Chicago Open 2016: "An Insatiable Kingpin of International Meme-Laundering"
Packet By Editors (4)
Edited by John Lawrence, Mike Cheyne, Matt Jackson, Adam Silverman, Mike Bentley, Aaron Rosenberg, Jake Sundberg, and Shan Kothari, with contributions from Ewan Macaulay and Jonathan Magin

Tossups

1. **Aurel Stein claimed a siege in this campaign took place at the spur of Pir Sar. That siege during it was at a place known as the "birdless rock," Aornos, and was reportedly done in a brave attempt to outdo the mythical Hercules. Near the end of this campaign, its leader was shot in the lung with an arrow while fighting an alliance of the Oxydraci and the Malli.** (*) Coenus urged its eventual termination and died shortly thereafter. After a battle during this campaign, the losing commander mythically said "treat me as a king would treat another king," while the winner founded the now-lost city of Nicaea. It basically abruptly ended when troops refused to go past what is now the Beas River; this occurred shortly after a grueling defeat of Porus at a battle that killed the horse Bucephalus. For 10 points, what 326 BC campaign featured a Macedonian winning the Battle of the Hydaspes River?
ANSWER: **Alexander the Great**'s **India**n campaign [or **Alexander the Great**'s **Punjab** campaign; or **Alexander the Great**'s **Pakistan** campaign; accept **Alexander III** of Macedon for "Alexander the Great"]

2. **This character's mother attempts to choose between nine different suitors embodying different superlatives, but doesn't get to choose because "the manliest" impregnates her. This character has a recurring dream in which her husband hangs from a basket at a pool and forces her and several other naked, singing women to perform kneebends, shooting any who are unable to continue. Recognizing a Beethoven string quartet playing on the radio in a pub is one the "six improbable** (*) fortuities" that bring her together with her future husband. Her husband refuses to retract an article that he wrote claiming that supporters of tyranny should be contrite as Oedipus, which eventually causes him to lose his job as a surgeon and take up window washing. Near the end of the novel in which she appears, her husband euthanizes her dog, Karenin. For 10 points, name this lover of Tomas in Milan Kundera's *The Unbearable Lightness of Being*.
ANSWER: **Tereza**

3. **Herodotus reports that this region wrapped its offerings to other regions in straw, then sent maidens to places like Dodona carrying them. A virgin priestess of Artemis from here named Opis or Upis was lusted after by Orion. Pindar's *Pythian Ode* relates that Perseus saw sacrifices of hecatombs of asses while visiting this region, and the *Olympian Ode* claims that Heracles went to this non-Attica region to get sacred olives. A mythical fasting prophet from this region, who flew around the world on a magical golden** (*) arrow, was named Abaris. A circular or spherical shrine in this region was circled by many singing swans, who also paddled around the Eridanos river that flows through it. To get here, you have to cross the Rhipaion mountains, which are beset by griffins. For 10 points, name this mythical Apollo-worshipping region where eternal spring is enjoyed by immortal or extra-long-lived people, which was believed to be far north of Greece.
ANSWER: **Hyperborea** [or the land of the **Hyperborean**s]

4. **The Jarman-Bell principle describes the hypothesis that organisms with high values of this quantity can subsist on low-quality food. The energetic equivalence rule suggests that fluxes of energy at the population level are independent of this quantity, which implies an inverse relationship between population density and this quantity. Cope's rule describes the apparent tendency of this quantity to increase over evolutionary time. G. Evelyn Hutchinson proposed that** (*) ratios of this quantity among related, sympatric species would tend toward 1.3. The West-Brown-Enquist model seeks to explain the three-quarters power allometric scaling of metabolic rate with this quantity, which is described by Kleiber's law. This quantity tends to decline at high latitudes according to Bergmann's rule. For 10 points, name this feature of an organism that often evolves to extremes on islands, causing gigantism or dwarfism.
ANSWER: body **size** [or body **mass**; or body **volume**; or body **length**]

5. **This senator once punched Kit Bond in the head after the latter opposed a courthouse construction project. As a senator, he produced an annual report on his state budget called the "Fisc." He was praised in the U.S. for his eloquent November 1975 speech denouncing an UN resolution that declared "Zionism is racism." As ambassador, he wrote the world's then largest check for billions of rupees to Indira Gandhi in 1974. While working in the Nixon administration, he suggested the race issue would benefit from "benign (*)** neglect" and introduced what became Nixon's proposed Family Assistance Plan. William Ryan introduced the book and phrase *Blaming the Victim* in response to a text produced by this man discussing "the tangle of pathology" caused by high rates of unwed births and single mother households. For 10 points, what politician wrote the controversial report titled *The Negro Family*?
ANSWER: Daniel Patrick **Moynihan**

6. **He's not August Czieskowski, but this scholar referred to his understanding of history and metaphysics as "historiosophy". This man distinguished "restorative" and "utopian-catastrophic" subtypes of messianic movements. This man's dissertation led him to translate a book called the *Bahir*. A learned man who scoffed "This trash? Why would I waste my time reading nonsense like this?" inspired this scholar to study such thinkers as Abraham Abulafia. This scholar argued that real-life exile inspired a divine expulsion to the "Other Side" in the cosmology of Isaac** (*) Luria. This man accused Hannah Arendt of lacking *ahavat Yisra'el* due to her apparent shilling for Adolf Eichmann. For 10 points, name this penpal of Walter Benjamin and author of *Sabbatai Zevi: the Mystical Messiah*, an emigré to Israel who revived the study of kabbalah in such works as *Major Trends in Jewish Mysticism*.
ANSWER: Gershom **Scholem**

7. **In a 2006 book, journalist Michael Zielinziger likened these people to a "lost generation" created in part by an economic bust in the 1980s. A non-profit called New Start takes groups of people of this condition on a two-month-long "slow walk" of the 88-Temple Pilgrimage to help them overcome it. This demographic is sometimes described as at the most extreme end of a spectrum that also includes "freeters" and NEETs. Some families hire "rental sisters" to handle people of this sort, which a 2010 study by Yamada claimed to result from the same cultural forces as** (*) "parasite singles". Psychiatrist Tamaki Saito studies this demographic, whose behavior often results from failure to make it as a salaryman. The book *Shutting Out the Sun* is about, for 10 points, what largely-male set of almost a million adults who hide away in their rooms for months at a time in contemporary Japan?
ANSWER: **hikikomori** [prompt on descriptive answers such as <u>recluse</u>s, <u>hermit</u>s, <u>shut-in</u>s, or <u>adults living at home with their parents</u>; prompt on <u>men</u> or <u>Japanese</u> men if that's really necessary]

8. **A set of structures named for this mathematician is invariant under a glide reflection with respect to the horizontal median line of the pattern and are known as his friezes. The off-diagonal elements of the symmetric matrices named for this mathematician are integers greater than one, whereas their diagonal elements are all equal to one. Those matrices can be used to construct diagrams co-named for this man and Dynkin which can be used to visualize his namesake groups. The relations in his namesake groups set products of two of the generators r sub i and r sub j raised to the m sub i comma j power equal to one and are used to describe (*)** kaleidoscopic objects. This author's work with geometry served as a major inspiration for the works of Buckminster Fuller and M.C. Escher. For 10 points, name this British geometer who was noted for his work on higher-dimensional geometries and polytopes.
ANSWER: Harold Scott MacDonald **Coxeter**

9. **At one point in this poem, oak trees stoop down to hear a nightingale, and a thorn "draws / Within the skin the shrunken claws" to avoid pricking it. This poem includes the fanciful image of horses kicking their own tails, which miraculously transform into leeches. Its last major section describes the author's then student as "the Law / Of all her Sex, her Age's Awe." One part of this poem compares men mowing their way through grass with scythes to the Israelites crossing the Red Sea. It describes its dedicatee's ancestor storming a priory to rescue (*)** Isabella Thwaites from life as a nun, and marry her. This poem describes a place that is "Heaven's Center, Nature's Lap. / And Paradise's only Map"; and it belongs to a genre established by Ben Jonson's "To Penshurst." This poem opens: "Within this sober Frame expect / Work of no Foreign Architect." For 10 points, name this poem describing the estate of Thomas Fairfax by Andrew Marvell.
ANSWER: "**Upon Appleton House**"

10. **Willem de Kooning placed an upside-down-head from *Guernica* above the knee of an angel of this color in one painting. A portrait nicknamed for this color has the words "Mas el caguero que el primero" written above a limbless torso in the bottom right of the canvas. Giovanni Battista Moroni's portrait of Giovanni Gerolamo Grumelli is commonly titled "Man in [This Color]". A portrait of an 11-year-old (*)** Jamaica-born girl nicknamed for this color is displayed in the Huntington Library. Some forty tons of garbage were removed as part of a project to extend the perimeter of islands in Biscayne Bay with material of this color in an early '80s project by Christo and Jeanne-Claude. For 10 points, give this color which appears in the nickname of a portrait of Sarah Barnett Moulton by Thomas Lawrence which hangs opposite Gainsborough's *The Blue Boy*.
ANSWER: **pink** [or **pinkie** or **pink** angels]

11. *Description acceptable.* **HV Nicholson documented the horrors of this campaign in *Prisoners of War*. One part of this government-led campaign was controlled by the CORB and nearly ended after an incident involving the SS *Volendam*. Expectant mothers were classified as Category D in this campaign, which divided the country into "neutral" and "reception" areas. Code-named Operation (*)** Pied Piper, the slogan "Leave this to us Sonny" appeared on a Ministry of Health poster for this campaign. Some participants in this campaign were killed when the SS *City of Benares* was torpedoed. The population of cities such as Belfast and Manchester were depleted during this campaign, as people were moved to places such as Australia and Canada. For 10 points, name this campaign where children and other civilians were moved away from cities such as London during the Blitz.
ANSWER: the **evacuation** of British civilians during World War II [or **Government Evacuation Scheme**; accept Operation **Pied Piper** until mentioned; accept anything that involves **relocating British** citizens or children during the Blitz in **World War II**]

12. **In C.S. Peirce's "beta graphs," this philosophical property is indicated by a dot; Peirce defined this property as "reaction with the environment." Richard Routley coined a term for a school of thought that holds that "particular" quantification can occur over things that do not possess this property. Objects without this property are said to reside in "Meinong's jungle," as Alexius Meinong argued that objects of intentionality can possess "givenness" without this property. A work titled for this concept states that nothing composed of "simple parts" can possess this property; and that although this property is not identical with (*)** reality, all real things possess this property. That work by J.M.E. McTaggart is titled for *The Nature of* this property. Both Kant and Frege argued that this concept is not a primary property of individuals or objects, in their rejection of an argument by Anselm. For 10 points, what property does the ontological argument claim that God possesses?
ANSWER: **existence** [accept word forms, such as "it **exists**"; generously accept **being**, even though it does not apply to all clues; prompt on "ontology"; do NOT accept or prompt on "reality"]

13. **A literary critic with this last name claimed that the essence of narrative is causing readers to desire an end, but this desire can be subverted by our compulsion to repeat, in a theory derived from *Beyond the Pleasure Principle*. Another author with this last name wrote that "the warping of a statement by the context" produces the essential poetic quality of irony. The essay "Freud's Masterplot" appears in *Reading for the Plot* by an author with first name Peter and this last name. Another critic with this last name argued that because a poem's "internal (*)** unity" is embedded in its structure, no summary of a poem can say the same thing as the poem itself. With Robert Penn Warren, that author with this last name wrote *Understanding Poetry*; and he included "The Heresy of Paraphrase" in a collection of essays taking its title from John Donne's "The Canonization." For 10 points, name this last name of the New Critic Cleanth, who wrote *The Well-Wrought Urn*.
ANSWER: **Brooks** [accept Cleanth **Brooks** or Peter **Brooks**]

14. [*Note to moderator: Please read the score clue in the first sentence slowly.*] **A recurring theme in this work's second movement begins D, down to F-sharp, up to B, down to A in a long-short-short-long rhythm. Mariss Jansons and the Oslo Philharmonic first catapulted to fame with a 1992 recording of this work. The *Allegro anima* main section of this work's first movement begins with strings alternating root-position tonic and subdominant chords in a minor key before the first clarinet and bassoon introduce the jaunty 6/8 main theme in octaves. The main melody of its second movement is a French horn solo in D major and 12/8 time marked *Andante cantabile, con* (*) *alcuna licenza*.** This symphony's slow introduction begins with a long, low melody for solo clarinet, which returns in the parallel key of E major to open the finale. It replaces the third-movement scherzo with a waltz in A major, in the normative time signature of 3/4, unlike the "limping" waltz of its successor. For 10 points, name this symphony that precedes a certain Russian composer's *Pathétique*.
ANSWER: Pyotr Ilyich **Tchaikovsky's Symphony No. 5** in E minor, Op. 64

15. **A normalized form of this quantity is represented by X in the expression "1 + 54.4X, over 11 + 117.2X", which is Molokanov's correlation. Lord Rayleigh names a differential equation that assumes this quantity is zero. A method for calculating it requires solving for theta in the equation "sum of: alpha z, over alpha minus theta, equals 1 minus q", where q is the feed condition and z is mole fraction. The Underwood equations are used to solve for the smallest possible value for this quantity, at which you'd get a pinch point and would need to draw infinite "steps". When this quantity goes to infinity, the operating lines meet the** (*) 45 degree line on a McCabe-Thiele diagram and the number of stages is minimized. It equals the boilup rate over the takeoff rate, or alternatively, the ratio of flow rates of the two streams leaving the overhead condenser. For 10 points, name this ratio which measures how much liquid returns to the column during distillation.
ANSWER: **reflux** ratio [or **R**; or **minimum reflux ratio**; or **Rmin**]

16. **Right before this event began, a man on a bridge refused to approach a cross, calling it "a weapon" wielded by "a wolf, a predator, a destroyer…". After this event, its leader went to another city, where he was offered meat during Lent by a holy fool, who insisted the other man ate "human blood." This event was caused because of suspicions of treason of Archbishop Pimen. Immediately after this event, its perpetrator was rebuked by Saint Nicholas of** (*) Pskov. This five week event apparently took place because a man irrationally suspected Pimen was going to surrender to Sigmund Augustus of the Polish-Lithuanian Commonwealth. During it, mass interrogations and trials took place in the suburb of Gorodishche, with women and children thrown into the Volkhov River.. For 10 points, what 1570 bloody attack on a city was perpetrated by the *oprichniki* of Ivan the Terrible?
ANSWER: **Massacre** of **Novgorod** [accept answers featuring synonyms for "massacre"; accept **attack** on **Pskov** until "Pskov" is mentioned]

17. **Some Athabaskan languages permit a form of "coercion" based on this grammatical property, according to Theodore Fernald. A mandatory Type II system of this property exists through five verb suffixes in Tuyuca, and Tibetan modifies the copula with suffixes such as *dug* or *yod red* to mark it. Scott DeLancey distinguished "mirativity" from this linguistic property. A 2004 book by Alexandra Aikhenvald argued that this property cannot be conflated with modality, updating earlier work by Chafe and Nichols. The "quotative" was defined as a subtype of this in Roman Jakobson's notes on Balkan Slavic, which coined this linguistics term. Cantonese** (*) sentence-final particles such as *lo, wo,* and *gwaa* mark this trait of an utterance. In languages such as Cherokee, hearsay can be marked using affixes that convey, for 10 points, what trait indicating how the speaker got the information in a proposition or how reliable it is?
ANSWER: **evidential**ity [or **evidential**s; accept **evidential** coercion; prompt on indirective; prompt on mediative; prompt on descriptive answers such as "how the speaker came to know something" or "level of (un)certainty"]

18. **"Bursts" resulting from the decay of these particles have been proposed as a source for cosmic rays with energies above the GZK cutoff. The fact that the matrix of couplings to this particle is both diagonal in the interaction basis and proportional to the identity matrix explains the absence of tree-level flavor-changing neutral currents in the standard model. A virtual particle decays to this particle and a Higgs boson in the Higgs-strahlung pathway. "Factories" for these particles included the LEP (*)** and the SLC accelerators. Neutrinos can only undergo elastic scattering through the exchange of one of these particles. Apart from the top quark-antiquark pair, any fermion-antifermion pair may be produced by the decay of this particle which has mass around 91.2 GeV. Its existence was predicted along with two particles whose interactions are governed by the CKM matrix. For 10 points, name this neutral carrier of the weak force.
ANSWER: $\underline{Z}^0$ Boson

19. **In the opening section of one of this author's novels, a sculptor's daughter dies when her boyfriend drives their car off a bridge during a police chase, and they both drown. While reaching for a cup under a stove, one of this author's characters has scalding water poured in her ear by a Satan-obsessed nun. One of this author's characters poses for what becomes a nude painting of him plunging off a cliff, which is hung in the state capitol building. In a novel by her, an unfaithful wife sacrifices her own daughter to** (*) wolves while traveling over a frozen lake, and the bones of the child are placed within the title object. Bernard narrates the multigenerational history of an instrument discovered by Faye Travers in that novel by her. Marie Lazarre marries the man who rapes her, Nector, in this author's debut novel, which opens with June Kashpaw dying while trekking back to the Chippewa reservation where she was born. For 10 points, name this Ojibwe author of *The Painted Drum* and *Love Medicine*.
ANSWER: Louise **Erdrich** [or Karen Louise **Erdrich**]

20. **In Bellini's *Beatrice di Tenda,* this many people sing "Angiol di Pace." After Oronte converts to Christianity, this many singers close the third act of *I Lombardi* with "Qual voluttà trascorrere." This many people sing *"Pria di partir, O Dio"* right before the monster appears in *Idomeneo*. This many people sing in the final scene of *Ernani*. A Mozart number for this many singers opens with oscillating parallel thirds in the violins in E major. The brasses blast this many times in the "fate motif" from *La (*) forza del destino*. This** many chords represent Scarpia in *Tosca*. A number for this many singers begins when the Marschallin sings the line "Hab mir's gelobt" in the last act of *Der Rosenkavalier*. This many singers sing "Soave sia il vento" from *Cosi fan tutte*. "Nessun dorma" ends with Calaf singing the words "vincerò" this many times. For 10 points, Luciano Pavarotti was part of an all-star singing group featuring how many tenors?
ANSWER: **3**

21. **W. R. Valentiner asserted that a painting of a man from this country was actually of the Dutch hero, Gysbrecht van Amstel. In a portrait by the same artist at the National Gallery of Art, a mustachioed man from this country wears a pearl earring and holds a gold-tipped baton in his right hand. The Frick owns a painting of a man from this country in red pants and equipped with a quiver of arrows that may have been modeled on the artist's son, Titus. That same man from this country holds a war hammer and guides his (*)** white horse past a mountainous fortress in a painting made circa 1655. A history painter from this country depicted the title nobleman ripping off his shirt in despair in 1866's *Rejtan* and also painted *Skarga's Sermon*. Rembrandt painted a "nobleman" and a "rider" from the country, the latter of whom was a member of the Lisowski corps. For 10 points, name this birthplace of Jan Matejko.
ANSWER: **Poland** [or **Polish-Lithuanian** Commonwealth]

22. **A picture of this man's staircase with a host of artifacts he had collected from the mysterious Shaft Tomb Culture in Mexico appears in a 1960 Kahlua ad. In the 1960s, Sears sold some fifty thousand prints of this man's "Collection of Fine Art". He once bought a totem pole from John Barrymore; the pole appears in this man's "visual autobiography",** *I Like What I Know*. **Tosh Matsumoto, Eliot Elisofon and William Claxton all contributed photographs to this gourmet cook's recently reprinted cookbook,** *A Treasury of Great Recipes*. **The surprisingly long Wikipedia page "Tim** (*) Burton's unrealized projects" contains a description of a documentary where Burton would have "Conversations" with this actor, whom the title character of a 1982 stop-motion short Burton directed pretends to be. This man, who donated some 90 pieces of art to East Los Angeles College, helped create a taste for abstract art in Hollywood. This actor asked, "can you dig it?" after introducing Michael Jackson as "the Thriller". He made his name in films such as *Dragonwyck* and *The Invisible Man Returns*. For 10 points, name this deep-voiced horror film actor.
ANSWER: Vincent **Price** [or Vincent Leonard **Price**, Jr.]

Bonuses

1. Sociologist Douglas McAdam described civil rights protests as a "Black" example of this type of conflict, which is instigated by the *aggressors* in McCormick's "magic diamond" model. For 10 points each:
[10] Name this type of contemporary conflict, which another paper defined as "rural guerrilla warfare." The eruption of one in Iraq after the 2003 invasion led to strategies for countering them, often abbreviated COIN.
ANSWER: **insurgency** ["COIN" is short for "counterinsurgency."]
[10] This pair of Stanford political scientists argued that the feasibility of insurgency drives local conflict more than ethnic resentment in their, uh, *2003* paper "Ethnicity, Insurgency, and Civil War." Both names required.
ANSWER: James D. **Fearon** and David **Laitin**
[10] Fearon and Laitin used data to show that larger amounts of this geographic feature within a country greatly increase risk of civil war. Martin Price studies the human geography of these things.
ANSWER: **mountain**ous terrain [or **mountain**s; or "**rough terrain**"]

2. This artist earned his common name from his work on the figures on the lid of a monument to Saint Dominic in Bologna. For 10 points each:
[10] Identify this sculptor who also created a series of terracotta people expressing dramatic reactions to Christ's death in his *Lamentation* group for the Santa Maria della Vita.
ANSWER: **Niccolò** dell'Arca [or Niccolo **dell'Arca** or Niccolò da **Ragusa** or Niccolò da **Bari** or Niccolò d'Antonio d'**Apulia**]
[10] Niccolo dell'Arca left 5 of the figures on the lid of the ark incomplete at his death, so this 19-year-old sculptor stepped in to complete the job. A horned Moses is one of the sculptures he made for the tomb of Julius II.
ANSWER: **Michelangelo** di Lodovico Buonarroti Simoni
[10] The original ark was made by the groundbreaking Early Renaissance sculptor Nicola Pisano, whose other accomplishments include this octagonal work. The large Virgin Mary in the Nativity panel on this work was based on Roman statues of Juno.
ANSWER: the **pulpit** of the **Siena Cathedral** [or the **pulpit** of the **Duomo di Siena**]

3. After having bad news broken to her, this character yells "*Bruto!*" before trying to kill the protagonist with a potato peeler, her fingernails, a bread knife, an ashtray, a vase, a wine bottle, and the bread knife again. For 10 points each:
[10] Name this character who successfully stabs the protagonist in the ribs after he makes a deal to "like" his superiors. The novel she appears ends with her attempting to stab the protagonist one last time, but missing.
ANSWER: **Nately's whore**
[10] Nately's whore repeatedly tries to kill this Air Force captain of purported Assyrian heritage, the protagonist of *Catch-22*.
ANSWER: **John Yossarian** [accept either]
[10] Another character in *Catch-22* is the Native American Chief White Halfoat, who holds a grudge against the white man for forcibly relocating his family every time that they accidentally did this.
ANSWER: **strike oil** [accept any synonym for "strike," such as "discover" or "find"]

4. The two terms in this equation's numerator account for the effects of radiation pressure and mass transfer on heat fluxes. For 10 points each:
[10] Name this equation used to model evaporation from open water surfaces. An extension by Monteith models evapotranspiration from vegetated land by accounting for stomatal and aerodynamic resistance.
ANSWER: **Penman**-Monteith equation
[10] The mass transfer portion of the Penman equation can be reformulated to show explicit dependence on this quantity, which can be measured with an anemometer and evaluated on the Beaufort scale.
ANSWER: **wind speed** [or **wind velocity**; prompt on partial answer]
[10] Because low wind speeds raise the Wedderburn number of water bodies, they reduce the prevalence of this phenomenon, which involves vertical fluxes of hypolimnetic water. This phenomenon drives much of the productivity of the Humboldt Current.
ANSWER: **upwelling**

5. Answer the following about religion in Minnesota, for 10 points each.
[10] This Christian denomination is pretty common in Minnesota due to hella Scandinavian immigration early in the state's history. It includes the Missouri Synod, and its namesake founder opposed Johann Tetzel.
ANSWER: **Lutheran**
[10] Most of Minnesota's Muslims are of this ethnicity, whose largest American community is in the Twin Cities. This nationality's pre-Islamic deities included Waaq and Huur.
ANSWER: **Somali**an-Americans
[10] This new religious movement founded by Paul Twitchell is headquartered in Chanhassen. Its name may derive from a Sikh phrase denoting God's unity, and it promises that you can leave your body via Soul Travel.
ANSWER: **Eckankar**

6. In one story in this collection, Lynn waits at a gas station for a rescue team after a chemical explosion destroys Cape Town; that story is titled "Poison." For 10 points each:
[10] Name this debut short-story collection by South African writer Henrietta Rose-Innes. In its title story, Nona and Ray live near the retirement home they plan to live in, until it is replaced with a hotel.
ANSWER: *Homing*
[10] The story "Poison" won Henrietta Rose-Innes this literary award. It is given every year to the best short story by an African writer.
ANSWER: **Caine** Prize for African Writing
[10] Subsequent winners of the Caine Prize include NoViolet Bulawayo, who hails from this African country, whose other contemporary authors include Alexander McCall Smith and Tsitsi Dangarembga.
ANSWER: Republic of **Zimbabwe**

7. This was the primary instrument of virtuoso Giovanni Girolamo Kapsberger, who wrote many toccatas for it. For 10 points each:
[10] Name this instrument, whose other prominent composers include Simone Molinaro and the Gaultier cousins.
ANSWER: **lute**
[10] The English lutenist John Dowland wrote this song that asks the title objects to "fall from your springs." Appropriately, he used this song as the basis for a set of seven pavanes called *Lachrimae.*
ANSWER: "**Flow My Tears**"
[10] This much later Italian composer adapted lute music by Molinaro and others in his *Ancient Airs and Dances*. His *Roman Triptych* includes *The Pines of Rome* and *The Fountains of Rome*.
ANSWER: Ottorino **Respighi**

8. This instrument is competing with the Giant Magellan Telescope and the European Extremely Large Telescope, both located in Chile. For 10 points each:
[10] Name this telescope which is intended to succeed the Keck Observatory. In December 2015, its permit was declared invalid following protests.
ANSWER: **Thirty Meter Telescope** [or **TMT**]
[10] The TMT and Keck Observatory are both located atop this mountain, whose clear air and height make it the best site for astronomy in the northern hemisphere. Native Hawaiian groups have claimed that the mountain is sacred and should be off-limits to development.
ANSWER: **Mauna Kea**
[10] Opponents of the telescope have cited this 1959 act which granted statehood to Hawaii, because of a phrase promising public land would be held by the state for public support and the "betterment of Native Hawaiians."
ANSWER: Hawaii **Admission Act**

9. An electrocyclic reaction is predicted to be thermally allowed if it proceeds only through an antara-facial mechanism and the number of pi electrons has this property. For 10 points each:
[10] Name this mathematical property possessed by the number of pi electrons in anti-aromatic compounds.
ANSWER: **divisible by four** [or equal to **4 times an integer**; or **4n**; or obvious equivalents]
[10] By contrast, a suprafacial mechanism is preferred for 4n electrocyclizations when this stimulus is provided instead of heat. This stimulus is usually written as h-nu over the arrow in the reaction, and is often necessary for radical reactions.
ANSWER: **light** [or electromagnetic **radiation**; or **ultraviolet** radiation; or other types of light]
[10] This class of sigmatropic reactions, which includes the Cope and Claisen rearrangements, is predicted to undergo suprafacial electro-cyclizations with Hückel topology. This numeric label refers to the number of migrating atoms in each part of the molecule.
ANSWER: [**3,3**]-sigmatropic shift

10. An author from this country wrote of a man named Ronnie, who purchases the title dog for the purposes of winning races in the short story "Greyhound for Breakfast." For 10 points each:
[10] Identify this country, home to James Kelman and Irvine Welsh, who described an incident where Dawn, the young daughter of the heroin addict Sick Boy, is asphyxiated in his debut novel, *Trainspotting*.
ANSWER: **Scotland** [prompt on United **K**ingdom or Great **B**ritain]
[10] Blake Morrison counted over four thousand uses of the word "fuck" in this Booker-winning novel by James Kelman, which makes heavy use of Glaswegian dialect. Sammy is told that "Ye have to understand about the law, it isnay there to apply to them, it's there to apply to us, it's them that makes it" in this novel.
ANSWER: *How Late It Was, How Late*
[10] After a savage beating, Sammy suffers from this affliction in *How Late It Was, How Late*, although the doctors he visits refuse to admit it. Marie-Laure suffers from this condition in wartime Paris in a Pulitzer-winning novel by Anthony Doerr.
ANSWER: **blind**ness [or **lost his sight** or temporarily **blindness**]

11. [*Note to moderators: Do not read the full answerline to the first part if teams do not say it.*] This man's brother, Robert, was killed fighting Charles the Simple. For 10 points each:
[10] Name this count who was praised for his desperate defense of his city against the forces of Rollo, despite receiving little to no support from Charles the Fat.
ANSWER: **Odo** of France [or **Eudes**]
[10] Odo later became king in honor of his aforementioned valiant defense of this city from the Vikings.
ANSWER: **Paris**
[10] Charles the Fat commissioned the "Monk of Saint Gall" to compile a largely invented series of anecdotes about his great-grandfather, Charlemagne. This amusingly named Benedictine monk is generally believed to be that author, who (fraudulently) claimed in the text that Venerable Bede wrote a whole book about Pepin the Short.
ANSWER: **Notker** the Stammerer [or **Notker I**; or **Notker** the Poet; or **Notker** of Saint Gall]

12. An open letter attacking this man popularized the word "nihilism," and led to his 1799 dismissal from the University of Jena. For 10 points each:
[10] Name this philosopher who was publicly accused of atheism after he wrote an essay criticizing Friedrich Karl Forberg's essay "Development of the Concept of Religion."
ANSWER: Johann Gottlieb **Fichte**
[10] That letter popularizing the word "nihilism" was by this staunch opponent of systematic philosophy who believed that knowledge should be founded on *Glaube* or faith.
ANSWER: Friedrich Heinrich **Jacobi**
[10] Jacobi had earlier been involved in the so-called "Pantheism Controversy" with Gotthold Lessing over this Dutch philosopher, who declared God to be the substance from which the universe is derived.
ANSWER: Baruch **Spinoza** [or Benedito de **Espinosa**; or Benedict de **Spinoza**]

13. For 10 points each, answer the following about CLARITY, everybody's favorite method of imaging the brain using an acrylamide hydrogel to remove all the neural lipids:
[10] Crosslinking of the hydrogels to other biomolecules in CLARITY is accomplished by infusing this chemical, which is used as a fixative in many kinds of microscopy. Its formula is CH2O.
ANSWER: **formaldehyde** [or **methanal**; or **paraformaldehyde**; do NOT accept or prompt on "methanol"]
[10] In mice used in CLARITY, a neural thymus cell antigen is usually tagged with this reporter protein. Either this protein, or a variant like Venus or Citrine, is used as the acceptor in a classical FRET experiment.
ANSWER: **YFP** [or **yellow fluorescent protein**; or **YPet**; do not accept or prompt on "GFP" or "green fluorescent protein"]
[10] This currently hot form of microscopy, introduced by Chen et al. in 2015, operates under the same principles of CLARITY: a hydrogel is infused into the tissue, then artificially crosslinked to spread out individual biomolecules. It can give resolution up to 70 nanometers.
ANSWER: **expansion** microscopy [or **ExM**]

14. As President of Oberlin College, this man worked with faculty and students to assist the Underground Railroad. For 10 points each:
[10] Name this man who wrote a manual titled *Lectures on Revivals of Religion* during the Second Great Awakening. This man is credited with introducing the "anxious seat" to revivals where people seeking salvation could sit and receive prayer.
ANSWER: Charles Grandison **Finney**
[10] Finney was active in the "burned-over district" of what state during the early 19th century? Finney himself coined that term in his memoirs.
ANSWER: **New York**
[10] This black Methodist preacher during the Second Great Awakening was called by Benjamin Rush "the greatest orator in America." He was the first black man to address a white congregation when he spoke at Delaware's Thomas Chapel in 1784.
ANSWER: Harry **Hosier** [or **Black Harry**; or Harry **Hoosier**]

15. Zan Ganassa is often credited with introducing the character of Arlecchino to this genre. For 10 points:
[10] Name this semi-improvised Italian theatrical genre that flourished in the 16th and 17th centuries. It included such stock characters as Pierrot and Colombina.
ANSWER: *commedia dell'arte*
[10] This *commedia dell'arte* stock character is an old, rich Venetian miser. The *zanni* is typically his servant, and he is sometimes also the father to one of the *innamorati*, whom he tries to keep apart.
ANSWER: **Pantalone** [or Pantalon de **Bisognosi**; or **Pantaloon**]
[10] The first published collection of *commedia dell'arte* scenarios was *Il Teatro delle Favole Rappresentative* by this director of the troupe *I Gelosi*, who were fictionalized in Francine Prose's novel *The Glorious Ones*.
ANSWER: Flaminio **Scala** [or **Flavio**]

16. After seeing this film, Frank Capra declared, "We're dead. We're gone. We can't win this war." For 10 points each:
[10] Identify this Leni Riefenstahl film which used camera crews on roller skates and specially built elevators to capture a Nazi rally.
ANSWER: The *Triumph of the Will*
[10] Riefenstahl had a life-changing moment when in 1924 she saw a poster for a film about one of these things "Of Destiny." These things lend their name to a genre of interwar German films, with Riefenstahl herself starring in a film about a "holy" one of these things where, in one scene, she dances before the sea.
ANSWER: **mountain**s
[10] This woman is the subject of a recent dual biography with Riefenstahl by Karin Wieland. This actress stares upwards and places her hands to her face in a famous publicity still for a 1932 Josef von Sternberg film.
ANSWER: Marlene **Dietrich** [or Marie Magdalene **Dietrich**]

17. WikiLeaks released cables showing the U.S. may have funded this group. For 10 points each:
[10] What is this opposition movement consisting of female relatives of jailed dissidents in Cuba? Founded in 2003, members of this group gather to pray each Sunday and then march to a park in Havana.
ANSWER: **Ladies in White** [or **Damas de Blanco**]
[10] The Ladies in White formed after this 2003 crackdown on dissidents, which resulted in 75 people being arrested supposedly for being in the pay of the United States. This series of arrests may have been timed during the Second Iraq War to avoid publicity.
ANSWER: **Black Spring** [or **Primavera Negra**]
[10] The Ladies in White are similar to another country's Mothers of the Plaza de Mayo, who demand answers regarding the victims of what period of state-sponsored terrorism?
ANSWER: **Dirty War** [or **Guerra Sucia**; or **Process of National Reorganization**]

18. Studying mythology for Chicago Open might make you cry. But you won't cry literally forever, unlike this woman. For 10 points each:
[10] Name this female ghost from Mexican lore, who haunts bodies of water in search of her drowned children. Sometimes her origin story conflates her with La Malinche.
ANSWER: La **Llorona** [or **María**; prompt on The Weeping Woman or other non-Spanish answers]
[10] Many Greeks claim that the woman-shaped "weeping rock" atop Mount Spil was once this queen, a daughter of Tantalus whose boasts regarding her children led Apollo and Artemis to w0ne all those children in the fase.
ANSWER: **Niobe**
[10] This country's cryptids include the squonk, a creature so wrinkled and ugly that it spends its time weeping in the forest. The Glooskap legends were transcribed in what's now this country.
ANSWER: **United States** of **America** [or **USA**; accept any underlined portion]

19. Pericles the Younger was executed for this action. For 10 points each:
[10] For what action were six men executed by Athenians after the Battle of Arginusae? Socrates, in a rare instance of holding public office, tried to prevent the execution of those men.
ANSWER: **not picking up drowning** sailors [or **abandoning drowning** sailors; accept obvious equivalents; prompt on **abandoning soldiers**—the key point involves men in the water]
[10] An even less jolly Athenian battle was this one, in which the Athenian navy was destroyed by Lysander in 405 BC. After this battle, frazzled Athenian naval commander Conon fled to Cyprus.
ANSWER: Battle of **Aegospotami**
[10] Conon eventually felt secure enough to return to Athens after he teamed with the Persians to destroy the Spartan fleet under Peisander at this 394 BC battle during the Corinthian War.
ANSWER: Battle of **Cnidus**

20. A mad scientist wishes to pull the moon away from the Earth and into a new orbit around the Sun. Help him make sure it stays there by answering some things about the 3-body problem, for 10 points each:
[10] Although no general solution to the problem is known, it can be simplified in the "restricted" approximation, in one of the masses is taken to be very small. That allows the scientist to adopt these coordinates, which are also used to reduce the two-body problem to a one-body problem
ANSWER: **center-of-mass** coordinates [or **barycentric** coordinates]
[10] Even if two of the bodies collide, the solutions can be extended past that singularity by performing this task. Levi-Civita's approach to this task for the restricted circular problem involves an appropriate coordinate transform and the introduction of a "fictitious time" parameter.
ANSWER: **regularization**
[10] A solution to the 3-body problem will be unstable if the average kinetic energy is more than the value set for it by the virial theorem, which is the negative of the potential energy times this constant.
ANSWER: **one-half**

21. A formal logic for this sub-discipline was worked out by Stanisław Leśniewski, who also coined its name. For 10 points each:
[10] Identify this area of philosophy whose other foundational logics include Leonard and Goodman's Calculus of Individuals. It studies the way in which parts of objects relate to, and form, whole objects.
ANSWER: **mereology**
[10] In mereology thought experiments, the substances "gunk" and "hypergunk" have this unusual property. David Hume argued that neither space nor time can have this property.
ANSWER: **infinite**ly **divisible** [or **infinite divisibility**; or **non-atomic**; or **atomless**; or **not** composed of mereological **atom**s; accept any answer indicating that there is, or we can know, **no smallest** possible **part** you can divide it into; prompt on continuous]
[10] The proposer of "gunk," David Lewis, also believed that these constructs proposed in modal logic are concretely real, though inaccessible from our own universe. Gottfried Leibniz wrote that God chose to create the best one.
ANSWER: **possible world**s [prompt on worlds or universes]