

Chicago Open 2018: The spice must flow

Edited by Auroni Gupta, Jacob Reed, Will Holub-Moorman, Jordan Brownstein, Seth Teitler, Eliza Grames, and Joey Goldman, with contributions by Stephen Eltinge, Matt Jackson, JinAh Kim, Raynor Kuang, Dennis Loo, Rohith Nagari, Sriram Pendyala, and Victor Prieto

Packet by *careless_whisper_saxophone.wav* (Jonathan Magin, Weijia Cheng, Chris Borglum, and Billy Beyer); and by *Why does Rubicante, the largest fiend, not simply eat the other three?* (Mike Bentley, Ryan Westbrook, Matt Lafer, and Foster Hughes)

Tossups

1. A study of this concept asked participants to consider two versions of a story: one in which assaulting Thompson Hill saves the lives of soldiers, and one in which it risks them. That Joshua Knobe study of this concept caused Alfred Mele to retract his account of side effects. An argument that involves playing two instances of a missile-targeting video game was used to attack the “Simple View” of this concept in a Michael Bratman essay about its “Two Faces.” A book titled for this concept claims that when we speak of “different senses” of a word we are usually “in the dark about the character of the concept which it represents.” A 1978 paper analyzes planning a squirrel house as a “pure” instance of this concept and concludes that this concept is a (*) mental state. An earlier account of this concept as “acting under a description” was employed by Donald Davidson in a 1963 paper. G.E.M. Anscombe’s first book suggested that actions with this quality are ones for which it makes sense to ask why they were done. For 10 points, name this philosophical term for the reasons for actions. ANSWER: **intentional** [accept “**Intentional action and side effects in ordinary language**” or “**Two Faces of intention**”]; do not accept or prompt on “intentionality”]

<Philosophy>

2. The author of this play replaced a reference to “Red China” with “North Korea” in a list of suggested “contemporary” revisions included as an appendix in print editions following its 2004 Broadway revival. Following the direction “There’s no self-pity here” in her climactic monologue, a character in this play describes seeing “Who I never was. Or who I tried to be and never got there” in an “old baby picture” of herself. During a “genuine, but uneasy” truce in this play, a character buys time by making caramel apples and cocoa, even though she hates (*) milk. A woman in this play believes that a horse-riding accident was the cause of her epilepsy, because she was never told that it was inherited from her father. The protagonist of this play plans the next twenty Christmases and birthdays for her brother Dawson, whom she had tricked into selling a box of ammunition. Thelma Cates mutters the words “I thought you were mine” in shock after hearing a gunshot in her daughter Jessie’s bedroom at the end of—for 10 points—what dark Pulitzer-winning play by Marsha Norman?

ANSWER: ***‘night, Mother***

<Drama>

3. A domino Michael-Michael-Horner-Wadsworth-Emmons reaction is part of Hayashi et al.’s synthesis of this compound, which makes use of three successive one-pot reactions. An asymmetric Diels-Alder reaction of butadiene with trifluoroethyl acrylate in the presence of the CBS catalyst is the first step in Corey’s total synthesis of this compound. In order to accommodate the bulky hydrophobic 3-pentyl side chain of this molecule, the E276 residue of a protein must rotate and bond with R224, a process prevented by the (*) H274Y mutation that confers resistance to this drug. Several total syntheses of this drug attempt to replace the scarce usual starting material, shikimic acid. This is the most prominent compound that competitively inhibits the nine-carbon sugar Neu5Ac. After being orally ingested in the form of its phosphate prodrug, this drug prevents an enzyme from cleaving sialic acid residues, thus forcing new viral particles to stay in the cell. For 10 points, name this neuraminidase inhibitor, the most widely-used influenza medicine.

ANSWER: **oseltamivir** phosphate [or **Tamiflu**]

<Chemistry>

4. While serving as a consul in this city, Charles Henry Churchill laid out one of the first plans for the creation of a Jewish state in a letter to Moses Montefiore, who had led a delegation to this city with Adolphe Crémieux the previous year. The arrest of Muslim teenagers for painting crosses on doors led to 1860 riots in this city, during which the exiled Algerian freedom fighter Abd al-Qadir al-Jazairi became an international celebrity for sheltering Christians in his home. The reputed discovery of Father Tomaso's bones led to the arrest of six members of this city's (*) Jewish community in an 1840 affair that inspired Sultan Abdülmecid to issue an anti-blood libel *firman*. This city's Ottoman era ended with its 1918 capture by Edward Allenby and future King of Iraq Faisal I, after which Faisal briefly ruled an "Arab Kingdom" from this city until the French defeated him and set up a Mandate. For 10 points, name this city that later served as the capital of Hafez al-Assad.

ANSWER: **Damascus**

<World History>

5. Note to moderator: please look over the answerline before reading this question.

It's not in Turkey, but several key archaeological sites in the study of these people are located on a mountain whose name translates to "Potbelly Hill." One experimental work of anthropology on a group of these people depicts their speech in italics and the writings of Moravian missionaries in bold font. That work, titled for a convert named Alabi, is a follow-up to its author's study of the concept of *fési-tén* in the historical consciousness of a group of these people, *First-Time*. Studies of these people often use John Gabriel (*) Stedman's *Narrative of a Five Years' Expedition* as a source on European conflicts with them. In a 1973 work titled for these people's "societies," Richard Price distinguished between a short-term, *petit* form of the activity that gave them their name and a *grand* form that established tribes such as the Saramaka and cities like Palmares, which is the largest *quilombo* known to have existed. For 10 points, name these people who often congregated in mountainous regions and jungles after escaping from plantations.

ANSWER: **maroons** [accept equivalents of **runaway slaves**; also accept **Saramakas** and any answers that mention **maroons** in specific locations, such as Brazil and Suriname, **cimarrones**, *petit* or *grand* **marronage**; before read, accept **quilombos** or **quilombolas**; prompt on **slaves** and any answers that give a particular nationality without mentioning that they're escaped slaves, i.e. **Brazilians**]

<Social Science>

6. In one poem, this character describes a vision of a carriage in which "Great-bladdered Emer" rides with "her violent man" by her side. An unusually structured sonnet featuring this character comprises two seven-line stanzas, each ending: "Fol-de-rol, fol-de-rol." A poem in which this character states, "My body makes no moan / But sings on" ends each of its four stanzas with the line, "All things remain in god." This character thinks, "love is just a skein unwound / Between the dusk and dawn," in a poem titled for her sexual encounters with Jack the Journeyman. The refrain "Love is like a (*) lion's tooth" ends the three stanzas of a poem in which this woman "Grown Old Looks at the Dancers." The collection *Words for Music Perhaps* opens with a series of poems narrated by this woman, including one in which she asserts that "Fair and foul are near of kin / and fair needs foul," because "love has pitched his mansion in / The place of excrement." For 10 points, name this ribald old woman who stars in eight poems by William Butler Yeats, including one in which she "Talks with the Bishop."

ANSWER: **Crazy Jane** [prompt on partial answer]

<Poetry>

7. The signing of this agreement led to the widespread practice of placing metal plaques bearing the slogan “no, no, never!” on house doors. A country that signed this treaty gave the nickname “Civitas Fidelissima” to a city that voted to join it in a plebiscite held after this treaty; that city was Sopron. The Levente Associations were paramilitary youth organizations formed to circumvent this treaty’s ban on conscription. One aspect of this treaty’s namesake “syndrome” was the politicization of the Pan-Turkish theory of Turanism. This treaty was partly (*) reversed by the Bled agreement and by the First and Second Vienna Awards. The Little Entente formed in reaction to revanchist opposition to this treaty, which is still a tenet of the Jobbik party. This treaty took away two thirds of the territory of the country that signed it, turning it into a landlocked country and leading Admiral Horthy’s government to seek redress. For 10 points, name this 1920 treaty imposed on Hungary at the Paris Peace Conference.

ANSWER: Treaty of Trianon

<European History>

8. For an atom or molecule with a given total angular momentum, this physicist’s namesake “function” is a difference of two hyperbolic cotangent terms that gives the magnetic moment for a sample of the atom or molecule as a function of the applied field over the temperature. This man shortened Schrödinger’s phrase “negative entropy” to form the neologism “negentropy,” and showed that acquiring one bit of information requires paying at least “ $k \log_2$ of negentropy.” A large-scale, low-frequency lattice wave interacts with light in a phenomenon named for this man that is similar to Raman (*) scattering. A method for finding approximate solutions to the time-independent Schrodinger equation was invented independently by Wentzel, Kramers, and this man. For 10 points, the most central group of contiguous points in reciprocal space that can be reached from the origin without crossing any Bragg planes are known as what Frenchman’s namesake “zone”?

ANSWER: Léon Nicolas Brillouin [accept Brillouin function or scattering or zone]

<Physics>

9. A technique named for this substance was used to make a blue, green, and white sculpture of the *Nativity* in the Washington National Gallery. The use of this specific substance on sculpture was pioneered by the sculptor of a marble *Cantoria* for the Florence Cathedral. A technique named for this substance was applied to terracotta by Luca della Robbia. Production of goods using this substance waned in the later 18th century after the opening of the Meissen factory. One style of goods produced using this substance was named for being imported through (*) Majorca, while another took its name from being produced in the Italian town of Fa-enza. The use of this substance seems to have been developed under the Abbasids to imitate fine china. Josiah Wedgwood’s invention of “creamware” badly outcompeted the use of this substance, which was added to lead glazes to produce a shiny, white, opaque surface. Majolica, faience [fye-AWNSS], and Delftware are made with a glaze named after—for 10 points—what metal?

ANSWER: tin glaze [accept tin oxide or tin(IV) oxide or stannic oxide or SnO₂; prompt on just glazes or enamels; do not accept or prompt on “tin(II) oxide” or “stannous oxide”]

<Other Arts>

10. With Roger Bennett, a man with this surname organized a 2010 public art competition in which experimental *sukkahs* were exhibited in Union Square. An author with this surname wrote a novel in which the protagonist mistakenly identifies the uncircumcised man next to him in a Panda Express bathroom as Steven Spielberg. In 2014, Chris Hughes fired a journalist with this surname and replaced him with Gabriel Snyder, causing a wave of resignations at *The New Republic*. With Dylan Thura, a man with this surname founded the website Atlas (*) Obscura. That writer with this surname chronicled his path to winning the 2006 USA Memory Championships in the book *Moonwalking with Einstein*. An author with this surname created a character who tells an elderly man about an answering machine message left for him by his father during the 9/11 attacks, before returning a mysterious key he earlier found in a broken vase. For 10 points, name this surname that journalists Franklin and Joshua share with their brother, who wrote the novel *Extremely Loud & Incredibly Close*.
ANSWER: **Foer** [FOY-er] [accept Franklin **Foer**, Joshua **Foer**, or Jonathan Safran **Foer**]
<Other Academic>

11. Erasmus supposedly promised to Jacobus Lunis Stunica that he would include a passage of this book in the *Novum Instrumentum omne* if someone could show him a single Greek manuscript containing it. An excerpt from this book is the first to be criticized in *Two Notable Corruptions of Scripture*, an anti-Trinitarian letter sent to John Locke by Isaac Newton. This book sets forth two tests for the union with God by declaring that “If we say we have fellowship with him while we walk in darkness, we lie and do not practice the truth” and that “Whoever believes that Jesus is the Christ is born of God.” A passage from chapter (*) five of this book, which first appeared in later versions of the Vulgate, asserts that “there are three who bear record in heaven, the Father, the Word, and the Holy Ghost: and these three are one.” A controversial clause known as the “comma” appears in Latin manuscripts of—for 10 points—what epistolary New Testament book attributed to the author of the final canonical gospel?
ANSWER: **First** Epistle of **John** [or **1 John**; prompt on Epistle of **John**; prompt on the **Bible** or the **New Testament** until “New Testament” is read]
<Religion>

12. He’s not Dirichlet [“deer”-ih-“clay”], but a function named for this man satisfies a differential equation whose right-hand-side is a multiple of the modular discriminant, Delta. Setting x equal to a function named for this man, and y equal to its derivative, and setting g -sub-2 and g -sub-3 equal to 60 and 140 times the first two Eisenstein series, respectively, we can use that function to parametrize the curve “ y -squared equals: $4x$ -cubed, minus g -sub-2 times x , minus g -sub-3.” This man names a class of doubly periodic functions with double poles at each lattice point—a class of (*) elliptic functions written with its own special script “ p .” He showed that, if every function in a sequence is bounded by a sequence of positive integers with finite sum, then the sum of all those functions converges absolutely and uniformly. This creator of an “ M -test” gave Cauchy’s [KOH-shee’s] epsilon-delta definitions their modern form. For 10 points, name this German who re-proved that every bounded sequence in \mathbf{R}^n has a convergent subsequence, years after Bernard Bolzano.
ANSWER: Karl **Weierstrass** [“VIE”-uh-shtrahss]
<Other Science>

13. Hundreds of an instrument from this country have been produced at West Virginia University by pioneering builder Ellie Mannette. A song from this country includes the lines “If you catch them broke, you can get ’em all for nothing / Yankee’s gone” to mock the returning prostitutes “Jean and Dinah.” In this country, the stick-fighting martial art *calinda* is traditionally accompanied by *kaiso* music. In the ‘60s and ‘70s, this country’s Road March traded off between “Lord Kitchener” and (*) Mighty Sparrow, but it’s now dominated by Machel Montano. An instrument originally from this country is produced by “sinking” the playing head to make it concave, and then hammering out flat areas to produce individual notes. A traditional Carnival genre from this country was infused with soul and funk to produce soca, the genre of the song “Hot Hot Hot.” Steel drums originated in—for 10 points—what Caribbean nation home to Calypso music?

ANSWER: Republic of **Trinidad** and Tobago

<Auditory Arts>

14. A drunken, mud-covered character in this novel unleashes a tirade against the government for allowing a black college professor to vote on election day. Shelley Fishkin cited the similarity of its main character’s speech patterns to “Sociable Jimmy” in a book examining if its main character was black. Its 23rd chapter ends with silence after one of its characters laments beating his young daughter for disobedience, only to learn she was deaf and dumb. Ralph Ellison’s essay “Change the Joke and Slip the Yoke” argues that the “dignity and human complexity” of a major character in this novel emerges from behind “the stereotype mask” of the (*) minstrel tradition. In *Playing in the Dark*, Toni Morrison argued that this novel’s “fatal ending” constantly defers an escape because there is no way for its main character to “mature into a moral human being” without “the specter of enslavement.” For 10 points, an oft-critically-panned ending featuring an elaborate plot to free an escaped slave from the Phelps farm ends what novel largely set on a raft in the Mississippi river?

ANSWER: *The Adventures of **Huckleberry Finn***

<Long Fiction>

15. After a work of this type was returned for its loose brushwork and complex composition, its artist sent in a new version with the figures traced in white, and later used the original design for his *The Blind Guitarist*. During his time as a royal consultant, Anton Raphael Mengs commissioned the first of 63 of these works, including the Tiepolesque *The Parasol* and a non-Fragonard *Blind Man’s Bluff*, from a young Francisco de Goya, who refused to make these works after the illness that made him deaf. The foreground of one of these works is framed by two irregular, twisty (*) columns. Another of these works depicts three cranes standing on the shore in front of a disciple standing up in his rickety boat, while James and John pull in their overfull nets. *Saint Paul Preaching in Athens* and *The Miraculous Draught of Fishes* are among seven of these works in the Victoria and Albert Museum. Pope Leo X commissioned Raphael to make a set of—for 10 points—what full-size drawings meant to be reproduced as tapestries?

ANSWER: tapestry **cartoons** [or **cartones**; prompt on drawings or study or modello or sketches; prompt on tapestries by asking “What part of the manufacture of the tapestry is this?”]

<Visual Arts>

16. A religious text claims that the reign of a queen from this dynasty was a golden age during which sages collected kidney-sized wheat grains to show to future generations. According to a theory propounded by Jerome Murphy O'Connor, a ruler from this dynasty with the epithet meaning "dissembler" was the "Wicked Priest" who deposed the "Teacher of Righteousness." The body of a princess from this dynasty was supposedly preserved in honey for seven years by her husband after he had her executed; that princess, (*) Mariamne, married an Idumean who was appointed as a Roman client king. The last ruler from this dynasty, Antigonus, was deposed by Mark Antony. Pompey the Great intervened in this dynasty's dispute between the brothers Aristobulus II and Hyrcanus II, restoring Hyrcanus II as high priest. For 10 points, name this dynasty that ruled an independent Judea following the revolt of Judas Maccabeus.

ANSWER: Hasmonean dynasty [or Hashmona'im; accept Maccabees or Maqabim before "Maccabeus" is read]
<European History>

17. B. Roland Lewis was the first to note that this document opens by copying a formula from William West's *Symbolaegraphia*. This document includes a recommendation to purchase a mourning ring for William Reynolds, the son of recusant parents who had been fined for sheltering a Jesuit, in a passage sometimes held to reveal hidden Catholic sentiment on the part of the author. Thomas Quiney's name was removed from the second draft of this document, perhaps because of the revelation that he (*) impregnated Margaret Wheeler, who died in childbirth. The words "brown best" appear in the first publication of this document, 1763's *Biographia Britannica*, instead of the later accepted transcription. Peter Ackroyd addressed outrage at the most notorious stipulation of this document by arguing that dower law would have already guaranteed the spouse a third of the estate in question. For 10 points, what document offers its author's "second best bed" to Anne Hathaway?

ANSWER: William Shakespeare's will [or William Shakespeare's last testament]
<Miscellaneous Lit>

18. In 2014, Chuong et al engineered a noninvasive inhibitory protein of this type named Jaws, partly by trafficking a sequence from Kir2.1. In the paper establishing the nomenclature for these proteins' intermediates, Lozier et al. reported that one of them shuttled between K590 to L550 to M412. Mutating one of these proteins at C128 or D156 generates a so-called "step function" variant that has a time constant on the order of seconds, instead of milliseconds. One of these proteins is linked via a Schiff base on the lysine-214 residue on its G (*) helix to a molecule that isomerizes from all-trans to 13-cis. In 2004, Peter Hegemann isolated the Chr-1 and Chr-2 proteins of this type from the model green algae *Chlamydomonas reinhardtii*, kickstarting the field of optogenetics. Prefixes such as "halo," "archaeo," "bacterio," and "channel" appear in the names of the microbial analogues of, for 10 points, what pigments that sense light in the retina?

ANSWER: rhodopsins [accept opsins since many papers refer to them as that; accept channelrhodopsins, halorhodopsins, bacteriorhodopsins, archaeorhodopsins, and other phrases that contain rhodopsins]
<Biology>

19. According to Barry O'Connor's biological research, sightings of this creature are actually reports of animals infected with *Sarcoptes scabiei*. Benjamin Radford's book about "tracking" this creature traces its first sighting to Madelyne Tolentino, and argues that her description of it closely resembles the alien from the then-recent movie *Species*. In folklore, this creature is often held responsible for corpses that demonstrate postmortem lividity. This creature was first sighted in the town of (*) Canovanas, causing then-mayor Jose Soto to lead weekly armed militias which failed to capture it. This creature has been depicted as a humanoid reptilian with large eyes and spikes on its back after its earliest sightings in Puerto Rico; since then, it has been sighted throughout the southern United States and Latin America. For 10 points, name this being of local legend whose name means "Goat sucker," which supposedly drains the blood of livestock.

ANSWER: chupacabras
<Mythology/Geography/Current Events>

20. In this city, the publisher Winston Smith put out the “Eclectic Series” of school readers by William Holmes McGuffey. A young Hiram Powers designed statues of hellish ghouls for “The Infernal Regions,” a Dante-inspired exhibit in this city that was one of the money-making schemes of a woman who founded a Bazaar here after leaving Fanny Wright’s Nashoba Community. That woman, Frances Trollope, heaped scorn on the people of this city in her *Domestic Manners of the Americans*. In 1836, the printing press of a newspaper of this city, *The Philanthropist*, was wrecked by a mob due to the (*) abolitionism of its publisher, James Birney. Theodore Dwight Weld founded the Lane Theological Seminary in this city, where Harriet Beecher Stowe met with many of the escaped slaves who had been brought here by Levi Coffin. Due to its antebellum meatpacking industry, this “Queen of the West” was nicknamed “Porkopolis.” For 10 points, name this city on the Ohio River named for a Roman hero.

ANSWER: Cincinnati

<American History>

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Bonuses

1. This book opens with a comparison of Nogales, Arizona and Nogales, Sonora to argue for the role of institutions in divergent economic outcomes. For 10 points each:

[10] Name this 2012 book by James Robinson and Daron Acemoglu [ay-suh-MOE-gloo], which describes the role of “extractive institutions” in causing the title event.

ANSWER: ***Why Nations Fail: The Origins of Power, Prosperity, and Poverty***

[10] Robinson and Acemoglu’s analysis in *Why Nations Fail* was heavily influenced by the work of *this* “new institutional” economist, who defined institutions as both “informal constraints” and “formal rules” in a 1991 paper.

ANSWER: Douglass (Cecil) **North**

[10] This economist is credited with establishing the school of new institutional economics through papers such as “The Nature of the Firm” and “The Problem of Social Cost.”

ANSWER: Ronald (Harry) **Coase**

<Social Science>

2. Jean-Luc Godard and his then-wife Anna Karina make a cameo in this film as characters in a parody of silent films. For 10 points each:

[10] Name this 1962 film that follows the title character in real time as she awaits the results of a biopsy.

ANSWER: ***Cléo from 5 to 7*** [or ***Cléo de 5 à 7***]

[10] *Cléo from 5 to 7* was directed by this woman, who is known for nonlinear films like *Vagabond* and the autobiographical, fragmented documentary *The Gleaners and I*. She became the oldest person nominated for an Oscar after a nod for the 2017 documentary *Faces Places*.

ANSWER: Agnès **Varda**

[10] Varda’s husband Jacques Demy was best-known for visually stunning films like *The Umbrellas of Cherbourg* and *The Young Girls of Rochefort*, which are both in *this* genre. Those films were both ripped off by a 2016 Damien Chazelle [shuh-ZELL] film in this genre.

ANSWER: movie **musicals** (The Chazelle film is *La La Land*.)

<Other Arts>

3. A range in the Sierra Nevadas of California named for this man contains Banner Peak and a jagged group of peaks called the Minarets. For 10 points each:

[10] Name this German, whose *Die Erdkunde* is generally considered to be a founding works of modern geography.

ANSWER: Carl **Ritter** [accept the **Ritter** Range]

[10] Carl Ritter taught *this* chief of the California Geographical Survey, who lends his name to a very large glacier on Mount Shasta, as well as the highest peak in the continental United States.

ANSWER: Josiah (Dwight) **Whitney** [accept Mount **Whitney**]

[10] Whitney was widely ridiculed after he proclaimed that a skull named for *this* county in California was evidence that Pliocene humans coexisted with mastodons, which led Bret Harte to write his poem “To the Pliocene Skull.”

The only incorporated city in this county is Angels Camp.

ANSWER: **Calaveras** County

<Mythology/Geography/Current Events>

4. In a seminal 1956 paper, Richard Twiss and this man reported on an experiment in which a pair of photomultiplier tubes were pointed at the star Sirius. For 10 points each:

[10] Name this physicist whose work with Twiss on intensity interferometry showed that photons undergo “bunching” in certain circumstances.

ANSWER: Robert Hanbury **Brown** [or Robert **Hanbury Brown**]

[10] In a 2007 experiment on the Hanbury Brown-Twiss effect, Chris Westbrook observed bunching and antibunching behavior in what was claimed to be the first direct comparison in a single apparatus of the different “statistics” governing bosons and these particles. They have half-integer spin.

ANSWER: **fermions**

[10] This American explained why beams of thermal radiation display photon bunching while laser beams do not. He won half of the 2005 Physics Nobel for his work on “the quantum theory of optical coherence.”

ANSWER: Roy Jay **Glauber**

<Physics>

5. This book’s chapter “Kindness to Strangers” develops an “emergency principle” in response to Singer’s drowning child situation, but laments that the principle doesn’t tell one whether or not to donate to UNICEF. For 10 points each:

[10] Name this book by Kwame Anthony Appiah, which opens by examining Richard Francis Burton as an exemplar of its title concept.

ANSWER: ***Cosmopolitanism***

[10] *Cosmopolitanism* contrasts a hypothetical offered in Balzac’s *Père Goriot* about getting rich by killing a distant mandarin to the inverse situation, in which a man would ease a minor finger pain by allowing far-off millions to die. That example comes from *this* book on ethics by Adam Smith.

ANSWER: *The **Theory of Moral Sentiments***

[10] This fellow Ghanaian philosopher had a dispute with Kwame Gyekye about whether it is correct to distinguish between a human and a person in Akan philosophy. In his *Cultural Universals and Particulars*, this philosopher offered a “biological foundation of universal norms.”

ANSWER: Kwasi **Wiredu**

<Philosophy>

6. A merchant from this city, Antera Duke, wrote a diary in pidgin English that is the only surviving eyewitness account of the Atlantic slave trade by an African merchant. For 10 points each:

[10] Name this city where the Scottish missionary Mary Slessor campaigned against the practice of killing newborn twins. This city founded by the Efik people was a major port of the 18th century African slave trade.

ANSWER: **Calabar** [or Old **Calabar**; accept **Akwa Akpa**; accept **Old Town** or **Duke Town** before they are read]

[10] One of these organizations known as the Ekpe made and enforced a system of laws in Calabar. Via the African diaspora, the Ekpe developed into an Afro-Cuban organization of this type called Abakua, which also uses the leopard as a symbol.

ANSWER: **secret societies** [or **fraternities**; accept **fraternal** associations or **mutual aid** societies; prompt on **societies** or **associations**]

[10] The ruler of Calabar used the title Etubom, meaning the “father of” this vessel. Osei Tutu was shot while in one of these vessels, which in West Africa were made from a single tree trunk instead of the bark variants made by American Indians.

ANSWER: **canoes** [prompt on **dugouts**, **pirogues**, **piraga**, or broader synonyms of **boats**]

<World History>

7. A woman named Hillé retreats to a recess under the stairs after “eating the flesh of God” in a novel by this author. For 10 points each:

[10] Name this Brazilian author of *The Obscene Madame D*. Karl writes disturbing letters to his sheltered sister Cordelia in her novel *Letters from a Seducer*, the third entry of her so-called “erotic” or “pornographic” tetralogy.

ANSWER: Hilda **Hilst**

[10] Hilst titled the final, especially depraved section of *Letters from a Seducer* for a “new” form of this taboo practice, in homage to a 1931 manifesto by Oswald de Andrade describing a metaphorical instance of this phenomenon that produced the culture of Brazil.

ANSWER: **cannibalism** [or **anthropophagy**]

[10] Hilst and her countrywoman Clarice Lispector both made distinctive use of this literary technique, which eschews conventional sentence structure to render a character’s uninterrupted thoughts.

ANSWER: **stream of consciousness** [or **interior monologue**]

<Long Fiction>

8. Materials commonly found in these structures include namesake claylike “gouge” deposits. For 10 points each:

[10] Name these structures that are typically bounded by a hanging wall and a footwall.

ANSWER: seismic **faults** [accept **fault gouge**]

[10] Seismic activity along a fault powers the “cataclastic” form of this process. Its “contact” form typically occurs around an igneous intrusion that heats the surrounding rock.

ANSWER: **metamorphism** [accept cataclastic or contact **metamorphism**; accept answers indicating the formation of **metamorphic** rocks; do not accept or prompt on **metamorphosis**]

[10] Seismic activity also produces these polished rock surfaces with parallel grooves indicating the direction of fault movement. They are sometimes confused with surfaces marked by glacial striations.

ANSWER: **slickensides**

<Other Science>

9. The beggar Roman Orlov drinks whiskey to “drown the great worm inside” and remembers how his father became more devoted to his mother after losing his accordion in this author’s story “How the Devil Came Down Division Street.” For 10 points each:

[10] Name this American author who collected “So Help Me,” “A Bottle of Milk for Mother,” and other stories framed as police interrogations in his landmark collection *The Neon Wilderness*.

ANSWER: Nelson **Algren**

[10] Algren reworked his story “The Face on the Barroom Floor” into the scene in which Achilles Smith badly beats up Dove Linkhorn which concludes this novel.

ANSWER: *A **Walk on the Wild Side***

[10] “The Face on the Barroom Floor” features a character with this profession nicknamed Railroad Shorty because he was cut in half by a train. A pair of assassins try to kill a practitioner of this activity nicknamed the “Swede” in “The Killers” by Ernest Hemingway, who himself was an amateur at this sport.

ANSWER: **boxing** [or **prizefighting**]

<Short Fiction>

10. A man profiled in this book, John Clarke, had to spend 104 days working at Alabama's Sloss-Sheffield mine to pay a court fee for his crime of "gaming." For 10 points each:

[10] Identify this Pulitzer-winning book by Douglas A. Blackmon which argues that bondage of African Americans didn't end with the Civil War.

ANSWER: ***Slavery by Another Name: The Re-Enslavement of Black Americans from the Civil War to World War II***

[10] Blackmon describes how many African Americans were forced to "work off" draconian fines at private companies for violating this type of laws which were ruled unconstitutional in the 1972 *Papachristou* case.

ANSWER: **vagrancy** laws

[10] *Slavery by Another Name* was adapted from an article that Blackmon wrote about this company's use of convict labor. J. P. Morgan merged two smaller companies into this first billion-dollar company in US history.

ANSWER: **U.S. Steel** [or **United States Steel** Corporation]

<American History>

11. In a poem by Walt Whitman, a freed slave wearing a turban decorated with the colors of this country's flag salutes Union troops during Sherman's march to the sea. For 10 points each:

[10] Name this country, the subject of an "Ode" by Paul Laurence Dunbar and a "Ballad" by Langston Hughes. It was traditionally used as a metonym for blackness and Africa in Western poetry.

ANSWER: **Ethiopia** [or **Abyssinia**]

[10] An early example of Ethiopia as metonym comes from this author's "divine epigram" "On the Baptized Ethiopian." A Latin epigram by this clergyman about the wedding at Cana contains a line usually translated as "the modest water saw its God, and blushed."

ANSWER: Richard **Crashaw**

[10] The best-known reference to Ethiopia in English literature may be the opium-induced vision of an "Abyssinian maid" playing a dulcimer and singing of Mount Abora in this poem.

ANSWER: "**Kubla Khan**"

<Poetry>

12. In *Pseudodoxica Epidemica*, Thomas Browne argued that this supposed cultural trait could not be caused by diet or a divine curse. For 10 points each:

[10] Name this mythical trait that medieval Western Europeans believed resulted from male menstruation and immediately disappeared after baptism. A description is fine.

ANSWER: the **belief that Jews smell bad** [or the **foetor Judaicus**; or clear-knowledge equivalents]

[10] Some believers in the *foetor Judaicus* myth claimed that Jews could receive temporary relief by bathing in *this* substance, causing normal-smelling Jews to be suspected of ritual murder.

ANSWER: Christian **blood**

[10] The *foetor Judaicus* myth also stemmed from the belief that Jews ate large amounts of *this* plant, possibly because the Talmud claims that it boosts virility. In medieval Germany, the Jewish communities of Speyer, Worms, and Mainz were collectively known as the Hebrew word for this plant, *Shum*.

ANSWER: **garlic** bulbs

<Religion>

13. In 2012, a composite image of this title was produced using data from the VIIRS aboard Suomi NPP. For 10 points each:

[10] Give this title used for a photo taken during the Apollo 17 mission, which depicts a cloud-covered Southern Hemisphere.

ANSWER: *The **Blue Marble*** [or ***Blue Marble 2012***]

[10] *The Blue Marble* is a slightly higher-resolution image of Earth than *this* photo taken by *Voyager 1* after Carl Sagan requested that NASA have it take a photo as it left the solar system.

ANSWER: ***Pale Blue Dot***

[10] This American writer lobbied NASA to release a color photo of the Earth throughout the 1960s. After they did in 1967, he put the image on the first issue of his seminal DIY magazine, *Whole Earth Catalog*.

ANSWER: Stewart **Brand**

<Other Academic>

14. For 10 points each—answer the following about women portraitists of the 18th century:

[10] Artists like Élisabeth Vigée-Le Brun and her father Louis Vigée made numerous works in *this* medium, which was hugely popular for portraits in the 18th century. Chardin used this medium throughout the last decade of his life.

ANSWER: **pastels**

[10] This Venetian painter helped popularize the use of pastels as a medium, through her prolific production of miniature portraits for a variety of international clients. Her paintings also helped popularize the Rococo style of her friend Watteau.

ANSWER: Rosalba (Giovanna) **Carriera**

[10] At the behest of Marie-Antoinette, Vigée-Le Brun, Adélaïde Labille-Guiard, and two other women portraitists were all admitted to France's institution of *this* kind on the same day in 1783. The founding president of England's institution of this kind promoted the "Grand Style" in his *Discourses*.

ANSWER: Royal **Academy** of Arts [or **Académie** royale de peinture et de sculpture]

<Visual Art>

15. Magnus Hirschfeld's Scientific-Humanitarian Committee was one of the first organizations founded to promote the rights of these people. For 10 points each:

[10] Name these people whom Karl Heinrich Ulrichs theorized belonged to a third "Uranian" gender. Maximilian Harden accused the Prince of Eulenburg and Kuno von Moltke of being these people in 1907.

ANSWER: **homosexual** people [accept obvious equivalents such as **gay** or **queer** people]

[10] The gay anarchist Adolf Brand, whose "path over corpses" strategy involved outing prominent Germans, influenced this movement with his Community of Free Spirits. This collection of youth groups popular in pre-Nazi Germany focused on "back-to-nature" activities such as hiking.

ANSWER: **Wandervogel**

[10] In 1902, a member of this German family committed suicide after the revelation of his affair with an 18-year-old barber on Capri. His daughter Bertha oversaw the manufacture of this family's "Big Bertha" guns during World War I.

ANSWER: **Krupp**

<European History>

16. This phenomenon may arise due to "reciprocal pruning" of adjacent limbs, especially in environments prone to natural abrasions like frequent winds. For 10 points each:

[10] Name this phenomenon in which the above-ground parts of some species of tree do not touch one another, resulting in channel-like gaps through which light streams in.

ANSWER: **crown shyness** [or **canopy disengagement**, or **canopy shyness**, or **intercrown spacing**]

[10] A major theory explaining the development of crown shyness in some trees is mutual perception of neighboring trees at the photoreceptor phytochrome, which picks up on the large quantities of this specific spectrum of visible light with a wavelength between 710 and 850 nm, which is reflected during photosynthesis.

ANSWER: **far-red** light [or **deep-red** light; or other answers indicating that the light is **very red**; prompt on **red** light; do not accept or prompt on "infrared"]

[10] JJ Casal showed that this species grows leaves away from its kin, but shades unrelated neighbors. The *HOTHEAD* gene of this model plant probably doesn't actually exhibit non-Mendelian inheritance.

ANSWER: **Arabidopsis thaliana**

<Biology>

17. Gaston Paris called this poem the "voice of the nation" in a public lecture urging young men to emulate its heroes and fight the Franco-Prussian War. For 10 points each:

[10] The title character blows the horn Oliphant so hard that his temples fucking explode in the climactic scene of what poem?

ANSWER: *The **Song of Roland*** [or the ***Chanson de Roland***]

[10] Because the oldest surviving manuscript of *The Song of Roland* in Oxford's Bodleian Library mentions this person in its last line, critics have long debated whether he was the author or performer of the poem.

ANSWER: **Tuoldus**

[10] This literary technique, in which short independent clauses are placed side by side without using subordinating conjunctions to explicitly link them, is used extensively throughout *The Song of Roland*, such as with the lines: "Roland is dead, his soul with God in Heaven / The emperor arrives in Roncevals."

ANSWER: **parataxis**

<Miscellaneous Lit>

18. A classic experiment in this field involves observing the intermediates that are formed when iodine cyanide dissociates. For 10 points each:

[10] Name this field of chemistry that uses ultrafast laser pulses and pump-probe spectroscopy to study reactions at timescales of "10 to the minus-15" seconds.

ANSWER: **femtochemistry**

[10] Femtochemical techniques were used to elucidate the "hula-twist" mechanism for the photoisomerization of this compound, which consists of two phenyl groups bonded at either end of ethylene.

ANSWER: **stilbene**

[10] In one of Ahmed Zewail's foundational photochemistry experiments, an ultrashort laser pulse was fired a van der Waals complex of HI and this compound. The highest power continuous wave lasers make use of this linear gas.

ANSWER: **CO2** [or **carbon dioxide**]

<Chemistry>

19. Jonathan Edwards's tract on this heresy "unmask'd" accused John Locke of holding it, and Locke may have been influenced by the ideas on religious toleration of its advocate Samuel Przypkowski. For 10 points each:
[10] Identify this non-trinitarian heresy espoused by the Polish Brethren. It is named for a 16th-century Italian theologian who rejected the Trinity and moved to Transylvania where his ideas were adopted by the Unitarian Church.

ANSWER: **Socinianism** [or **Sozzini** or **Socinus**, named for Fausto Sozzini/Faustus Socinus]

[10] This final Jagiellonian king of Poland called a theological conference in 1565 to try to quash the debate over Socinianism. He oversaw the Union of Lublin that brought together Poland and Lithuania.

ANSWER: **Sigismund II Augustus** [**Zygmunt II August**; prompt on **Sigismund**]

[10] This non-conformist popularized Socinian thinking in his *Institutes of Natural and Revealed Religion* and *Letters to a Philosophical Unbeliever*, which greatly influenced Unitarianism. This scientist used the term "dephlogisticated air" to describe oxygen.

ANSWER: Joseph **Priestley**

<European History>

20. This symphony's opening slow movement climaxes with the full orchestra playing an "A" half-diminished chord on top of a G-sharp diminished seventh chord, all over a low C-sharp. For 10 points each:

[10] Name this five-movement symphony, which has two scherzos and a central movement labelled "Purgatorio."

ANSWER: Gustav **Mahler**'s **10th** Symphony

[10] In the manuscript of Mahler 10, *this* woman's name is scribbled under the final notes. Mahler composed the symphony in despair after learning of this woman's affair with Walter Gropius.

ANSWER: **Alma** Mahler [prompt on answers like "his wife"]

[10] This husband of Mahler's daughter Anna made completions of the first and third movements of Mahler 10 in 1924. An advertisement for the Nazi exhibition *Degenerate Music* depicts the title character of this composer's opera *Jonny spielt auf* playing a saxophone, even though he's a violinist.

ANSWER: Ernst **Krenek**

<Auditory Arts>