uses an electrode of this element for the electrolysis of brine to form sodium hydroxide and chlorine gas. This element is bound to an ethyl group at the end of a compound commonly used in patch testing for dermatitis and conjunctivitis. An acetate of this element undergoes an “oxy” reaction followed by a “de” reaction to convert an alkene to an alcohol. This element’s oxidation state 1 cation is diatomic and has a +2 charge, whereas its oxidation state 2 cation is monatomic. Sulfur has a strong binding affinity for this metal, which forms alloys called amalgams. For 10 points, name this heavy metal that is liquid in standard conditions, and is often found in thermometers.

ANSWER: MERCURY [or HG; or QUICKSILVER; or HYDRAGYRUM]

3. The Palmer Z index tracks the short-term severity of these phenomena, whose long term persistence is measured by another Palmer index named for them. Wilhite and Glantz developed a four-fold taxonomy of these phenomena, which they ranked in order of duration and impact, with the “socioeconomic” type at the top. Cleaveland et al. used tree ring records to conclude that an extreme form of this phenomenon resulted in a massive death toll in Mexico in the 16th century by increasing the population of pests that carry hemorrhagic fevers. A discredited theory by Charles Dana Wilber argued that these phenomena would not occur in places where agriculture was being practiced. The combination of this phenomenon with extensive land development has resulted in increased levels of coccidiomycosis, or “valley fever” in the San Joaquin Valley of California. One of these events, combined with strong winds, was responsible for driving a vast migration west from the Great Plains during the Dust Bowl. For 10 points, identify this climatological phenomenon characterized by a lack of precipitation.

ANSWER: DROUGHT

4. Although he was quickly succeeded by Judah Benjamin, one man with this last name was the first Secretary of War for the Confederacy. A black sergeant with this last name led a group of South Carolina Volunteers in 1863 who laid down their arms in Jacksonville, Florida to protest unfair racial treatment, and was shot for mutiny. A mayor by this surname sashayed around Europe with his Ziegfeld showgirl mistress Betty Compton after a commission led by Judge Samuel Seabury exposed the bribes he’d taken. Another black man by this surname based in Boston wrote an 1829 pamphlet entitled *Appeal to the Colored Citizens of the World*, encouraging Southern slaves to rise up and rule themselves. This was also the name of the Secretary of Treasury under James K. Polk, who sponsored an 1846 tariff which reduced rates of the “Black” Tariff. In addition to

the Mayor of New York, “Gentleman Jimmy,” a man by this surname was President of the Republic of Sonora. For 10 points, give this last name shared by a filibustering lawyer who owned a banana republic in Nicaragua.

ANSWER: WALKER [in order: LeRoy Pope Walker, William Walker, Jimmy Walker/James John Walker, David Walker, Robert Walker, and the other William Walker]

5. In an essay published on the fiftieth anniversary of the introduction of these concepts, Fred Dretske broke these concepts into two independent assumptions, and argued that for many philosophers, rejecting the closure principle that is the second assumption, brings “Armageddon.” In order to address the critique presented by these concepts, Ernest Sosa formulated the triple-A criteria, which assess an action based on accuracy, adroitness, and aptness. In his book *Thought*, Gilbert Harman formulated the “no false lemmas” reply to the objections raised by these concepts, and Roderick Chisholm’s most famous work used the concept of something being “evident” to counteract the critique originated by the formulator of these concepts. The paper which first formulated these concepts presented one of them in which Smith infers that Brown is in Barcelona on the grounds that Jones owns a Ford. Formulated to give a negative answer to that paper’s title, “Is Justified True Belief Knowledge?” for 10 points, identify these seemingly paradoxical epistemic scenarios formulated by the namesake American philosopher.

ANSWER: GETTIER problems

6. This poem offers an inadvertent portrait of Ike Jose in its description of “a reading machine, always wound up and going / [who] mastered whatever was not worth the knowing.” A woman with “I-turn-the-crank-of-the-Universe air” interrupts the main character midway through this work right before a notable passage asserting that a writer’s “rich words” are “like gold nails in temples to hang trophies on.” At the beginning of this poem, Phoebus Apollo abandons reading under a laurel tree and starts to commenting on a procession of figures led by Tityrus Griswold. At the end of this work the speaker concludes, “He who would write and can’t write can surely review” before fleeing from the over-talkative “Miranda” who is based on the author of *Woman in the Nineteenth Century*. This poem subtitled “A Glance at a Few of Our Literary Progenies” famously describes a man “like Barnaby Rudge / Three fifths of him genius and two fifths sheer fudge” in a discussion of Poe and earlier sections discuss “Emerson” and “Hawthorne.” For 10 points, name this satirical poem by James Russell Lowell.

ANSWER: “A FABLE FOR CRITICS”

7. In 2005, Ali Ryerson formed a “big band” consisting of sixteen of these instruments. During the 1970s, Paul Horn recorded albums in which this instrument’s sounds echo inside the burial chambers of Egyptian pyramids and the Taj Mahal. Rahsaan Roland Kirk sings while playing this instrument in his single “You Did It, You Did It.” Another performer of this instrument posed nude on the cover of his album *Push Push* and included recordings of “Hold On, I’m Coming” and “Chain of Fools” on the 1969 album *Memphis Underground*. The relatively low volume of this instrument made it uncommon in jazz until the bebop era, when it was played by musicians such as Sam Most. Besides clarinets, saxophonists in jazz bands most often double on these instruments. For 10 points, name this woodwind instrument popularized by Herbie Mann.

ANSWER: jazz FLUTE

8. In his biography of this man entitled *Fury on Earth*, Myron Sharaf wrote that he became a wanted man after Mildred Brady wrote an article in *The New Republic* on the “Strange Case” of this man, which he rebutted with his own article “Conspiracy: An Emotional Chain Reaction.” He promoted the idea of “work democracy” as his utopia and developed the theory of “body armoring” in two of his books. He also performed experiments with cultures called “bions,” which would degrade on exposure to death-causing agents known as “t-bacilli.” This author of *Character Analysis* and *The Mass Psychology of Fascism* invented a device consisting of hollow metal tubes pointed at the sky, which had the power to disable alien spaceships and control the weather by using the positive energy of water. That device was the cloudbuster, but this man is better known for trying to trap the life force of the universe in his boxes. For 10 points, name this crazy Austrian psychoanalyst who created the idea of orgone energy.

ANSWER: Wilhelm REICH

9. Yoneyama et. al unearthed that RIG-I and MDA5, both cytosolic helicases, can trigger production of these proteins. They upregulate the MX1 and MX2 GTPases, which experience increased activity in Down’s syndrome. Thrombocytopenia is a major adverse effect of one of these proteins when it is administered to control the progression of hepatitis C. The first synthetic

orally-active inducer of these proteins was tilorone. A “gene factor 3” complex named for these proteins works by activating namesake “stimulated response elements.” This term was coined by Jean Lindemann and Alick Isaacs, who were working with heat-inactivated influenza viruses and chicken eggs, though these proteins were first noticed by two Japanese virologists working on a new smallpox vaccine. In vertebrates, these proteins activate protein kinase R after themselves being induced upon exposure to double-stranded RNA. For 10 points, name these cytokines best-known for messing with viral replication in infected host cells.

ANSWER: INTERFERONS [prompt on CYTOKINES]

10. This king did a lot on his deathbed - first, he secured passage of a bill which mandated that one son per family was eligible for conscription, replacing a system where wealthy families could buy their way out of military service. Five days before his death, he also illegally married the whore Caroline Lacroix, and left her a large estate. Seven years earlier, he was almost assassinated by Italian anarchist Gennaro Rubino, and his queen, known as the “Rose of Brabant,” was also killed. He created an army under the command of Leon Roger, known as the Force Publique, which outfitted its soldiers with whips made from hippopotamus hide. This king, who was succeeded by his nephew Albert I, famously had his activities documented by Roger Casement in a certain report. Known for hiring Henry Stanley, for 10 points, name this late 19th century Belgian king who committed the Rubber Atrocities in his private colony of the Congo.

ANSWER: LEOPOLD II of Belgium [prompt on “Leopold”]

11. Note: type of piece and composer needed. The sinfonia of one of these pieces begins with an allegro in 3/8 showcasing every orchestral section, followed by an adagio dominated by an oboe solo. The last of these pieces to be composed contains a section lacking basses, in which the 3/8 time and the triad of flute, oboe, and soprano voices have been interpreted as symbolising the trinity. One of these pieces includes a duet between the oboist and soprano, each of whom has a backstage pair that sometimes echoes their notes, a phenomenon that gave that duet the nickname the “Echo Aria.” One of these pieces was reworked from a birthday piece about shepherds, explaining the lingering presence of “the other Mary” Mary Jacobe. Another of these compositions opens with a fanfare with kettledrums and the chorus singing “Jauchzet, frohlocket!” These three pieces include “Loben Gott in seinen Reichen,” which has an unusually low BWV number since it’s also considered a cantata, as well as a piece depicting the events between the “Annunciation of the Shepherd” and “The Adoration of the Magi.” For 10 points, name these sacred pieces by J.S. Bach celebrating Ascension, Easter, and Christmas.

ANSWER: J.S. BACH ORATORIOS [just ORATORIOS is fine after “Bach” has been mentioned; prompt on BACH ORATORIOS since they’re the ones by JOHANN SEBASTIAN BACH]

12. These animals pulled the chariot of a toothless Vedic god whose considerate followers offered him gruel and other soft foods. During an assembly in a section of the Campus Martius named for these animals, a sudden storm followed by a solar eclipse concealed Romulus’s ascension into godhood. Blodeuwedd once tricked Llew into revealing that he could only be killed while stepping on a cauldron with one foot and on this animal with another. Herodotus wrote that women often had sex with these animals at Mendes in Egypt, where they were greatly revered; centuries later, Eliphas Levi illustrated that animal “of Mendes,” and it became identified with the occult deity Baphomet. Loki once tied one end of a thong to one of these animals and the other end to his scrotum in order to make Skadi laugh. Two of these animals named “teeth-grinder” and “teeth-barer” belonged to Thor. In Greek mythology, the chimera had the head of one of these animals. Another of these animals, or a nymph who tended them, suckled the infant Zeus on Mount Ida. For 10 points, name these animals that included Amalthea, whose broken horn became the cornucopia.

ANSWER: GOATS [or CAPRA aegagrus hircus]

13. In the lead-up to this battle, the elderly general Camulogenus had been slain and left on the battlefield, which allegedly inspired a rallying cry. One side in this battle dug a series of eight rows of pits in the ground, each located three feet apart, which were referred to as lilies since the traps resembled that flower - inside each pit, that winning army placed sharpened stakes known as *cippi* created from trees stripped of their bark at the top. Prior to this battle, a council held at Bibracte united the force of one side, which led their opponent to mount a failed attack at the hill of Gergovia. The cavalry on one flank commanded by Titus Labienus survived just long enough and the assistance of Commius was not enough to prevent the capture of the Avernian chieftain. For 10 points, name this 52 BC battle at which Vercingetorix was defeated by Julius Caesar.

ANSWER: Battle of ALESIA [or siege of Alesia]

14. A general formula for the differential cross section of this process was calculated by Elwert and Haug, who showed that the solution obtained in the relativistic limit using Born approximations by Bethe and Heitler was a special case of their formula. In Coulombic collisions, the radiation cross section for this process is proportional to the log of the ratio of maximum to minimum momentum transfers, while in the limit of low frequencies and small velocity changes, the intensity per unit frequency for this process is proportional to the velocity change squared times the Lorentz gamma squared. A thermal form of this process in ionized HII regions results in free-free emission, and in cases where the acceleration is normal to the velocity, this process reduces to synchrotron radiation. For 10 points, identify this radiation which is emitted when particles undergo rapid deceleration, such as when they impact a target.

ANSWER: BREMSSTRAHLUNG

15. Bernard Berenson wrote a notable essay on how he escaped the shamanic influence of this work, which he claims “had simply become an incubus.” The artist’s anatomical drawings of a young man’s straight veins and an old man’s bloated veins were the models respectively for the serpentine river on the left background and the wide river on the right spanned by a bridge. Vasari claimed that the artist kept a troupe of musicians and jesters on hand while painting this work to amuse the sitter so it wouldn’t be infected with the melancholy that painters give their subjects. A notable description asserts that the main figure “like the vampire, has been dead many times and learned the secrets of the grave.” Walter Pater claimed the main figure of this painting “is older than the rocks among which she sits.” Barely visible vertical strips of column flank the title figure of this painting who sits on a loggia and is portrayed with the corners of her eyelids and mouth left undefined as part the artist’s trademark *sfumato* technique. Depicting Lisa del Giocondo, for 10 points, name this portrait by Leonardo da Vinci with an enigmatic smile.

ANSWER: MONA LISA [accept La GIOCONDA before “Giocondo”]

16. In this play’s second scene, a musician performs a serenade he was commissioned to write about the Greek god Iris for his patron, who suggests rewriting it as a song about the sheep “Namby the lamb-y.” In this play’s final act, one man crouches on his hands and knees so a Mufti can use his back as a desk to hold the *Alcoran* during a ceremony to turn him into a “mamamouchi”. The main character of this play gives a bankrupt count a diamond ring to woo the marchioness Dorimene on his behalf, but the count seduce her as his own lover. In a famous line from this play, the title character, after learning from a philosophy master that all language is prose or poetry, declares that he is happy to discover he has been speaking prose all his life. The servant Covielle plans an elaborate ruse in this play’s final act when one character poses as the royal son of the sultan of Turkey to trick the title character into granting Cleonte his daughter Lucile’s hand in marriage. For 10 points, name this Moliere play about the ridiculous social-climbing of the merchant Jourdain.

ANSWER: The BOURGEOIS GENTLEMAN, or Le BOURGEOIS GENTILHOMME [or accept The WOULD-BE GENTLEMAN; or The WOULD-BE NOBLE; or The MIDDLE-CLASS GENTLEMAN]

17. A pavilion to the west of this structure contains the mural *The Western Elysium*, which depicts 70 josses including fairies and flying apsaras. This structure contains 104 bells which ring when the wind blows, positioned under its eaves, which contain a densely-positioned wooden bracket system known as dougong. The Sumeru pedestal at the base of this structure is said to be covered in silt, attesting to a legend about its durability. It was built to replace a previous wooden structure, which was destroyed by a lightning strike five years earlier. It consists of thirteen stories with a spiral stone staircase placed inside of a tower of bricks, which have been glazed red, blue, green, and brown. It survived a flood in 1847 even though its surrounding structure, called the Youguo Temple, was destroyed. The interior contains several frescos from the novel *Journey to the West*. For 10 points, name this Buddhist tower in Kaifeng, which was built during the Song Dynasty in China, and earned its name because its bricks give off a rusty appearance.

ANSWER: IRON PAGODA [accept Youguo Temple before “silt”]

18. One sub-section of this document entitled “What of External Aid?” lists the three forms of aid as being gifts, loans, and private investment. This text discourages reliance on those forms by stating that “a poor man does not use money as a weapon” because money is only the result of development while the true causes are people, land, and good leadership. The man who drafted this document worked with Richard Turnbull to establish power, and used it as a basis to create his “Party of the Revolution,” or CCM. This text promotes that leader’s motto of “Freedom and Work” and his idea of the “Ujamaa Viji-jini” or a village based on familyhood where all members are self-reliant. Originally issued by the TANU party, this statement was designed as a “Policy on Socialism and Self Reliance.” For 10 points, name this 1967 declaration in which Julius Nyerere outlines

his vision of a socialist state for Tanzania.

ANSWER: ARUSHA Declaration

19. The number of these objects can be computed by taking the alternating trace of the Frobenius endomorphism, as shown by the Lefschetz trace formula. For an unperturbed rational curve with a specified rotation number, only an even number of these objects will remain after a perturbation, and they will be alternately elliptic and hyperbolic, as per a theorem named after Poincare and Birkhoff. One of these is stable if both eigenvalues of its stability matrix are negative, or alternately if its Lyapunov exponent is negative. For the logistic map, these exist at 0 and 1 minus quantity  $1/\mu$ . For a continuous real-valued function on some closed interval, an application of the intermediate value theorem can be used to show that one of these values must exist on that interval; that theorem is a special case of a theorem which guarantees the existence of one of these values for any continuous mapping from the  $n$ -dimensional unit ball to itself, named for Brouwer. For 10 points, identify these values which equal the application of some map to themselves.

ANSWER: FIXED point or EQUILIBRIUM point or INVARIANT point

20. This author wrote about a vulgar genre of art that gives expression to the “Sancho Panza view of life” whose “whole meaning” lies in its “unredeemed lowness” and in another work described his home country as “a family with the wrong members in control”. This author criticized a famous poet for the phrase “necessary murder” which he argues could “only be written by a person to whom murder is at most a *word*.” This author wrote about dirty comics in “The Art of Donald McGill” and described his horrifying education at the prep school Crossgates in “Such, Such Were the Joys.” He borrowed a metaphor from an essay on Anaïs Nin to describe a certain writer as a willing Jonah. This author defended Henry Miller in his essay “Inside the Whale” and satirically translated a passage from *Ecclesiastes* into modern English in an essay that argues political writing has become “the defense of the indefensible.” For 10 points, name this British author who wrote the essays “Politics and the English Language” and “Shooting an Elephant”.

ANSWER: George ORWELL

#### TIEBREAKER

21. One problem in this story is solved when a character recalls that another character often mixed up his left and right eyes. One piece of paper in this story has a secret insignia resembling the image of a goat or a child. The protagonist deduces that “8” means “e” and “semi-colon 48” means “the” in a coded cryptogram message that confuses him by referring to strange places such as “the bishop’s hostel” and “the devil’s seat”. The Newfoundland dog Wolf knocks a piece of parchment near the fire, which illuminates the outline of a Death’s Head. The narrator of this story is unsettled when he is summoned to a boat filled with a new scythe and three new spades for an expedition in which the servant Jupiter is instructed to climb to the seventh branch of a tulip tree and drop the title object through the left socket of a skull he finds there. The narrator visits Sullivan’s Island near Charleston where he finds Captain Kidd’s buried treasure. For 10 points, name this Edgar Allan Poe story in which William Legrand becomes obsessed with finding treasure after being bitten by the title insect.

ANSWER: “The GOLD-BUG”

## BONUSES

1. The magnetization of a system with this property is proportional to the quantity hyperbolic cotangent of  $x$  minus one over  $x$ , also known as the Langevin function. For 10 points each:

[10] Identify this property, characterized by the formation of a weak magnetic moment proportional to the applied field.

ANSWER: PARAMAGNETISM

[10] Paramagnetic materials are also characterized by the fact that this quantity, which is inversely dependent on temperature according to the Curie Law, is greater than 1.

ANSWER: magnetic SUSCEPTIBILITY

[10] In this eponymous type of paramagnetism, the parallel alignment of spins to the applied field is preferred at absolute zero because both up and down spins must have the same Fermi energy. It is named for the scientist who gave a fully quantum-mechanical treatment of paramagnetism.

ANSWER: PAULI paramagnetism.

2. Answer the following about retired emperors of Japan, for 10 points each.

[10] Retired emperors, or Joko, used this 701 CE Japanese legal code as their basis for being able to wield power in abdication. Based on the laws of Tang Dynasty China, this code provided for establishment of provinces, districts, and townships of 50 households governed by headmen.

ANSWER: TAIHO code [do not accept or prompt on Taika Reforms - those are completely different things]

[10] This retired emperor issued a decree in 1221 calling for the overthrow of the Hojo regent Yoshitoki to cause the Jokyu Disturbance, but Yoshitoki's son quashed this man's threat and he was exiled along with Juntoku.

ANSWER: Emperor GO-TOBA [or Go-Toba-tenno or the "Later Toba" or any translation of go which means "later"]

[10] A later retired emperor Go-Hanazono abdicated just prior to the outbreak of this ten year Japanese civil war that ran from 1467 to 1477 during the Ashikaga shogunate.

ANSWER: ONIN War [Onin no Ran]

3. At the end of this work the author exhorts the title figure, "We have listened too long to the courtly muses of Europe." For 10 points each:

[10] Name this speech given by Emerson to the Phi Beta Kappa Society, which Oliver Wendell Holmes dubbed the country's "intellectual Declaration of Independence".

ANSWER: "The AMERICAN SCHOLAR"

[10] Emerson repeats this two-word phrase throughout the speech as the "right state" of the American Scholar bemoaning instead of this figure we have bookworms.

ANSWER: MAN THINKING

[10] Emerson also wrote this essay that claims, "there is no end in nature, but every end is a beginning." This essay discusses the fluidity of the universe by tracing the progression of the title forms through mechanical knowledge, relationships, conversation, and literature.

ANSWER: "CIRCLES"

4. This symphony's 1958 radio premiere was ruined by such mishaps as the flute playing a solo passage too early and Paul Beard altering the bowing of the string parts. For 10 points each:

[10] Name this symphony that concludes with a chord building up from the bass C, and begins with bass arpeggios inspired by the composer hearing a Vivaldi concerto as he was finishing up *The Midsummer Marriage*.

ANSWER: Michael TIPPETT's 2nd Symphony [prompt on Symphony No. "2" or "second" symphony]

[10] A gruppetto preceding a note cell, and a theme based on the *Dies irae* plainchant are recurring elements in this other symphony, whose premiere left the composer so traumatized that he sought hypnotic therapy with Nikolai Dahl.

ANSWER: Sergei RACHMANINOFF's 1st Symphony in D minor, Op. 13 [or RACHMANINOFF OP. 13; prompt on Symphony No. "1" or "first symphony"]

[10] This Beethoven symphony was the second of two to be premiered in an under-rehearsed 1808 concert. Its second movement, titled "By the brook," uses a flute, oboe, and clarinet to depict a nightingale, quail, and cuckoo.

ANSWER: Beethoven's SIXTH symphony [or PASTORAL symphony; or Beethoven's OP. 68; prompt on "F major" symphony since his eighth is also in that key]

5. The central text of this religion is subtitled “How I Found the Goddess, and what I did to Her Once I Found Her” - that text comes with a Pope Card, which turns anyone into a Pope, as long as they’re not under the authority of the authorities. For 10 points each:

[10] Name this religion, which may or may not be a joke, founded by two men called Omar Khayyam Ravenhurst and Malaclypse the Younger.

ANSWER: DISCORDIANISM

[10] One saint of Discordianism is this man who worked with his pupil P.D. Ouspensky to found the Fourth Way religion. Its teaching is contained in his trilogy of books *All and Everything*.

ANSWER: G.I. GURDJIEFF (George Ivanovich Gurdjieff)

[10] Discordian teaching says that one avatar of Eris is the Divine Eye at the center of this syncretic religion, which arose in Vietnam in the 1920s.

ANSWER: CAO DAI

6. This goddess’s daughter with Zeus, Pandia, names a mysterious Athenian festival that took place annually in the spring after the City Dionysia. For 10 points each:

[10] Name this goddess who regularly drove her chariot into the sea.

ANSWER: SELENE

[10] Selene is best known as the lover of this Aeolian shepherd, creepily standing watch over him during his eternal slumber.

ANSWER: ENDYMION

[10] In some accounts, Selene is regarded as the mother of this creature, whose slayer was told that he had 30 days to kill it before a boy would sacrifice himself to Zeus.

ANSWER: NEMEAN LION [prompt on “lion”]

7. This man proposed “units of action” to help his students determine a “through-line” or “super-objective”, and his other concepts include “the magic if” and “given circumstances”. For 10 points each:

[10] Name this director at the Moscow Art Theatre who created a system that trained actors to examine the motivations of their characters by embodying emotions through a “method of physical actions”.

ANSWER: Constantin STANISLAVSKI

[10] Stanislavski trained this famous American acting teacher who pioneered method acting and served as the director of the Actors Studio for nearly thirty years. He taught Elia Kazan and played Hyman Roth in *The Godfather Part Two*.

ANSWER: Lee STRASBURG

[10] Method acting differed most drastically from Stanislavski on this technique, which Stanislavski disavowed and Strasburg made a central tenet of method acting with this new name. It calls for actors to recall emotional events from their past similar to the emotions of their character.

ANSWER: AFFECTIVE MEMORY [do not accept EMOTIONAL MEMORY]

8. This older brother of Haakon VII of Norway is the only man to ever be king of Iceland. For 10 points each:

[10] Name this Danish king who resisted German occupation during World War II and reportedly wore a yellow star to support Jews.

ANSWER: CHRISTIAN X [or CHRISTIAN CARL FREDERIK ALBERT ALEXANDER VILHELM; prompt on “Christian”]

[10] This event refers to Christian X’s dismissal of the Danish government in 1920, after a dispute with Prime Minister Carl Zahle over whether central Schleswig should be re-incorporated into Denmark. After protests broke out in the street, Christian backed down and dismissed his own government as well.

ANSWER: EASTER CRISIS of 1920

[10] The so-called Telegram Affair broke out when Christian was wished a happy 72nd birthday by Hitler, and didn’t respond warmly enough. The job of consoling Hitler’s anger after that slight fell to this Nazi collaborator, who was executed in Norway in 1945 after inviting the Nazis there.

ANSWER: Vidkun QUISLING

9. Identify these techniques and concepts important in robotics, for 10 points each.

[10] This is the general term for a class of algorithms that iteratively construct a representation of an unknown environment and position the robot within that environment.

ANSWER: simultaneous Localization And Mapping

[10] This general problem in robotics seeks to find the position of joints in a manipulator arm that will yield the desired position of the effector, in contrast to the “forward” variety which finds the effector position based on the position of the joints.

ANSWER: INVERSE KINEMATIC

[10] The zero moment point technique is an algorithm which allows bipedal humanoid robots to do this, which is necessary for walking. The Boston Dynamics BigDog robot does this by distributing the load across its legs and generating ground reactions in the legs toward the hips.

ANSWER: BALANCE [accept word forms or descriptions like NOT FALLING OVER]

10. Ted thinks there should be five Picasso questions for every question on the Pre-Raphaelites, so let’s work our way to that next William Holman Hunt tossup by answering these questions on Picasso. For 10 points each:

[10] Picasso was inspired by the suicide of his friend Carlos Casagemas to create this 1903 painting of an impoverished blind beggar holding the title object.

ANSWER: The OLD GUITARIST

[10] Picasso painted *The Old Guitarist* during this phase of his work from 1901 to 1904 when he focused on depressing subjects and used a somber monochromatic color palette.

ANSWER: BLUE PERIOD [or PERIODO AZUL]

[10] During the Blue Period, Picasso also painted a notable portrait of this man sometimes dubbed “the beer glass”. This man became Picasso’s full-time secretary and started the Picasso Museum in Barcelona by donating his personal collection.

ANSWER: Jaime SABARTES

11. This poem’s speaker suggests you should “ride ten thousand days and nights / till Age snow white hairs on thee,” if you are the type of person “born to strange sights, / things invisible to see.” For 10 points each:

[10] Name, or provide the first line, of this poem, whose speaker sneers at the idea of finding a perfect woman. It advises the reader to “find / What wind / Serves to advance an honest mind,” and to “get with child a mandrake root.”

ANSWER: “SONG” [or “GO AND CATCH A FALLING STAR”]

[10] This Metaphysical poet included “Go and catch a falling star” among his *Songs and Sonnets* and admonished readers to “never send to know for whom the bell tolls” since “It tolls for thee” in one of his *Meditations*.

ANSWER: John DONNE

[10] In this first poem of *Songs and Sonnets*, the speaker comments that the “waking souls” of him and his lover “watch not one another out of fear” since their love “makes one little room an everywhere.” This poem ends with the couplet “If our two loves be one, or, thou and I / Love so alike, that none do slacken, none can die.”

ANSWER: “The GOOD MORROW”

12. Answer the following about the statues commissioned for the Florentine church Orsanmichele, for 10 points each.

[10] Ghiberti was commissioned by the cloth merchant’s guild to cast this sculpture of a saint holding a scroll, the first of three statues he did for Orsanmichele. It was the largest bronze statue cast in a single piece that had been completed for centuries and sparked a craze for bronze statuary.

ANSWER: St. JOHN THE BAPTIST

[10] This statue by Nanni di Banco, based on a scene from *The Golden Legend*, shows a group of soldiers who were killed by Diocletian for refusing to sacrifice to Asclepius.

ANSWER: FOUR CROWNED SAINTS [or FOUR CROWNED MARTYRS; or QUATTRO SANTI CORONATI]

[10] The linen-weavers commissioned this sculptor’s marble statue of St. Mark, and his other Florentine commissions include the Prophet Habakkuk nicknamed “Le Zuccone” or “pumpkin head”.

ANSWER: DONATELLO [or Donato di Niccolò di Betto BARDI]

13. Large-scale industrial production of this compound was once accomplished using the Bechamp reduction. For 10 points each:

[10] Name this compound that can be made by reacting benzene with a mix of sulfuric and nitric acid, then hydrogenating the resulting product.



ANSWER: ANILINE

[10] Polyaniline was “rediscovered” by this Scottish polymer chemist, who shared the 2000 Nobel for his development and discovery of conductive polymers.

ANSWER: Alan Graham MACDIARMID

[10] The weakness of aniline as a base can be explained by the fact that it is this kind of compound, not an aliphatic one. Benzene is the most famous of these compounds that are governed by Huckel’s rule.

ANSWER: AROMATIC [accept word forms]

14. This legislation is counterbalanced by the Insurrection Act and the Enforcement Acts of 1870 and 1871, which were used by Eisenhower to send troops into Little Rock. For 10 points each:

[10] Name this Act passed in 1878, which makes it a crime for anyone to use any part of the Army or Air Force as the namesake kind of force to uphold the law on U.S. soil, except as authorized by Congress or the Constitution.

ANSWER: POSSE COMITATUS Act

[10] The act was initially intended to bolster the Compromise of 1877, which pulled federal troops out of the South in return for Rutherford Hayes being elected president over this Democrat.

ANSWER: Samuel Jones TILDEN

[10] The act also ratified the decision of Ulysses Grant not to send in troops to deal with this 1872 “war,” which broke out when two candidates for governor in Arkansas claimed that they were fraudulently deprived of office, leading to riots in the street.

ANSWER: BROOKS-BAXTER War [or BAXTER-BROOKS]

15. Auden complimented this author saying, “I do not know of anyone else in the United States who writes better prose.” For 10 points each:

[10] Name this food writer who penned *Consider the Oyster* and *How to Cook a Wolf*, and started her collection *An Alphabet for Gourmets* with the column “A is for (dining) Alone”.

ANSWER: M. F. K. FISHER

[10] Fisher did the definitive English translation of this 18th-century French gourmand’s magnum opus *The Physiology of Taste*. He is also the namesake of a soft, white-crusted cheese.

ANSWER: Jean Anthelme BRILLAT-SAVARIN

[10] This contemporary author said he was trying to take food writing away from Fisher’s focus on food toward an interest in lifestyle in his book *Kitchen Confidential*. He also hosted Travel Channel’s show *No Reservations*.

ANSWER: Anthony BOURDAIN

16. This work’s 10th section analyzes the “Different Roads to Salvation,” and its antepenultimate chapter argues that Judaism is “accommodated to the world,” a fact which the author uses to explain Jews’ economic success. For 10 points each:

[10] Identify this work that also analyzes caste systems, a monograph originally published as part of its author’s larger *Economics and Society*.

ANSWER: The SOCIOLOGY OF RELIGION [or RELIGIONSSOZIOLOGIE]

[10] *The Sociology of Religion* was written by this German social scientist, best known for proposing that economic success was driven by religious beliefs in his *The Protestant Ethic and the Spirit of Capitalism*.

ANSWER: Karl Emil Maximilian WEBER

[10] According to *The Sociology of Religion*, this type of individual draws on charismatic force to proclaim religious doctrine. Weber contrasts this type of person with the priest, whose main function is to dispense salvation, and the magician, who may be charismatic but is not doctrinal.

ANSWER: PROPHET

17. People with this disease lack one or more of the six proteins that make up the branched-chain alpha-ketoacid dehydrogenase complex. For 10 points each:

[10] Name this autosomal recessive disorder, which has an astounding incidence of 1 in 176 among the Pennsylvania Mennonites. In it, the excreted amino acids leucine, isoleucine, and valine produce an unmistakably sweet odor.

ANSWER: MAPLE SYRUP URINE disease [or MSUD]

[10] Physicians literally use the words “cola-colored” to describe the abnormal hue of the urine produced by this other condi-

tion, in which myoglobin from broken-down muscle cells gets filtered by the kidneys.

ANSWER: RHABDOMYOLYSIS

[10] If there's protein in your urine, then you could have a lot of diseases, one of them being this autoimmune condition more common in women than men, which leaves a butterfly rash on the face.

ANSWER: systemic LUPUS erythematosus [or SLE]

18. Scholar Antoine Berman outlined twelve “deforming tendencies” including ennoblement and clarification that hamper this action, which was also studied by Gideon Toury and Lawrence Venuti. For 10 points each:

[10] Name this practice that Walter Benjamin discussed in an essay about “The Task” of the person performing it, which argues its goal is finding “that intended effect”.

ANSWER: TRANSLATION

[10] This Russian author got into an argument with Edmund Wilson over his militantly literal translation of *Eugene Onegin*. He translated his own novel *The Luzhin Defense* from Russian into English.

ANSWER: Vladimir NABOKOV

[10] This writer held translation can create a contradictory version of the same work, and he translated Oscar Wilde's *The Happy Prince* at the age of nine. He outlined the legends behind Sir Richard Burton and Edward Lane in his essay “The Translators of *The Book of One Thousand and One Nights*.”

ANSWER: Jorge Luis BORGES

19. Answer the following about Homs-based warfare in the latter 13th century, for 10 points each.

[10] The first two Battles of Homs in 1260 and 1281 CE pitted the Ilkhanate against forces of this slave dynasty led by the Sultans Qalawun and Baybars, who won a big victory for them at Ayn Jalut.

ANSWER: MAMELUKES [Mamluk]

[10] Speaking of Baybars, in 1271 CE, he successfully launched a siege against this Crusader castle near Homs which had been built up by the Knights Hospitallers starting in 1140 CE under direction of Raymond II, Count of Tripoli.

ANSWER: KRAK DES CHEVALIERS [prompt on translations like “Fortress of the Knights”]

[10] After Abaqa Khan failed to take Homs and Syria for the Mongols, he was succeeded in 1282 CE by this brother of his, who converted to Islam and tried to make peace with the Mamelukes while setting up his own sultanate. It didn't last long, and he was overthrown by Arghun.

ANSWER: TEKUDER [or Sultan AHMAD, or Sultan AHMED]

20. Among those cited favorably in this text are Al-Farabi, Averroes, and Porphyry, and this text claims that its author has come up with seventy-two propositions which, if correct, will allow “anyone... to resolve any question posed to him in natural philosophy or theology.” For 10 points each:

[10] Identify this text, an invitation to “disputation” which served as the introduction to a larger work of its author.

ANSWER: Oration ON THE DIGNITY OF MAN

[10] The *Oration on the Dignity of Man* was intended to introduce the 900 *Theses* of this Italian Renaissance philosopher, whose *Heptaplus* is an “account” of the six days of Genesis.

ANSWER: Giovanni PICO della Mirandola

[10] At the end of his oration, Pico claims to possess a series of books which make sure that “there is no point of controversy... on which,” these people “cannot be confuted.”

ANSWER: HEBREWS or JEWS

#### EXTRA BONUS

21. The twelve principles of this field were laid out by Paul Anastas, who is usually considered its father. For 10 points each:

[10] Name this chemical approach dedicated to reducing the amount of hazardous substances used and produced as by-products.

ANSWER: GREEN chemistry

[10] Green chemistry also seeks to maximize this value quantifying the amount of product obtained in a chemical reaction, whose actual value is always less than the theoretical value.

ANSWER: YIELD

[10] This green solvent, which is industrially produced by a transesterification of propylene carbonate and methanol, is commonly used as a non-toxic methylating agent superior to iodomethane or dimethyl sulfate.

ANSWER: DIMETHYL CARBONATE [or DMC]