

Chicago Open 2018: The spice must flow

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Packet by the Editors (3)

Tossups

1. In a 2018 paper, Claudia Steinwender argues that “frictions” associated with this value increased the level and volatility of cotton exports from the United States after 1866. Underemployment necessarily results from a divergence in this value between firms and their workers, according to Oliver Hart. It’s not technology, but a study of the fishing industry in the Indian state of Kerala by Robert Jensen suggests that the spread of this value produced adherence to the Law of (*) One Price. Michael Rothschild and Joseph Stiglitz argue that achieving equilibrium in insurance markets requires specifying *both* prices *and* quantities when even a small amount of this value is imperfect. According to Michael Spence, this value can be transferred through “signaling,” in order to prevent “adverse selection” in scenarios when it is “asymmetric.” For 10 points, name this value, which determines how much economic agents know about each other.

ANSWER: information [accept information frictions, imperfect information, or asymmetric information; prompt on knowledge or data]

<Social Science>

2. A paper advocating this view builds upon a 1993 collaboration between Basil Hiley and David Bohm to argue that denying this view would mean abandoning the notion of particle number. That paper arguing for this position cites Tim Maudlin to establish that “spooky action at a distance” implies the cosmos is an “entangled system.” A paper titled for this position asks the reader to consider whether a circle itself or a pair of its semicircles is prior. That 2010 paper by Jonathan Schaffer argues that this position’s “priority” form is the best explanation of atomless (*) gunk. This noun names a position in the philosophy of mind that was introduced in a paper that proposes the “Principle of Causal Interaction” to explain how “calculations [and] judgements” caused the sinking of the *Bismarck*. That view known by this noun holds that there are “no (strict) psychophysical laws” despite thoughts being physical. In “Mental Events,” Donald Davidson proposed an “anomalous” version of—for 10 points—what ontological view, according to which there is some sense only one thing?

ANSWER: monism [accept “anomalous monism” after “philosophy of mind”]

<Philosophy>

3. Just before the coda, a piano piece in this genre suddenly drops from the tonic of D-flat major to the A major of its “B” section. A C-sharp-minor piece in this genre begins with both hands playing quarter-note quadruplets in 3-4 time. Chopin’s first piece in this genre begins with a high, *fortissimo* C-sharp half-diminished chord with a B on top and a G on the bottom, which is held for 4 bars before cadencing in the tonic of B minor. Despite being his Opus 4, Johannes Brahms’s earliest extant piece is an E-flat-minor work in this genre that rips off Chopin’s second piece in this genre, which is in (*) B-flat minor. Chopin used 3-4 time and the tempo marking “Presto” for all of his works in this genre, and he only used a major key for his last one, in E major. Chopin’s ballades are often paired with his four highly virtuosic works in this genre. The second movements of Chopin’s last two sonatas have this title, as opposed to his first sonata, which has a minuet. For 10 points, name this genre whose name is Italian for “joke.”

ANSWER: scherzos [or scherzi]

<Auditory Arts>

4. A woman in this novel pictures her recurring headaches as jellyfish-like masses floating beside her on cobblestoned streets. A character in this novel feels as if no book on offer at a bookstore could signify as much as her singular childhood memory of hearing a tree branch tap against a windowpane. A housewife in this novel checks in to a hotel for a few hours to escape the guilt she feels for throwing away an imperfect birthday cake she had baked with her (*) son Richie. In this novel, on the evening of a party celebrating his being awarded the Carrouthers Prize, the AIDS-afflicted poet Richard Brown leaps to his death from the window of his fifth floor apartment. The prologue to this novel imagines the final moments of an author who had loaded her coat pocket with stones before wading into a river. The linked narratives of the lesbian New Yorker Clarissa Vaughan, the Mrs. Dalloway-obsessed Laura Brown, and Virginia Woolf herself comprise, for 10 points, what novel by Michael Cunningham?

ANSWER: *The Hours*

<Long Fiction>

5. At the end of a short film made in this country, the camera zooms in on the title character's abode, defocuses, and then rotates into aerial shots of a cityscape, before cutting to a nightclub with a live rock band. In a Neorealism-inspired film from this country, a boy throws an egg at the camera before killing two chickens at a "farm school" for delinquent boys. A 45-minute film made in this country ends with Satan showing the dance "Radioactive Flesh" to the title saint. Another film made in this country ends with shots of church bells ringing, riot police shooting into a crowd, and a flock of sheep heading into the church. In this country, Gustavo (*) Alatríste produced several movies starring his wife Silvia Pinal. In a film made in this country, the guests at a dinner party find themselves inexplicably trapped in a mansion. After being re-exiled for *Viridiana*, a director returned to this country to make *Simon of the Desert* and *The Exterminating Angel*. For 10 points, name this country where Luis Buñuel worked for most of the '40s and '50s.

ANSWER: Mexico [or United Mexican States; or Estados Unidos Mexicanos] (The second film is *Los Olvidados*.)
<Other Arts>

6. In a mouse model, Joseph Wallace showed that this physiological process prevented β -amino-propio-nitrile-induced changes in collagen D-spacing. This process dramatically increases the rate of transcription of the PGC-1 α gene, the master regulator of mitochondrial biogenesis. Different varieties of this physiological process activate the $\alpha 1\beta 2\gamma 1$ [alpha-1-beta-2-gamma-1] and $\alpha 2\beta 2\gamma 3$ [alpha-2-beta-2-gamma-3] AMP kinase complexes. A minority of the population may experience hives or other allergic symptoms during this process after they eat wheat or shellfish. This physiological process increases the levels of anandamide and other members of the (*) endocannabinoid family. Among pediatric patients, this physiological process is the most common cause of rhabdomyolysis, raising creatine kinase levels well beyond even the normal increase seen in this process. The VO₂ max is measured while the body undergoes this process. The Cori cycle transports the lactate generated in muscles during, for 10 points, what kind of activity whose "aerobic" type improves cardiovascular endurance?

ANSWER: exercise [or obvious synonyms for exercise such as physical activity or workouts; accept more specific types of exercise; prompt on muscle contraction or similar answers]

<Biology>

7. An article in a publication of this name gives the honoring of “Saint Monday” as an example of the “irregular labor rhythms” that were common before the imposition of “time-discipline” by industrialization. A periodical of this name published a paper arguing that economic changes should be understood as a result of class structure and not via the “demographic model”; that article kicked off the Brenner debate about the origins of capitalism. A book of this title expresses hopes that “Mammon-Feudalism with unsold cotton-shirts” will be rejected by future “Captains of Industry” in its last section, “Horoscope.” (*) E.P. Thompson co-founded a pioneering social history journal with this title, which it shares with a book that presents a fawning portrait of the 12th-century monk Abbot Samson. After *Chartism*, the author of that book with this title wrote it to address the “Condition of England” question. Thomas Carlyle titled a book after—for 10 points—what three-word phrase that refers to bygone and current states of affairs?

ANSWER: Past and Present

<European History>

8. During his time as this man’s doctoral student, Alexandre Chorin developed the artificial compressibility method. For coercive linear operators on Hilbert spaces, the existence and uniqueness of weak solutions of boundary value problems is governed by a theorem proved by this man and Arthur Milgram. He showed that a difference equation in conservation form is needed when utilizing John von Neumann's idea of shock capturing, and expanded on that insight to develop one numerical integration method with his advisor Kurt Friedrichs, and another with his former doctoral student Burton (*) Wendroff. Robert Richtmyer's name is sometimes attached to this man’s theorem on consistent finite difference methods for well-posed boundary value problems. For 10 points, name this mathematician who showed that those finite difference methods are convergent if and only if they are stable, a result known as his equivalence theorem.

ANSWER: Peter (David) Lax [accept Lax-Milgram theorem or Lax-Friedrichs method or Lax-Wendroff method or Lax-Richtmyer equivalence theorem]

<Other Science>

9. In this country, the subject of the book *Let Me Speak*, Domitila Chúngrara, formed the Housewives’ Committee to agitate for the rights of a group of workers with a 35-year life expectancy. An international campaign freed the theorizer of focalism, French philosopher Régis Debray, from prison in this country. The East German spy Tamara Bunke was the only female member of an insurgency that this country’s government responded to by massacring employees of the Siglo XX (twenty) company. One of its dictators got this country’s rural (*) militias to agree to the Military-Peasant Pact before dying in a 1969 helicopter crash. The nationalization of this country’s tin mines by General Juan Torres helped get him overthrown by Hugo Banzer. This country’s dictator René Barrientos may have hired Nazi war criminal Klaus Barbie to help him capture a guerilla leader. For 10 points, name this South American country where Che Guevara was killed.

ANSWER: Bolivia

<World History>

10. *Note: genre and author required.* Coleridge scribbled the words “Worthy almost of Shakespeare!” in his copy of one of these works, in response to its assertion that “that world which finds itself truly in an Autumn, in itself, finds itself in a spring, in our imaginations.” The “Easter” work of this type notes that we are prisoners within “our Mothers’ wombs”, are born as “Prisoners still, though within larger walls; and then all our life is but a going out to the place of Execution.” The author’s son compiled a three-volume edition of these 160 works, including one predicting that the “ambitious man shall have no satisfaction... nor the (*) poorest receive any contentment in being made equal to princes, for they shall be equal but in dust.” In his biography of their author, Izaak Walton describes how by delivering the last of these works, “Death’s Duel,” while fatally ill, the author had conducted his own funeral. For 10 points, identify these homilies given by a Dean of Saint Paul’s Cathedral who wrote the *Holy Sonnets*.

ANSWER: John **Donne’s sermons**

<Miscellaneous Lit>

11. According to legend, a girl carrying one of these objects inscribed with her name appeased the Jade Emperor by pretending to destroy the city of Chang’an. In a watershed moment in the establishment of Chinese folk religion, Emperor Ming of Han co-opted the usage of these objects by Buddhist monks. They are central to a festival during which riddles are written on slips of paper and then attached to these objects for strangers to solve. Sweet sticky rice balls called *tangyuan* are eaten during a festival named for these objects, which marks the (*) end of Chinese New Year celebrations. Zhūgě Liàng [JOO-guh lyang] is popularly thought to have invented “sky” objects of this type. In order to help guide hungry ghosts back to the afterlife, lotus-shaped examples of these objects are set afloat on rivers, while other examples take the form of small hot air balloons. For 10 points, name these typically-red paper objects which illuminate many Chinese celebrations.

ANSWER: paper **lanterns** [or sky **lanterns**; or tiāndēng or dēnglóng; prompt on **candles**; prompt on **lights**]

<Religion>

12. *Description acceptable.* Several of these concepts are classified as “Bartlebean” [“Bartleby”-an] in a 2005 book that analyzes Melville’s *The Confidence-Man* in its opening chapter on “Tone.” Before her work on postmodern aesthetic categories, Sianne Ngai wrote a book about “Ugly” concepts of this kind. This concept is described as “autonomous” in Brian Massumi’s *Parables for the Virtual*, which studies the body through movement, sensation, and this concept. These concepts are treated as an intersection of speech acts and embodied cultural practices in a 2004 book on their *Cultural Politics* by Sara (*) Ahmed. A 1983 book describes how people feel a “pinch” that causes them to mobilize these concepts in a kind of “gift exchange,” due to namesake social “rules” surrounding them. That book studies how flight attendants and bill collectors use these concepts on the job. Arlie Hochschild’s *The Managed Heart* analyzes—for 10 points—what kind of “labor?”

ANSWER: **emotion**s [or **affects**; or **feelings**; accept **Ugly Feelings**; accept *The Cultural Politics of Emotion*; accept **emotional** labor; accept **feeling rules**]

<Other Academic>

13. A historian quipped “I shall go away one kiss the poorer” after angering his patron by arguing against *this* status in a debate with Anaxarchus. Christian Habicht has disputed the theory that this status was announced to back the authority of a decree requiring cities to readmit their exiled citizens. One account claims that two crows guided a journey undertaken to confirm this status that was also aided by heavy rains. A golden building called the Sema became the center for observations of this status after a (*) general hijacked a procession in Syria. Plutarch reports that stories about a woman dreaming of a lightning bolt striking her body and that woman’s husband seeing her in bed with a snake were used to support the belief in this status. This status was apparently confirmed by the oracle at the Siwa Oasis after its holder was told that he had it by his mother Olympias. For 10 points, a cult in Ptolemaic Egypt honored what status that a conqueror claimed for himself by declaring Zeus Ammon to be his father?

ANSWER: the divinity of Alexander the Great [accept obvious equivalents of Alexander the Great being a god, a demigod, or the son of Zeus (until “Zeus” is read); prompt on answers like “being a demigod” with “Specifically, which person?”]

<European History>

14. An intricate line of poetry that Anthony Hecht suggested mapping with concentric circles invokes this substance using a triple possessive phrase that is pitted against the phrase “our thoughts’ chivalry’s throng’s Lord.” This substance is mentioned twice in the title of a poem that observes that “Each mortal thing does one thing and the/ same... Crying What I dó is me: for that I came.” The disappearance of this substance “in a flash, at a trumpet crash,” stirs that poem’s speaker to realize that “I am all at once what Christ is, | since he was / what I am, and / This Jack, joke, poor potsherd, | patch, / (*) matchwood, immortal diamond, / Is immortal diamond.” A metaphorical instance of this substance “breaks from thee then, a billion / Times told lovelier, more dangerous” in “The Windhover.” The title of a caudate sonnet about the “comforts of the Resurrection” indicates “that Nature” is this “Heraclitean” substance. For 10 points, name this substance that surrounds both “kingfishers” and “dragonflies” in a poem by Gerard Manley Hopkins, for whom it symbolized religious passion.

ANSWER: fire [or flame; or other synonyms]

<Poetry>

15. An “intercultural history” of these artworks was co-edited by longtime curator Aldona Jonaitis. These artworks seem to have been fairly rare before the 19th century, and new production had mostly stopped by the death of Albert Edenshaw in 1894. These are the largest artworks made in what Bill Holm dubbed the “formline” style. Scholars like Hilary Stewart typically classify these objects as “memorial,” “mortuary,” or “frontal.” Another type of these artworks includes caricatures of their subjects and is thus called “shame.” Along with (*) Chilkat weaving, these sculptures are the most famous artistic productions of the Haida and Tlingit peoples. The crests of these objects often depict Raven, but they usually put the most important figure on the bottom. A cedarwood trunk is used to make—for 10 points—what sculptures made by Native Americans of the Northwest Coast?

ANSWER: totem poles [prompt on partial answer; prompt on wood carvings or similar]

<Visual Arts>

16. A gauge-invariant curvature term and a gauge-invariant generalization of this quantity named for James Bardeen are popular metric perturbations in the study of linear cosmological perturbations. For nonradial pulsations of high degree or high radial order, the perturbation of this quantity may be safely neglected, thus reducing the system of linearized pulsation equations from fourth order to second order, in the Cowling approximation. In a 1902 paper, the contribution of an infinite, homogeneous medium to this quantity was ignored in what has been called a “swindle.” In a rotating frame, adding this non-energy quantity to the rotational frequency squared times the radius squared—which encodes centrifugal effects—yields a closely related “effective” (*) form of this quantity. “Four-pi times big G times the local density” equals the Laplacian of this quantity, according to one form of Poisson’s equation, and the gravitational acceleration is its negative gradient. For 10 points, name this quantity which, for a point mass M , equals “minus big G - M over r .”

ANSWER: gravitational potential [accept Bardeen potential or effective potential; do not accept or prompt on “(gravitational) potential energy”] (The third sentence refers to the “Jeans swindle” in deriving Jeans instability.)
<Physics>

17. This Supreme Court justice wrote that the standard of “actual malice” did not apply to the John Birch Society’s false accusations against a lawyer who had “achieved no general fame or notoriety.” In a majority opinion, this justice noted that “the identity of its source” does not dictate the “inherent worth” of political speech, ruling that the First National Bank of Boston had the right to donate to ballot initiative campaigns. This justice negatively cited William Kunstler’s call for college students to “learn to do all of the things that property owners fear” in a work written at the behest of Eugene Sydnor that also advocates for the “balancing of faculties” and the mobilization of (*) corporate stockholders. This justice noted that a “so-called preference” may not always be “benign” in his controlling opinion for a decision that struck down the use of racial quotas by UC Davis, ruling in favor of Allan Bakke. For 10 points, name this Nixon Supreme Court appointee who authored a secret memorandum encouraging corporate America to lobby more aggressively against its title “Attack on the Free Enterprise System.”

ANSWER: Lewis F. Powell, Jr. [accept the Powell memorandum]
<American History>

18. An old woman in this novella moves into a chateau where she installs electrical generators that emit so much radiation that they destroy the beaks of six hundred chickens, which all starve to death. The older brother of this novella’s protagonist compulsively steals from his mother, housekeeper, and sister to feed his opium and gambling habits. The protagonist of this novella fantasizes about sucking on the “flour-white” breasts of her classmate H el ene Lagonelle, the only friend whom she doesn’t alienate by leaving her (*) boarding school dormitory every night to meet the title character. The protagonist of this novella remembers how as a fifteen and a half year old girl, she wore a men’s fedora and gold lam e heels to her first meeting with the title elegantly-dressed millionaire, who waits for her in his limousine by the shore of the Mekong River. For 10 points, name this autobiographical novella about a teenage romance with a Chinese man, by Marguerite Duras.

ANSWER: *The Lover* [or *L’Amant*]
<Short Fiction>

19. It is not hydrogen bonding, but the chiral shift reagent TFAE forms these interactions with chiral molecules, allowing clean enantiomeric resolution of proton NMR resonances. The crude Hunter–Sanders model is able to estimate interaction energy using a purely electrostatic model, whereas the Wheeler–Houk model is better at explaining substituent effects like the especially strong effect of nitro-substitution. The intercalation of molecules such as anthracyclines is driven primarily by this interaction. Participatory molecules have (*) strong quadrupole moments, explaining why parallel-displaced and T-shaped interaction geometries are preferred to the sandwich geometry. In proteins, these interactions are possible for the side chains of amino acids histidine, tryptophan, phenylalanine, and tyrosine, and these intermolecular forces play a role in the close layering of nucleobases within DNA and RNA molecules. For 10 points, name these noncovalent interactions which occur between aromatic rings.

ANSWER: pi-pi stacking

<Chemistry>

20. In 2011, a controlling stake in this country's largest telecommunications company was bought by the Mobin Trust Consortium, which is largely a front for the state-owned enterprise EIKO. The 2017 collapse of the Plasco Building in this country led to scrutiny of the safety measures taken by its owners, the Foundation for the Oppressed and Disabled. In June 2018, thousands of merchants in this home of *Setad* and the (*) Mostazafan Foundation went on strike to protest a sudden drop in the black-market exchange rate of this country's currency against the dollar. In this country, which is home to a number of government-subsidized charitable trusts called *bonyads*, *bazaari* traders tend to support the Islamic Coalition Party, which has recently lost ground to the Moderation and Development Party. In May 2018, the U.S. withdrew from the Joint Comprehensive Plan of Action to place limitations on the nuclear program of—for 10 points—what Middle Eastern country led by Hassan Rouhani?

ANSWER: Islamic Republic of Iran [or Jomhuri-ye Eslāmi-ye Irān; accept Persia]

<Current Events>

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Packet by the Editors (3)

Bonuses

1. In this novel, Moose continues his research on the role of glass in shaping society from the basement of Winnebago College after he is fired from Yale for giving students a bomb detonator as a morality test. For 10 points each:

[10] Name this novel by Jennifer Egan in which the model Charlotte has facial reconstruction surgery following a car accident when she was driving with Z, and joins the website Ordinary People as an “Extraordinary” person.

ANSWER: **Look At Me**

[10] *Look at Me* is set in New York and in Rockford, a city in this Midwestern state. The Jarrett family lives in this state’s city of Lake Forest in Judith Guest’s *Ordinary People*.

ANSWER: **Illinois**

[10] Egan used this non-fiction work as the basis for Moose’s lessons with his niece about the history of Rockford. This work by Bill Cronon chronicles the role of industry in the conversion of the greater Chicago area from its natural state.

ANSWER: **Nature’s Metropolis**: *Chicago and the Great West*

<Long Fiction>

2. As disorder increases, the spin-1/2 Heisenberg chain exhibits a phase transition from a state satisfying the eigenstate thermalization hypothesis to one displaying this phenomenon. For 10 points each:

[10] Name this phenomenon, in which localized disorder prevents a macroscopic quantum system from reaching thermal equilibrium.

ANSWER: **many-body localization** [accept **MBL**; prompt on localization or strong localization; prompt on non-thermalization; prompt on, but do not otherwise reveal, Anderson localization]

[10] Many-body localization arises in closed systems that are isolated from one of these idealized objects. A system in the canonical ensemble is assumed to be in contact with one of these systems at constant temperature.

ANSWER: thermal **reservoir** [or heat **bath**]

[10] Many-body localization builds on a model of disorder-mediated localization by this Nobel-winning Princeton physicist, who also proposed the non-relativistic Higgs mechanism and a namesake impurity model that describes the Kondo effect.

ANSWER: Philip Warren **Anderson**

<Physics>

3. The final, May 2016 issue of this site features a review of *On the Abolition of All Political Parties* that imagines the final thoughts of its author, Simone Weil, as she lay dying in a rural English sanatorium. For 10 points each:
[10] Identify this influential literary blog that often highlighted books by women and people of color who were ignored by mainstream publishers. It was founded in 2002 as a side venture by Jessa Crispin, who was working for Planned Parenthood in Austin at the time.

ANSWER: **Bookslut**.com [or Blog of a **Bookslut**]

[10] In her “Slutlesson” “How To Talk Like You’ve Read Something You Haven’t,” Crispin suggests referencing a scene from early in this novel in which Orin Incandenza traps cockroaches in upside down glasses because he’s afraid to kill them.

ANSWER: ***Infinite Jest***

[10] In a 2006 interview with the overlooked author A.M Homes, Bookslut decried the savaging of her novel *This Book Will Save Your Life* at the hands of this “increasingly irrelevant *New York Times* hitwoman.” To her credit though, reviews written by this Japanese–American critic have pissed off both Nassim Taleb and Jonathan Franzen.

ANSWER: Michiko **Kakutani** [or Michi **Kakutani**]

<Miscellaneous Lit>

4. The inventor of phlogiston theory, Johann Joachim Becher, shaped this discipline with his book *Political Discourse* and applied it by scheming to acquire a South American colony for the Count of Hanau. For 10 points each:

[10] Name this obsolete German academic discipline that dealt with the techniques of administering a police state. After Friedrich William I established one, most 18th-century German universities had chairs devoted to it.

ANSWER: **cameralism** [or the **cameral** sciences]

[10] This ardent fan of cameralism popularized it in his native Sweden, but is better-known for classifying animals and plants in his *Systema Naturae*.

ANSWER: Carl **Linnaeus**

[10] Cameral sciences were taught at a school Maria Theresa established in Schenmütz for this industry. Many German luminaries, including Leibniz, von Humboldt, and Novalis served as officials in this non-banking industry, which Georgius Agricola revolutionized and which the Fuggers oversaw in Tyrol.

ANSWER: **mining** [accept more specific answers]

<European History>

5. Supposedly, when this emperor presented his academy with a competition to paint “A Tavern in a Bamboo Grove by a Bridge,” he chose a painting that only hinted at the presence of the tavern by depicting its signboard in the bamboo. For 10 points each:

[10] Name this art-loving emperor and artist who took the throne in 1100 A.D. He’s traditionally thought to have spent way too much time on his art, since the Northern Song dynasty collapsed and basically ended under his rule.

ANSWER: **Huizōng** [hway-dzong] of Sòng [or the **Xuānhé** [SHWEN-huh] emperor; or **Zhào Jí** [JOW-jee]]

[10] Two answers required. Huizong’s best-known paintings are of *this* kind of animal with *this* kind of plant, a pairing frequently adopted by Japanese artists like Hiroshige.

ANSWER: **birds** AND **flowers** [accept more specific answers for either]

[10] Huizong is also credited with inventing the “thin gold” style in *this* art form, whose Chinese masterpieces include Wáng Xīzhī’s [wang shee-jur’s] *Preface to the Poems Collected from the Orchid Pavilion*. Students of Chinese have to learn the “stroke order” that’s used in this practice.

ANSWER: **calligraphy** [prompt on writing]

<Visual Arts>

6. For 10 points each—answer the following about Joseph Roach’s seminal study of “circum-Atlantic performance,” *Cities of the Dead*:

[10] This central concept in *Cities of the Dead* is defined by Roach as the mechanism through which culture reproduces itself “as actual or perceived vacancies occur” in the social fabric. It often involves the use of effigies.

ANSWER: **surrogation** [or **surrogates**]

[10] *Cities of the Dead* was influenced by this thinker’s transnational analysis of the African diaspora in books like *There Ain’t No Black in the Union Jack* and *The Black Atlantic*.

ANSWER: Paul **Gilroy**

[10] *Cities of the Dead* focuses on London and *this* American city, arguing that “whiteface minstrelsy” and the figure of the “vanishing Indian” are two key touchstones for a celebration in this city that involves parades along St. Charles Avenue and Bourbon Street.

ANSWER: **New Orleans**

<Other Academic>

7. The first section of this sura declares “[It is as if] We had placed [iron] collars around their necks, right up to their chins so that their heads are forced up,” before giving a parable about three messengers. For 10 points each:

[10] Name this “heart of the Quran,” a Meccan sura that emphasizes that the Quran is a divine revelation and not poetry written by Muhammad. The last third of this mysteriously-named sura defends the Resurrection of the body.

ANSWER: Sura **Ya-Sin** [or Sura **36**]

[10] At the end of Ya-Sin’s parable, the third messenger is told to “Enter” one of these places. The Song of Solomon declares that one of these places “inclosed” is “my sister, my spouse.”

ANSWER: **gardens** [prompt on **Paradise**; prompt on **fountains** by asking “Where is the fountain?”]

[10] Sura Ya-Sin is one of the four suras that are named for their *muqatta’at*, which are composed of *these* things. In Judaism, *gematria* assigns a number to each of these things.

ANSWER: **letters**

<Religion>

8. *Note to moderator: please emphasize the italicized words/syllables.*

This theorem applies to a path-connected space X that can be expressed as the union of path-connected spaces A and B whose intersection C is also path-connected. For 10 points each:

[10] Name this theorem, which expresses the fundamental group of X in terms of the fundamental groups of A , B , and C .

ANSWER: *Seifert–van Kampen* theorem

[10] The *sievert* is a unit used to measure “equivalent” or “effective” values of this quantity. “Absorbed” values of this quantity may be measured in grays.

ANSWER: radiation **dose** [accept equivalent or effective or absorbed **dose**]

[10] The classification of *Seyfert* galaxies relies heavily on these *two* features, which appear at about 6563 and 4861 ångströms.

ANSWER: **Balmer alpha** and **beta** [or **H α** and **H β**]

<Other Science>

9. Major surveys and recordings of these peoples' music were made by Colin Turnbull and Simha Arom. For 10 points each:

[10] Give this term used for peoples like the Efè and the Aka, whose complex contrapuntal music is often considered one of the most intricate examples of non-European polyphony.

ANSWER: **pygmies** [accept word forms such as **pygmy**]

[10] Like pygmy polyphony, Javanese gamelan is highly stratified. In gamelan, the basic melody, or *balungan* is played by instruments like the *saron*, while instruments of *this* type play rhythmic subdivisions. These instruments are often suspended vertically, and they usually have a central “nipple,” except for the flat tam-tam.

ANSWER: **gongs** [prompt on **percussion**; do not accept or prompt on “cymbals”]

[10] Both pygmy polyphony and gamelan music are built on repeating metric cycles. These metric cycles of Indian music are ignored during an *alapana*, and are typically brought out by instruments like a *mridangam* or a pair of *tablas*.

ANSWER: **talas**

<Auditory Arts>

10. Theodulf of Orleans implemented his version of this position in the mosaics of his private chapel at Germigny-des-Près. For 10 points each:

[10] Name this position, the implementation of which by the Isaurian dynasty resulted in some Byzantine artists going west and participating in the Carolingian Renaissance.

ANSWER: **iconoclasm**

[10] Charlemagne's scholars produced this confused response to the Second Council of Nicaea, which they wrongly believed to have instituted iconoclasm. Pope Adrian I probably never sent this polemic onto Constantinople after he realized it was entirely irrelevant.

ANSWER: **Libri Carolini** [or **Opus Caroli regis contra synodum**; or **Charlemagne's Books**; or the **Carolines**]

[10] The Carolingian archbishop Agobard, who wrote in favor of iconoclasm in his treatise *Book on Paintings and Images*, also opposed this heresy advanced by Felix of Urgel. Alcuin condemned this Spanish heresy at the Council of Frankfurt.

ANSWER: **adoptionism**

<European History>

11. This author noted that his best-known works, including one in which Actor #1 takes on the job of being of a watchdog, focus on a process he termed *animalizacion*. For 10 points each:

[10] Name this Argentinian author and director of the Fray Mocho theater group, whose *Historias para ser contadas* includes that short play, *The Story of the Man Who Turned into a Dog*.

ANSWER: Osvaldo **Dragún**

[10] Dragún is often credited with bringing this two-word theatrical movement to Latin America. It was developed by Erwin Piscator and a man who analyzed the role of *gestus* in its namesake form of narration in an essay whose title claims that “the modern theatre” is *this* movement.

ANSWER: **epic theatre** [or **episches theater**]

[10] Dragún's play *Hero of Buenos Aires* is a rewriting of this play by that aforementioned author, Bertolt Brecht, moving a scene in which Anna Fierling sings the “Song of Great Capitulation” to a disgruntled soldier into the setting of an Argentinian marketplace.

ANSWER: **Mother Courage and Her Children** [or **Mutter Courage und ihre Kinder**]

<Drama>

12. Michel Foucault argued that by offering a “solution” to his earlier works in the posthumously published *How I Wrote Certain of My Books*, this author “turns each word into a possible trap... a space of infinite uncertainty.” For 10 points each:

[10] Name this subject of Foucault’s study *Death and the Labyrinth*, an incredibly wealthy French writer who paid for the publication of experimental works such as his *Locus Solus* and *New Impressions of Africa*.

ANSWER: Raymond **Roussel** [roo-SELL]

[10] This work of literary criticism notes that Roussel’s poetic descriptions of *tableaux vivants* evoke a “daydream of life within life” that reveals the “essential theatricality of all miniatures.” This book by Susan Stewart examines the role of nostalgia in literary depictions of the miniature and the gigantic.

ANSWER: **On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection**

[10] Stewart also notes the “intolerable burden” caused by Roussel’s famously heavy use of this punctuation mark, which occasionally created up to five nested levels of explanation in his work. Two of these punctuation marks enclose the phrase “a leaf falls” in an e. e. cummings poem.

ANSWER: **parentheses** [or **parenthetical** phrases]

<Poetry>

13. A November 2017 paper by Subramanian, Narayan, and Corsello details the development of L1000, a reduced representation form of this technique, and its use to form a “Connectivity Map” . For 10 points each:

[10] Name this transcriptomic technique that measures the expression levels of the roughly 20,000 different genes in the genome.

ANSWER: **RNA-sequencing** [prompt on gene expression **profiling**]

[10] This technique, developed by Evan Macosko, performs single cell RNA seq by using microfluidics to encapsulate each cell with a functionalized microbead inside some oil, and then lyses each cells individually to captures its mRNA on a bead to create a barcoded STAMPs, or single transcriptomes attached to microparticle.

ANSWER: **Drop-seq**

[10] If you’d rather just measure the expression level of one gene, you can use TaqMan qPCR, which relies on Taq polymerase to cleave a fluorophore off of a gene-specific probe. This is the most common fluorophore used in TaqMan.

ANSWER: **FAM** [or or **6-carboxyfluorescein**]

<Biology>

14. When decorated with liernes, these architectural features are called “stellate” due to their star-like appearance. For 10 points each:

[10] Name these arch-like components of traditional church ceilings, each of which covers one “bay.” Romanesque naves are often covered by the “barrel” type of them, while, in King’s College Chapel, they’re decorated with “fans” of ribs.

ANSWER: **vaults** [accept **barrel vaults** or **rib vaults** or **fan vaults**]

[10] The fan vaults of King’s College Chapel exemplify this latest of the three major styles of English Gothic architecture. This style, which is analogous to the mainland’s Flamboyant Gothic, succeeded the Decorated style.

ANSWER: **Perpendicular** Gothic

[10] Typically, the most ornate set of ribs in a Gothic cathedral will be found in the vault at *this* location. English cathedrals often placed a tower over this bay of the church.

ANSWER: transept **crossing** [prompt on answers that indicate the intersection of the transept and the nave or the rest of the church]

<Other Fine Arts>

15. This journalist interviewed Katherine Breshkovsky and Maria Spiridonova while on assignment from the Bell Syndicate in 1917. For 10 points each:

[10] Name this journalist whose reporting on the Russian Revolution was compiled in the volume *Six Red Months in Russia*.

ANSWER: Louise **Bryant**

[10] Bryant was married to John Reed, who drew from his articles for *The Masses* to write this book-length account of the Russian Revolution, which wasn't published until well after Bryant's.

ANSWER: ***Ten Days That Shook the World***

[10] Bryant was a member of the all-female debating club Heterodoxy, which was based in this New York City neighborhood. Key locales of this neighborhood's early twentieth century bohemian residents included Mabel Dodge's apartment, the Hotel Albert, and the Cherry Lane Playhouse.

ANSWER: Greenwich **Village** [or the West **Village**; do not accept or prompt on the "East Village"]

<American History>

16. In June 2018, an attacker threw a grenade into a crowd that had gathered in Meskel Square to listen to a speech by this country's prime minister, Abiy Ahmed. For 10 points each:

[10] Name this country, where political violence has recently broken out after Ahmed committed to the border established by the EEBC in 2002 after a war with its neighbor Eritrea.

ANSWER: Federal Democratic Republic of **Ethiopia**

[10] As part of agreeing to its previously established national boundaries, Ethiopia will return control of *this* hotly contested border town in its Tigray Region to Eritrea. The invasion of this town in 1998 by Eritrean forces precipitated the Eritrean–Ethiopian War.

ANSWER: **Badme**

[10] Eritrea has had testy relations with *this* Ethiopia-based political organization ever since it was established in 2002, following the Sirte Declaration.

ANSWER: **African Union** Commission [accept **AU**; do not accept the "Organization of African Unity"]

<Current Events>

17. In a paper with Ben Golub, this economist argued that the "wisdom of crowds" theory only holds if the influence of a society's most influential agent declines as the society increases in size. For 10 points each:

[10] Name this Stanford economist, best-known as the author of the 2010 book *Social and Economic Networks*.

ANSWER: Matthew O. **Jackson**

[10] Jackson's work often makes use of the DeGroot model of *this* process, which uses stochastic "trust matrices" to analyze the convergence of beliefs in societies. Albert Bandura's Bobo Doll experiment tested his theory of the role of observation, imitation, and modeling in this process.

ANSWER: social **learning** [or DeGroot **learning**]

[10] Jackson writes frequently about the spread of *these* relationships in social networks. Scott Feld observed a "paradox" of them caused by the oversampling of individuals with high centrality, and Leon Festinger attributed their formation to "propinquity" in his "Westgate studies."

ANSWER: **friendship** [or **friendship** paradox; prompt on **close** relationships or **strong ties**; do not accept "acquaintanceship"]

<Social Science>

18. This reaction was published by Carolyn Bertozzi's group in the year 2000 and is useful in bioorthogonal chemistry. For 10 points each:

[10] Name this reaction in which an electrophile trap, usually a methyl or benzyl ester, reacts with an alkyl azide in the presence of triphenylphosphine to form an amide.

ANSWER: **Staudinger ligation** [do NOT accept or prompt on "Staudinger reaction", they MUST say "ligation"]

[10] Bertozzi also developed a "copper-free" version of this other reaction which uses cyclooctyne derivatives. This reaction's concerted mechanism is similar to the first step of the Criegee mechanism for ozonolysis.

ANSWER: **azide-alkyne cycloaddition** [or **AAC**; accept **Huisgen** cycloaddition]

[10] Both the azide-alkyne cycloaddition and the Staudinger ligation are examples of this class of biocompatible small molecule reactions, which got its name from K. Barry Sharpless.

ANSWER: **click** chemistry

<Chemistry>

19. This people's system of arithmetic lacked the concept of abstract numbers, so different words were used to indicate two items that made a pair, two unrelated items, two items bound together, and so on. For 10 points each:

[10] Name these people who used an abacus-like tool called the *yupana*. The knotted strings carried by messengers among these people are sometimes thought to encode base-ten numbers.

ANSWER: **Inca** [or **Incans**]

[10] The use of knotted strings, or *quipu*, for record-keeping may have originated in this culture with a capital at Chan Chan. Pachacuti's expansion of the Inca state allowed it to conquer this successor to the Moche culture.

ANSWER: **Chimu**

[10] The quipus felt under greatest Spanish scrutiny after this millenarian movement with a name meaning "dancing sickness" broke out in the 16th century. The extent to which this movement terrified Spanish clerics is suggested by the fact that Juan Bocanegra included a questionnaire about it in his Quechua-language songbook 60 years later.

ANSWER: **Taki Unquy**

<World History>

20. The author of this set of "Reflections from a Damaged Life" justified its idiosyncratic structure by calling it an "attempt to represent moments of a common philosophy from the standpoint of subjective experience." For 10 points each:

[10] Name this book, whose 29th aphorism, titled "Dwarf fruit," asserts that "the splinter in your eye is the best magnifying glass" before concluding "the whole is the untrue."

ANSWER: **Minima Moralia**

[10] This author of *Minima Moralia* attacked Marcuse by writing that "the thinking denigrated by actionists apparently demands too much undue effort: it requires too much work, is too practical."

ANSWER: Theodor (Wiesengrund) **Adorno**

[10] In a chapter about *Minima Moralia*, this philosopher declared that "if Lukács [LOO-kahsh] has turned Marxism into method, Adorno has turned it into the search for style." This author of *The Melancholy Science* analogized Kant's project of reason to the practice of law in courts in *Dialectic of Nihilism*.

ANSWER: Gillian (Rosemary) **Rose**

<Philosophy>