2013 ACF Regionals: Transmitido en Quizbowlese ("This man while traveling through the woods found bathing in a stream the naked goddess Artemis")
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Packet by MIT A and LASA B

1. During a disastrous posting in New Orleans as a young officer, this man was shot in the head after challenging a master surgeon to a duel, and court-martialed after denouncing infamous traitor James Wilkinson for moving their camp closer to his favorite whorehouse. He managed a volatile Charleston during the Nullification Crisis and was mocked in later life for the phrase "hasty plate of soup" in a letter to William Marcy during a campaign in which he was forced to try and hang the St. Patrick's Battalion. This mediator during the Pig and Aroostook wars won at Cerror Gordo and Chapultepec but lost as the Whig opponent of Franklin Pierce in 1852, and by the time he formulated the Anaconda Plan in the Civil War was famously too fat to mount a horse. For 10 points, identify this victor at Veracruz, a U.S. general known as "Old Fuss and Feathers."

ANSWER: Winfield Scott

- 2. This is the Nakamura number of a game with seven players where the subsets of size at least three are the coalitions. It is the largest number of chips one can bet in a round of Kuhn poker. The product of the unitless Paasche and Laspeyres price indices gives this power of the Fisher index. The Bertrand and Cournot models govern behavior of this many actors, while a classical Edgeworth Box includes this many types of goods and also this many individuals. At most this number of fairness criteria are satisfied at once by a rank-order voting system according to Arrow's impossibility theorem. In his second Prisoner's Dilemma tournament, Robert Axelrod used a strategy responding with a "tit" for this many "tats." It is the number of pure strategy Nash equilibria in Chicken, as well as in Battle of the Sexes. For 10 points, identify this number, the amount of players in the Prisoner's Dilemma. ANSWER: two
- 3. An external fire pit and wooden beam loft highlight this man's summer house, begun to heal from his wife's death by indulging in random architectural whimsies. This man designed a library with a brick exterior fan and curving interior steel frame illuminated by natural light at Mount Angel Abbey. Rows of "grass stairs" dot the exterior of a town hall designed during the height of this architect's brick-obsessed "red period." His buildings in Germany include a namesake 200-foot highrise in Bremen and a cultural center built around a roof terrace in Wolfsburg. The Carrara marble has begun to warp on the exterior of a concert hall designed by this man to include a congress wing. To maximize views of a nearby river, he designed a building with a serpentine shape while teaching at an American university. A cantilevered chair this man designed to help TB patients at his Paimio Sanitorium is still marketed today. For 10 points, name this designer of MIT's Baker house and Finlandia Hall in Helsinki, a Finnish architect. ANSWER: Alvar Aalto
- 4. Proteins named for their proliferation of this organelle are activated by thiazolidinedione medications; the alpha type of those proteins is activated during prolonged fasting in ketogenesis. Proteins to be localized to this organelle often contain a tripeptide serine-lysine-leucine motif at their C-terminus known as PTS1. The myelin, central nervous system, adrenal glands and testes are most affected when mutations in ABCD1 cause this organelle to be unable to break down very-long chain saturated fatty acids in X-linked adrenoleukodystrophy. It contains enzymes required for the synthesis of plasmalogens. Defects in PEX genes cause a group of four namesake "biogenesis disorders" of this organelle, including Zellweger syndrome. For 10 points, name this organelle abundant in the liver that uses catalase to decompose a namesake compound into oxygen and water.

ANSWER: peroxisomes

5. The melody to the second movement of this work reappears in one of its composer's later oratorios, depicting a ploughman whistling its tune. Its composer's biographer, Georg August von Griesinger, confirmed that one moment in this work was designed to outdo the works of its composer's student, Ignaz Pleyel. This symphony's finale is in G major and 2/4 time and is marked "Allegro di molto". A theme beginning "C - C - E - E - G - G - E" is the basis for the variations that make up the second movement of this symphony. This is the second in a set of twelve works that includes symphonies nicknamed "Miliary" and "Clock". For 10 points, name this London symphony by Franz Joseph Haydn, nicknamed for its unexpected timpani thwack in the second

ANSWER: Franz Joseph <u>Haydn's Symphony No. 94</u> in G Major, Hob. I/94 "<u>Surprise</u>" [accept either; accept

obvious equivalent like "Haydn's 94th Symphony"]

6. In one poem by him, the speaker questions whether to cheer "the hero whose heaven-handling flung me, foot trod me" or "me that fought him". This poet described "worlds of wanwood leafmeal" in a poem that begins "Margaret, are you grieving / Over Goldengrove unleaving?". This author used the curtal sonnet form in a poem describing images like "skies of couple-colour as a brinded cow," and wrote the works "Carrion Comfort" and "Spring and Fall." In another work, he described a bird that is "kingdom of daylight's dauphin, dapple-dawn-drawn Falcon." The maritime deaths of five nuns exiled by the Falk Laws inspired this man's *The Wreck of the Deutschland*. For 10 points, name this English poet whose sprung rhythm works include "Pied Beauty" and "The Windhover".

ANSWER: Gerard Manley Hopkins

7. The existence of Arnold diffusion in this problem was shown by Zhihong Xia. A theorem first put forth with respect to this problem states that a conformal one-to-one transformation from an annulus to itself that advances points on the outer edge positively and inner edge negatively has at least two fixed points. That theorem was proposed by Poincaré and proven by Birkhoff. Karl Sundman found a solution to this problem in terms of a uniformly convergent infinite series. Jacobi's work on it yielded his namesake integral. One of the first solutions to this problem is applied to the Trojan asteroids located at the Lagrange points of Jupiter. It is often considered in a version where one mass is negligible and all masses are moving in the same plane, which is the circular restricted version. For 10 points, name this unsolved problem first considered by Newton with respect to the movement of the Moon under the influences of the Sun and Earth.

ANSWER: **three-body** problem

8. In one game, this figure is informed he has finished a level but "unfortunateley, also found a moose!," forcing the player to immediately flee in terror from the murderous, rampaging ungulate. In another appearance, this figure travels through stages like Treetops, Dark Forest, Fire Grotto, and Snowy Valley while collecting genie lamps and fire hydrants to power his costumes, which include a magician, fire fighter, and mountain climber. This star of the SNES's *Magical Quest* appears out of nowhere to help Ventus defeat Vanitas in one game, and in another leaves a note in his abandoned castle instructing you to go to Traverse Town, meet with Leon, and find "the key." This character meets Oswald the Rabbit in the Wasteland and uses a magic paintbrush to fight the Shadow Blot in a Disney game titled *Epic* [this character]. For 10 points, name this king in the *Kingdom Hearts* series, who first appeared in the film *Steamboat Willie*.

ANSWER: Mickey Mouse [accept King Mickey; prompt on "the king"]

9. The last lines of a story set in this city declares that the title character's tombstone bears "no hopeful verse", "for his dying hour was gloom". In that story set here, a pink ribbon flutters through the air after the protagonist meets a man in the guise of his grandfather who carries a staff shaped like a snake. A character in this city cannot remember adultery when attempting to name the Ten Commandments, shortly before a doll is discovered in his house. In a play set in this city, Reverend Parris questions his niece about why she was dancing in the forest with their Barbadian slave, Tituba. That niece had an affair with John Proctor, who is condemned to death in this city. For 10 points, name this setting of Nathaniel Hawthorne's "Young Goodman Brown" and Arthur Miller's *The Crucible*.

ANSWER: Salem, Massachusetts

10. Thomas Tallemache was defeated in this war after reportedly refusing to believe a goofy-looking polygonal building could really be a defensive tower, losing the Battle of Camaret. Control of the fortress at Pinerolo proved crucial in this conflict, which broke the Peace of Ratisbon. In this war, a random fisherman named Herve Riel was given command of a fleet after its captains proved too scared to flee through the treacherous Race of Alderny. The Duke of Noailles captured Camprodon on its Catalonian front, and it turned after Victor Amadeus of Savoy reached a separate peace. The Duc de Luxembourg enveloped the Prince of Waldeck at Fleurus, a rare open battle in this war that mostly saw naval clashes like Beachy Head and La Hogue and sieges

like Namur. The defensive lines of Vauban led to the Treaty of Ryswick ending, for 10 points, what 1688-1697 war that pitted pretty much everyone in Europe in a namesake coalition against Louis XIV of France? ANSWER: War of the **Grand Alliance** [or **Nine Years** War; or War of the **League of Augsburg**; or War of the **Palantine Succession**; prompt on "Williamite War" or "King William's War"]

11. In "Is Theology Poetry?", this man introduced an idea he later referred to as "the Cardinal Difficulty of Naturalism" in his book *Miracles*; that idea is his anti-materialist "argument from reason" for the existence of God. This author of *The Problem of Pain* used the German term *Sehnsucht* to refer to a concept that differs from pleasure because it includes an "inconsolable longing"; that concept appears in the title of his *Surprised by Joy*, an account of his conversion. In another work, this thinker asserted that pride was "the Great Sin" and popularized the idea that Jesus was either "lunatic, liar, or Lord", his namesake "trilemma." For 10 points, identify this lay theologian, whose religious works include *Mere Christianity*, the apologetic satire *The Screwtape Letters*, and the heavily allegorical *Chronicles of Narnia*.

ANSWER: Clive Staples Lewis [accept "Jack" Lewis from his friends and family]

- 12. One of these things describes homology groups of a space in terms of the homology groups of two subspaces and their intersection and is named for Mayer and Vietoris. A commutative diagram of R-modules with two exact rows yields one of these things by the snake lemma. Carmichael's theorem describes prime divisors in ones named for Edouard Lucas, which are described by a rational generating function. The Bolzano-Weierstrass theorem states that every bounded one in R-n has a subset that converges to a finite limit. A complete metric space is defined by the convergence of ones named for Cauchy. Although not functions, the squeeze theorem can be used to find their limit. These things can be defined by a recurrence relation, such as the one F-sub-n equals F-sub-n-minus-one plus F-sub-n-minus-two. For 10 points, name these ordered lists of numbers that include one named for Fibonacci. ANSWER: sequence [accept sequential; accept "long exact sequence" before John Farey, Sr.]
- 13. In a short story by this author, an atheist teacher pretends to be a believer to win Alice, but gets in trouble with the school authorities for his religiosity. This author of "Eduard and God" created a character who stands naked in front of a mirror wearing only her father's bowler hat. In one novel by this author of *Laughable Loves*, Helena is seduced by a scientist seeking revenge on her husband. A postcard saying "Optimism is the opium of the people!" causes Ludvik Jahn to be expelled from Communist Party in another work by this man. A dog named Karenin dies even after his tumor is removed in a novel by him in which Sabina has an affair with the surgeon Tomas, who is married to Tereza. For 10 points, name this Czech author of *The Joke* and *The Unbearable Lightness of Being*.

ANSWER: Milan Kundera

- 14. This artist spent most of the winter months compulsively painting in the snow, a hobby that produce a work showing a woman in yellow leading a child in red in the foreground as large mass skates on a pond behind. This artist of *Love of Winter* painted a portrait of a boy barely covered by torn overalls and sporting a prominent set of buck teeth in his *Paddy Flannigan*. Noah's Ark is recalled in his series about *Shipyard Society*, while children play leapfrog in the foreground of a more characteristic work that shows a crowd around a trolley as laundry is hung on fire escapes overhead, his *Cliff Dwellers*. The East River docks are the setting for his strikingly-nude *42 Kids* commented on race in *Both Members of This Club*, which like *Dempsey and Firpo* depicts a boxing match. For 10 points, name this New Yorker and member of The Eight, who painted *Stag at Sharkey's*. ANSWER: George Wesley **Bellows**
- 15. These entities are modeled by the STO-nG and the Pople sets, and by more complicated functions denoted with zeta notation. One model for describing them sets Coulomb integral equal to alpha and the resonance integral equal to beta and was developed by Erich Hückel. A good rule of thumb is that diagrams of them for cyclic conjugated pi system always takes the shape of the ring involved, with one vertex pointing down. They are created in pairs, with the higher-energy one being marked with a star. The chemical reactivity of species often depends on the highest occupied and lowest unoccupied, or "frontier," examples of the these entities, which can be described as bonding or antibonding. One of the simplest ways to calculate them is as a linear combination of their atomic counterparts. For 10 points, name these functions that describe the locations of electrons in a molecule.

ANSWER: <u>molecular orbital</u>s [prompt on <u>orbital</u>; accept <u>atomic orbital</u>s before "alpha" and DO NOT accept or prompt afterwards]

16. This man forged an alliance by marrying off his wife's annoying best friend to Holden Roberto. This man nationalized the UMHK mining company into Gecamines, for which he built the Citibank-financed Inga dams. This man often followed up torture and death sentences with high office appointments as part of his compulsive compulsive rotation of cabinet officials. The Manifesto of N'Sele pronounced the anti-party stance of his Popular Movement of the Revolution, and he was aided by the Safari Club during two uprisings in the Shaba province. This man's anti-European program of *Authenticité* resulted in his characteristic tunic, the abacost. This man promised amnesty to and then publically dismembered Pierre Mulele, who fought in the Simba Rebellion against this predecessor of Laurent Kabila. Emerging over Kasa-Vubu and Lumumba following the Katanga Crisis, for 10 points, identify this quintessential African kleptocrat, who renamed his country Zaire. ANSWER: Mobutu Sese Seko Kuku Ngbendu wa Za Banga [accept Joseph-Desire Mobutu]

17. Nader El-Biziri's *Being at Home Among Things* examines this philosopher's argument that in dwelling on earth we inhabit the poetic rather than the scientific, an argument outlined in this man's *Building Dwelling Thinking*. Theodor Adorno criticized his work in *Jargon of Authenticity*, and Nikolas Kompridis formulated reflective disclosure as an extension of this philosopher's assertion that humans assign meaning to things based on the context in which they learn about them. He used a Greek temple as an example of something that has lost the ability to effect the struggle between "Earth" and "World" in a work that discusses a pair of boots painted by Van Gogh. More famously, this author of *The Origin of the Work of Art* differentiated "being" from "a being" and described the uniquely human condition of *Dasein*. For 10 points, name this philosopher who wrote *Being and Time*. ANSWER: Martin **Heidegger** 

18. One character in this work buys all the raffle tickets at a charity bazaar to win a music box to give as a birthday present to his future wife. That character in this work gives saddlebags of money to a domino-playing widower to get him to sell his house. This work opens with Victoria chopping rabbits in the kitchen and the protagonist's dream of walking through a forest in the rain being misinterpreted by his mother, Placida Linero, while two characters to lie in wait in Clotilde Armenta's milk bar. The title event of this work is precipitated by Bayard San Roman angrily returning his bride on their wedding night and Angela Vicario naming the protagonist as the one who took her virginity. For 10 points, name this novella about the murder of Santiago Nasar, a work of Gabriel Garcia Marquez.

ANSWER: Chronicle of a Death Foretold [or Crónica de una muerte anunciada]

19. In one story, one of these items is taken by King Nidhad's men and given to Bodvild after earlier being duplicated seven hundred times by its owner, Wayland. In Egyptian myth, Nemty had his talons cut off after accepting one of these items as payment for ferrying a disguised Isis. One of these items that appears in the *Volsung Saga* was used to cover a whisker, thus completing a reparation payment given to Hreidmar for the death of Otr. Another of these objects was retrieved by Hermod from Baldr's funeral pyre, where it was placed by his father. The former of those objects was cursed by its owner after Loki tricked him out of it, while the latter generates eight copies of itself once every nine nights. For 10 points, Andvaranaut and Draupnir are both what type of jewelry, an invisibility-granting example of which was worn by the Lydian king Gyges on one of his fingers?

ANSWER: rings [or arm rings; or arm bands; prompt on "bracelets"]

20. A census during this campaign amusingly listed one figure's official address as "hiding in a crypt in Parliament." A fundraising rally in Connecticut for this campaign saw a speaker claim to be both "convict" and "soldier." John Redmond was maimed with a hatchet during this campaign, which included the "Freedom or Death" speech and resulted in a fatal trampling after a protester leaped in front of a racehorse. George Lansbury resigned in support of this effort, which grew from outrage over the Contagious Disease Acts and sparked the mass arrests of Black Friday. Several Conciliation bills and the Cat and Mouse Act failed to suppress this campaign, which was championed by the WSPU and included the infamous slashing of the *Rokeby Venus*. Sylvia, Christabel, and Emmeline Pankhurst were leaders of, for 10 points, what political campaign that won the vote for around half the population in cities like London?

ANSWER: women's  $\underline{\mathbf{v}}$  in the  $\underline{\mathbf{U}}$  in the  $\underline{\mathbf{U}}$  inted  $\underline{\mathbf{K}}$  ingdom [or  $\underline{\mathbf{Great\ Britain}}$ ,  $\underline{\mathbf{England}}$ , etc.; prompt on partial answer]

Tiebreaker. A William Blake watercolor with this title shows a man unfurl a scroll above the titular figure. JMW Turner's painting with this title shows a red skeletal figure with an outstretched right arm draped over another

figure's back. Another piece with this title features a snake in the foreground and is also known as "The Race Track." That work shows depicts this figure with a gleaming scythe in his hand. The most famous painting with this name shows the central figure holding up a hand to stop the titular figure and his brothers, Famine, Pestilence, and War. For 10 points, name this common title of works by Albert Pinkham Ryder and Benjamin West.

ANSWER: **Death on a Pale Horse** [prompt on **Death** before "title"]

- 1. This holiday sees the second yearly recitation of the Yizkot prayer, while the Musaf service on this day features the *tefillat geshem*, the prayer for rain. For 10 points each:
- [10] Identify this holiday celebrated on the 22nd of Tishrei. Depending on the tradition, it is either the day before Simchat Torah or contemporaneous with it.

# ANSWER: Shemini Atzeret [or the Eighth Day of Assembly]

[10] The reading of this book is concluded on the morning of Simchat Torah. It includes the words of the Shema, the installation of Joshua as Moses' successor, and a restatement of the Ten Commandments.

# ANSWER: **Deuteronomy** [or **Deuteronomion**; or **Devarim**]

- [10] Shemini Atzeret occurs immediately after this agricultural holiday. Jews live in namesake booths for its seven days to remember the forty years of travel through the desert after the flight from Egypt , as recounted in Exodus.
- ANSWER: **Sukkot** [or **Sukkos**; or the **Feast of Tabernacles**; prompt on "Feast of Booths"]
- 2. Senate candidate Henry Crabb led a volunteer force to defend Carboca during this conflict but, for reasons that remain unclear, was mercilessly slaughtered on arrival by the already-victorious locals. For 10 points each:
- [10] Identify this conflict that also saw US naval involvement at the Battle of Anton Lizardo and Felix Zuloaga take over the capital after the passage of the Lerdo Law.

## ANSWER: War of the **Reforma** [or Guerra de **Reforma**]

[10] The War of the Reform followed the Liberal overthrow of Santa Anna and the promulgation of Mexico's famous 1857 Constitution by this president, a major Liberal ally of Juan Alvarez and Benito Juarez.

#### ANSWER: Ignacio Comonfort

[10] Juarez tried to stem the economic turmoil caused by the war by cancelling Mexico's foreign debts, a move France protested by installing this Habsburg as the country's second Emperor.

ANSWER: Maximilian I [or Maximiliano I]

- 3. Oxidation of alkenes with osmium tetroxide can be used to synthesize these compounds. For 10 points each: [10] Name these compounds with geminal and vicinal types, whose most common example is ethylene glycol. ANSWER: **diol**s
- [10] Strong oxidizing agents can cleave the carbon-carbon sigma bond in a vicinal diol to yield compounds containing this functional group, which consists of a carbon atom double bonded to an oxygen atom.

## ANSWER: carbonyl group

[10] Vicinal diols are converted to carbonyl-containing compounds under acidic conditions in this reaction, first performed by Wilhelm Fittig with sulfuric acid. It involves the dehydration of a glycol to form a ketone and the migration of a methyl group from one carbon atom to an adjacent one.

ANSWER: **pinacol** rearrangement [or **pinacol-pinacolone** rearrangement]

- 4. In one novel by this author, Marian Forrester has an affair with Frank Ellinger. For 10 points each:
- [10] Name this American author of *A Lost Lady* and *O Pioneers!* who wrote about Jim Burden's reminiscences of the title character in *My Antonia*.

ANSWER: Willa Sibert Cather

[10] This novel by Cather chronicles Thea Kronborg's rise to stardom as an opera singer after leaving Moonstone, Colorado, culminating in her triumph at the Metropolitan Opera.

#### ANSWER: The Song of the Lark

[10] Cather also wrote this story about a young usher at Carnegie Hall in Pittsburgh who steals \$1000 to pay for a fling in New York City, after which he throws himself in front of a train.

ANSWER: "Paul's Case: A Study in Temperament"

- 5. Identify these figures defended by Clarence Darrow, for 10 points each:
- [10] This biology teacher from Tennessee was charged with teaching evolution in violation of the Butler Act, pitting

Darrow against national wet blanket William Jennings Bryan.

ANSWER: John T. Scopes

[10] William Borah similar came up short against Darrow in the trial of this head of the Western Federation of Miners for the 1905 dynamiting of Idaho governor Frank Steunenberg. This co-founder of the IWW was later convicted under the Espionage Act of 1917.

ANSWER: William Dudley "Big Bill" Haywood

[10] Darrow asserted that he "believe[d] in the law of love" in his seven-hour closing statement on behalf of this black family from Detroit, who faced murder charges for defending their house from a white mob.

ANSWER: The Sweets

6. This man's son, the ugly hunter Broteas, supposedly carved a huge image of Cybele on a mountain in Lydia. For 10 points each:

[10] Name this mythological figure who cut up his son Pelops and attempted to feed him to the gods, and was punished for doing so by being forced to stand neck-deep in water with both food and drink just out of reach.

ANSWER: Tantalus [or Tantalos]

[10] Pelops was later revived by the gods and eventually gained the right to marry this daughter of King Oenomaus by winning a chariot race. She shares her name with the wife of Pirithous, the king of the Lapiths.

ANSWER: **Hippodamia** 

[10] This son of Pelops and Hippodamia had his sons cut up and cooked by his twin brother Atreus. This man then raped his own daughter Pelopia, thus fathering Aegisthus, who later killed Atreus.

ANSWER: Thyestes

7. This city is the capital of Vizcaya Province and is located on the Nervion River. For 10 points each:

[10] Name this Basque home to a Guggenheim Museum designed by Frank Gehry.

ANSWER: Bilbao, Spain

[10] This autonomous community of southern Spain features the cities of Cadiz, Almeria, Malaga, and Cordoba. Its capital is Seville.

ANSWER: Andalusia

[10] Northern Spain's Cantrabian mountains provide an unusual oscillating example of this effect, in which the rain shadow caused by namesake winds on a mountain range leads to drastically different climates on the the windward and leeward sides.

ANSWER: Foehn Effect/winds/etc.

8. This artist is depicted as an infant suckling from a bare-breasted woman wearing a ritual mask in *My Nurse and I*. For 10 points each:

[10] Name this artist whose other works includes the ethereal Suicide of Dorothy Hale.

ANSWER: Frida Kahlo

[10] Kahlo was married to this famous Mexican muralist, who painted Man at the Crossraods and Detroit Industry.

ANSWER: Diego Rivera

[10] Kahlo's best-known treatment of her defining bus accident is probably this self-portrait, which shows the artist studded with crude nails and the titular shattered object held in place of a spine by a medical brace.

ANSWER: The **Broken Column** [or La **Columna Rota**]

9. This man used the phrase "et in Arcadia ego" to open his travelogue, *Italian Journey*. For 10 points each:

[10] Name this German Romantic author of *The Sorrows of Young Werther* and *Faust*.

ANSWER: Johann Wolfgang von Goethe

[10] The title character of this Goethe novel performs *Hamlet* as part of a theatrical troupe that includes Felix and Mignon before marrying Natalie and discovering that Felix is his son.

ANSWER: <u>Wilhelm Meister's Apprenticeship</u> [or <u>Wilhelm Meisters Lehrjahre</u>]

[10] In this Goethe narrative poem, the first title character, an innkeeper's son, falls in love with the second title character while distributing supplies to war refugees.

ANSWER: <u>Hermann and Dorothea</u> [or <u>Hermann und Dorothea</u>]

10. This number divides flows into laminar, transient and turbulent regimes. For 10 points each:

[10] Identify this dimensionless number given by the ratio of inertial to viscous forces.

ANSWER: Reynolds number

[10] The Reynolds number can be defined with respect to the kinematic viscosity or this type viscosity, sometimes measured in centipoise. It is equal to the kinematic viscosity multiplied by the density of the fluid.

ANSWER: **dynamic** viscosity [or **absolute** viscosity]

[10] In two examples of non-Newtonian fluids, thixotropic and rheopectic fluids, the viscosity is dependent on this quantity. Other non-Newtonian fluids, like Bingham plastics and power-law fluids, do not depend on this quantity. ANSWER: <u>time</u> of applied shear stress [or the <u>duration</u> of applied shear stress]

- 11. During this country's resistance to Russification, the *Knygnesiai*, or Book Smugglers, promoted its native language. For 10 points each:
- [10] Identify this country that joined Poland in the Union of Lublin and whose capital is Vilnius.

ANSWER: Republic of **Lithuania** 

[10] Lithuania's government under Antanas Smetona suppressed a coup by Augustinas Voldemaras, whose fascist group paired this term with "Wolves." Horia Sima led a Romanian fascist group begun as the Legion of the Archangel Michael whose name paired this term with "Guard."

[10] **Iron** 

[10] The only official King of Lithuania was this Grand Duke, crowned on the orders of Innocent IV in 1263. He didn't do all that much but is extremely prevalent in post-19<sup>th</sup> century historiography, and is thus often seen as an index case of subtler forms of nationalist revisionism.

ANSWER: Mindaugas

12. Daryl Bem argued against this theory with his theory of self-perception. For 10 points each:

[10] Name this theory describing the discomfort engendered by maintaining two or more conflicting thoughts, first described in the book *When Prophecy Fails*.

ANSWER: cognitive dissonance

[10] This main author of *When Prophecy Fails* ran a cognitive dissonance experiment with Carlsmith that asked students to spend time doing boring tasks while selectively compensating them.

ANSWER: Leon Festinger

[10] Festinger's mentor, Kurt Lewin, helped found modern group psychology along with this influential but intensely strange Brit, who co-founded the Tavistock Institute and divided groups into "work" and "basic assumption" sets in his *Experiences in Groups*.

ANSWER: Wilfred Bion

- 13. Robert D. Wilson has published a series of works in this form titled *Vietnam Ruminations*. For 10 points each:
- [10] Name this form that combines a prose poem and a haiku. This poetic form was popularized by *The Narrow Road to the Deep North*.

ANSWER: *haibun* [prompt on "haikai"]

[10] The Narrow Road to the Deep North is by this Edo period Japanese poet, known for his haikus.

ANSWER: Matsuo Basho [accept in either order; or Matsuo Kinsaku; or Matsuo Chuemon Munefusa]

[10] In one of his haikus, Basho writes about the splash of water made in an ancient pond when this kind of animal jumps in.

ANSWER: a frog

14. The onset of cancer after this event is an example of the Knudson's two-hit hypothesis. For 10 points each:

[10] Name this event in which one allele of a gene loses function, leaving a cell with a mutated copy that has the potential to disrupt cellular homeostasis. Tumor suppressor genes often fail to function after this event.

ANSWER: <u>loss of heterozygosity</u> [prompt on <u>allelic imbalance</u>]

[10] Loss of heterozygosity is often the origin of this cancer of the light-sensitive tissue at the back of the eye, which is caused by a mutation on chromosome thirteen. It typically manifests itself by the age of five.

ANSWER: retinoblastoma

[10] Another mechanism of tumor formation is these genes that have the potential to cause cancer when mutated. Their un-mutated forms are prefixed by "proto-", and prominent examples include Ras and Src.

ANSWER: oncogenes

15. One of these figures was supposedly the first to scale the walls of Carthage in the Third Punic War. For 10 points each:

[10] Name these leaders of the populares who pushed land reforms for the plebeians in the late 2nd century BC. For their trouble, senatorial factions had both of these brothers massacred in the streets.

ANSWER: Tiberius and Gaius Gracchus or the Gracchi Brothers

[10] Roman government was basically shut down indefinitely while this otherr populist figure was on trial after being caught in drag at the Bonna Dea festival, apparently in some kind of horribly botched liaison with Caesar's wife Pompeia.

ANSWER: Publius **Clodius** Pulcher [prompt on partial answer]

[10] Clodius assumed the office of Tribune after performing this action, which was popular in Rome due to the high costs of the *cursus honorum* and often involved modification of a nomen.

ANSWER: Being adopted [accept equivalents; prompt on "name changing" or similar answers]

16. The set of hereditarily finite sets is the smallest admissible set for the axioms of set theory named for this man and Richard Platek. For 10 points each:

[10] Name this Princeton philosopher who introduced rigid designators, terms which refer to the same thing in all possible worlds, in his *Naming and Necessity*.

ANSWER: Saul Kripke

[10] Extending predicate logic with the necessity and possibility unary operators gives this type of formal logic. Kripke published *A Completeness Theorem in* [this] as a teenager, and names the standard semantics for it.

ANSWER: modal logic

[10] The first written work in modal logic is perhaps the sea-battle argument in this man's *De Interpretatione*. This Greek fellow is better known for works like *Nichomachean Ethics* and *Poetics*.

ANSWER: Aristotle

17. He conducted the world premiers of *Pagliacci*, *La bohème*, and *Turandot*. For 10 points each:

[10] Name this first music director of the NBC Symphony Orchestra, an Italian conductor known for his photographic memory, his brisk and direct conducting style, and his fidelity to the written score.

ANSWER: Arturo Toscanini

[10] From 1928 to 1936, Toscanini was music director of the philharmonic of this city, a position also held by Pierre Boulez and Zubin Mehta. The orchestra plays in this city's Lincoln Center.

ANSWER: New York City

[10] Toscanini's stylistic opposite and artistic rival was said to be this principal conductor of the Berlin Philharmonic from 1922 to 1945, known for his broad and highly flexible tempi.

ANSWER: Wilhelm Furtwängler

18. This story begins with Muriel answering a phone call from her mother. For 10 points each:

[10] Name this short story in which Seymour sits on the beach and tells Sybil about the title creatures, which die from overeating a certain fruit.

ANSWER: "A Perfect Day for Bananafish"

[10] "A Perfect Day for Bananafish" is one of the title *Nine Stories* by this American recluse author of *The Catcher in the Rye* 

ANSWER: J(erome) D(avid) Salinger

[10] In this Salinger work, Buddy Glass shares a car ride with characters including the Matron of Honor, who criticizes Seymour for failing to show up to his own wedding.

ANSWER: Raise High the Roof Beam, Carpenters

19. The Kosi river has created one of the largest one of these landforms in the world, and they are commonly formed when streams flow out of narrow canyons and onto open plains. For 10 points each:

[10] Name this fan- or cone-shaped landform formed from the deposition of a namesake material radially away from the fan apex.

ANSWER: alluvial fan [or alluvial cone; do not accept other answers]

[10] At the bases of mountains in arid regions, adjacent alluvial fans can coalesce to form a continuous ramplike slope of alluvium known by this term.

ANSWER: <u>bajada</u> [prompt on piedmont <u>alluvial</u> or <u>bolson plain</u>; prompt on alluvial or debris or fan <u>apron</u>; prompt on <u>gravel piedmont</u>]

[10] A bajada can be a transitional landform between a pediment and the dry type of this surface feature, also known as a playa. Other type of this body of water include oxbow and crater.

### ANSWER: lake

20. In one opera, this character sings "Contessa, perdono". For 10 points each:

[10] Name this character that tries to win Rosina by disguising himself as Lindoro in one opera, and tries to exercise his *droit de seigneur* over Susanna in another.

ANSWER: Count Almaviva

[10] One of those two operas is *The Barber of Seville* by this Italian opera composer of William Tell.

ANSWER: Gioachino Antonio Rossini

[10] The other opera is Mozart's *The Marriage of Figaro* in which the Countess bemoans Almaviva's intended infidelity in this aria, which opens the second act.

ANSWER: "Porgi, amor, qualche ristoro"