

## Fall Open 2019

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Tossups

1. According to a foundational 1974 paper by Herbert Freudenberger, this phenomenon can lead to increased risk-taking behaviors and a reliance on tranquilizers. Schaufeli (“SHAO-fel-lee”), Jackson, and Leiter helped modify an inventory evaluating this phenomenon into a “General Study” assessment, which includes a 5-item component that measures cynicism. A 2007 article by Demerouti et al. applied the JD-R model to this condition to explore its prevalence outside of the human services sector. This condition is the subject of a book about “the cost of (\*) caring” by Christina Maslach (“MAZ-lock”), who also co-created the MBI to assess this condition in terms of depersonalization, decreased personal accomplishment, and emotional exhaustion. Attempts to alleviate this condition often involve schedule adjustments that improve work-life balance. For 10 points, identify this condition that has increasingly caused doctors and members of others stressful professions to quit their jobs.

ANSWER: occupational burnout [or job burnout; prompt on stress or descriptions of burnout]

<INB, Other Academic>

2. Solos for this instrument bookend the *Burleske in D minor* by Richard Strauss. In the *Resurrection Symphony*, the section “Der grosse Appell” (“dair GRO-suh AHP-pell”) introduces a third musician on this instrument to play offstage for fourteen bars, and then leave. In the scherzo of the *Resurrection Symphony*, this instrument also plays the opening solo. In the scherzo (“sker-tso”) of Beethoven’s *Symphony No. 9*, two statements of the opening (\*) rhythmic motif are answered by this instrument. In the Classical period, this instrument was tuned exclusively to the tonic and dominant pitches of the piece being performed. But everything changed when the Dresden pedal system came about in the late 1800s, enabling this instrument to be re-tuned mid-performance. Pounding beats by this instrument punctuate the fanfare that opens Strauss’s *Also sprach Zarathustra* (“AL-zo sh’PRAK zara-THOO-struh”). For 10 points, name this percussion instrument which traditionally comprises four large drums.

ANSWER: timpani [or kettledrums]

<KL, Classical Music and Opera>

*Note to players: The answer to this question is a taxonomic clade, but you may give the namesake type genus. For example, if the answer is “Bigfootia,” then you may give “Bigfootus” or “Bigfoot.”*

3. An animal from this order produced the largest fossil to be found at the Wannagan Creek site. A 2015 text on the *Biology and Evolution* of this order was published by Gordon Grigg. Extensive phylogenies of this order have been given by Christopher Brochu. Paul Willis has suggested an arboreal lifestyle for several extinct Australian genii of this order, such as *Pallimnarchus* (“pallim-narkus”) and *Quinkana* (“kwin-KAH-nuh”). Blunt, hoof-like claws and ziphodont teeth were terrestrial adaptations of this order’s genus *Pristichampsus* (“pristee-CAMP-suss”). Extinct relatives of this order are commonly named with the suffix (\*) “-suchus” (“SOO-kuss”), but exceptions include the apex predator *Carnufex*. The clade *Brevirostres* (“BREV-ee-ROS-treez”) includes two of the three families in this order. Birds are the closest living relatives of these extant archosaurs, who include the caimans and the gharials. For 10 points, name this order whose namesake genus includes the largest extant reptile on Earth.

ANSWER: Crocodylia [or crocodilians; accept Crocodylus or crocodiles]

<KL, Biology>

4. Lines from four of this author’s poems are combined to produce a “pastiche” lacking in “structural coherence,” “logical development” and “unity of play” in the introduction to a 1997 book. In *Break, Blow,*

**Burn, Camille Paglia (“PAH-lia”) compared this poet to Darwin, as both see “humanity beset by impersonal forces.” The textbook *Understanding Poetry* opens by distilling the three central metaphors of a poem by this author into the simple message of “I am old.” This poet compared night to “death’s second self” in a poem set during (\*) “That time of year thou mayst in me behold.” The “art” of a set of poems by this author is the subject of a book by Helen Vendler. This poet wrote that, “so long as men can breathe, or eyes can see,” his “eternal lines” give “life to thee” in a poem that describes its subject as “more lovely and more temperate.” For 10 points, name this poet whose 154 sonnets include “Shall I compare thee to a summer’s day?”**

ANSWER: William Shakespeare

<INB, Non-epic Poetry>

**5. Hans Hickmann is best known for studies of music from this country. *Hasaballah* (“hah-sah-BUH-luh”) is a style of brass music from this country first created by a single military band. The backing track to “Big Pimpin’” is taken from a song first performed by a schistosomiasis (“SHISS-toh-so-miasis”)-stricken singer from this country known as “The Dark Nightingale.” A singer from this country often turned songs like a setting of the poem “The Ruins” into hour-long feats of vocal improv. Art forms from this home of (\*) ‘Abdel Ḥalīm Ḥāfez (“AB-dull huh-LEEM HAH-fez”) often come in elaborate “sharqī” and more populist “beledī” forms. Belly dancing was introduced to Europe through this country home to Umm Kalthūm (“OM kel-SOOM”). This country inspired the stage-name of a musician who claimed to be an alien from Saturn and led a band called the “Arkestra.” For 10 points, name this country that inspired Sun-Ra’s stage-name and that calls Umm Kalthūm its “Fourth Pyramid.”**

ANSWER: Egypt [or Arab Republic of Egypt; or Jumhūrīyyat Miṣr al-‘Arabīyya]

<JG, World Music>

**6. This industry’s early development in America was mostly spurred by Douglass Houghton’s (“HO-ton’s”) 1841 surveys. The largest union decertification in U.S. history followed a failed 1983 strike in this industry in Arizona. Enforcers of this industry and journalists favorable to it were called its namesake “collars.” The Seeberville Murders and the lynching of Frank Little occurred during strikes in this industry. A shout of “fire” at a Christmas party for strikers in this industry caused the Italian Hall Disaster during a string of (\*) strikes in this industry on the Keweenaw (“KEE-wee-naw”) Peninsula in Michigan. William A. Clark, Marcus Daly, and F. Augustus Heinze battled to control this industry in a major center of it that saw 1914 labor riots between the WFM and IWW before the creation of the Anaconda Mining Company. For 10 points, name this industry, dominated in the Gilded Age by its three namesake “kings” in Butte, Montana.**

ANSWER: copper mining [prompt on mining and word forms; prompt on metal or smelting]

<JG, US History>

**7. A university named for this mountain range is connected to the city of Danyor by a wooden suspension bridge over the Hunza River only usable by pedestrians and motorcycles. A route through this mountain range was blocked for five years after a landslide caused the formation of Attabad Lake in 2010. A visit to this range is described in the book *Three Cups of Tea* and inspired its author Greg Mortenson to establish several schools in the area. The incredibly steep Trango Towers are part of a subgroup of this range called the Baltoro Muztagh. A survey by Thomas Montgomerie gave many of this range's peaks their (\*) short names. Much of the province of Gilgit-Baltistan is covered by this range, where Operation Meghdoot allowed one country to claim the Siachen (“s’YAH-chen”) Glacier. Kashgar and Hasan Abdal are connected by a high-altitude highway named for this range. For 10 points, what range in northern Pakistan contains the world's second-tallest mountain, K2?**

ANSWER: Karakoram Range

<KS, Geography>

8. In an article titled for the century *preceding* this one, H. F. Schurmann linked the rise of church power in this century to letters included in the “Short Collection.” An unsuccessful uprising that took place in this century’s 27<sup>th</sup> year nevertheless prompted an empire to withdraw its *baskaki* in favor of indirect tax collection. Charles Halperin argued that a 20-year period of “Great Troubles” in this century enabled the rise of a polity that had earlier been led by an opportunistic ruler nicknamed “Moneybags.” In this century, a Prince of (\*) Vladimir who received two competing *yarlyks* emerged victorious at a battle that earned him the epithet “of the Don River.” In the latter half of this century, a series of “palace coups” in Sarai, coupled with Mamai’s defeat at the Battle of Kulikovo, led to an increase in medieval Muscovite power. For 10 points, Russia spent the entirety of what century under the Mongol yoke following its invasion the previous century by Batu Khan?  
ANSWER: 14th century AD [or 1300s]  
<INB, European History (Continental)>

9. In a play, the fact that this event *does* happen prompted scholars to label its subject’s earlier monologue the “deception speech.” A black-figure vase painting by Exekias (“ex-EE-kee-us”) depicts its subject kneeling next to a palm tree in preparation for this action. In Ovid’s *Metamorphoses*, this event produces a purple flower whose petals are arranged in the shape of the Greek word for a “cry of woe.” A messenger relays a prophecy stating that this action will not occur so long as its perpetrator remains in his tent for an entire day; unfortunately, its perpetrator already left his slave-wife (\*) Tecmessa after giving his seven-layered ox-hide shield to his son Eurysaces (“yoo-ree-SAH-keez”). This action occurs after its subject’s temporary bout of insanity passes and he realizes that he shamefully massacred a herd of sheep and their shepherds. For 10 points, identify this action that occurs after Agamemnon awards the armor of Achilles to Odysseus, instead of to a brave son of Telamon.  
ANSWER: the suicide of Ajax the Greater [or the death of Ajax; accept equivalents, such as “Ajax impaling himself on his sword;” do NOT accept answers mentioning “Ajax the Lesser” or the “Locrian Ajax”]  
<INB, Mythology>

10. Douglas Schmidt, Herb Sutter, and Robert Martin all served as the editor of an influential publication about the design of this language called [*this language*] *Report*. Scott Meyers is the author of the *Effective* series of textbooks on this language. A principle that *originated* in this language that binds the life cycle of a resource to the lifetime of an object is called RAII (“R-A-double-I”). The rule of three for writing safe code in this language was extended to the rule of five when move semantics were introduced. So-called “long-distance” uses of the (\*) friend specifier in this language break encapsulation. Private inheritance in this language allows classes to reuse implementation without inheriting an interface. Declarations of “using namespace std (“S-T-D”)” can cause name conflict in this language, especially when done in header files. In its 2011 standard, this language added smart pointers. For 10 points, name this object-oriented language that extends a previous language.  
ANSWER: C++ (“C-plus-plus”) (Robert Martin is “Uncle Bob”)  
<JS, Computer Science>

11. In a novel, the sight of children learning to disassemble these objects on a field trip reminds the narrator of a farm where girls removed the innards from still-living chickens. In that novel, the narrator attributes his having shrunk four inches to a “sword of Damocles”-esque two-ton “canopy” of these objects that fill up his entire apartment. In a novel titled for one of these objects, Michelle and Gabrielle agree that the title creature of Ionesco’s *Rhinoceros* was picked for “comic effect.” Hanta spends 35 years “rescuing” these objects from a (\*) trash compactor in Bohumil Hrabal’s novel *Too Loud a Solitude*. A novel titled for one of these objects describes the building where Kafka’s father worked and where Vlado Clementis later gave Klement Gottwald a fur hat in its second of two sections titled “The Angels,” the latter of which follows the section “Litost.” For 10 points, vignettes about humor and memory fill a novel titled for what sort of object of *Laughter and Forgetting* by Milan Kundera?  
ANSWER: books [or novels; or philosophical texts; accept other equivalents]  
<INB, Long Fiction>

12. Park et al. observed differences in exfoliation when using this molecule to reduce oxides of graphite and graphene. This molecule is protonated in a sulfate salt used in the synthesis of a polymer that standardizes turbidity units known as formazin. The EPR spectroscopy standard and stable free radical DPPH becomes a derivative of this compound when reduced. This non-aromatic molecule is the intermediate in the anammox pathway and is substituted in a compound that reacts with sugars to produce osazones. This compound is substituted with a (\*) 2,4-dinitrophenyl (“two-four-dye-nitro-phenyl”) group in a reagent used to distinguish between aldehydes and ketones. An *N*-alkyl phthalimide (“f’THAL-uh-myde”) is cleaved via either a base or this compound to produce a primary amine in the Gabriel synthesis. This compound is the reagent in the first step of the Wolff-Kishner reduction. For 10 points, name this compound with formula N<sub>2</sub>H<sub>4</sub>.

ANSWER: hydrazine [accept phenylhydrazine; accept N<sub>2</sub>H<sub>4</sub> before mentioned]

<AK, Chemistry>

13. In a book titled for *Living with* these events, Koritha Mitchell suggested that their inclusion in contemporary plays encouraged people to partake in “embodied practices of... belonging.” The main character’s widowed mother reminisces about the “faint rustle of leaves” that followed one of these events in the play *Rachel*. A sonnet titled for one of these events describes its future participants as “little lads” that “dance around the dreadful thing in fiendish glee.” The memory of one of these events from his childhood arouses a (\*) sheriff as he sleeps with his wife Grace in the story “Going to Meet the Man.” The victim of one of these events compares his face to a “stony skull staring / in yellow surprise at the sun” in a graphic poem that inspired the title of Ta-Nehisi (“TAH-nuh-HAH-see”) Coates’s book *Between the World and Me*. For 10 points, Tom Robinson narrowly avoids what sort of event at the hands of a mob in *To Kill a Mockingbird*?

ANSWER: lynchings [accept *Living with* Lynchings or “The Lynching”]

<INB, Miscellaneous Lit>

14. In his book *The Renaissance*, Walter Pater praised a painting of this object that was then attributed to da Vinci, and described its subject as one that “may well be left to the beautiful verses of Shelley.” A short lyric that instructs the viewer to “Flee” was written by the poet Gaspare (“GAS-pah-reh”) Murtola in response to a painting of this object. An artist had his apprentices break down wooden furniture for kindling in order to generate metal hot enough to create a statue partly titled for this object, as recounted in his *Vita*. An otherwise unblemished green background is interrupted by spurts of (\*) blood emerging from this object in a circular oil painting by Caravaggio. This object decorates the title leader’s breastplate in the Alexander Mosaic. The Loggia dei Lanzi (“LOD-juh day LAN-tsee”) houses a statue of a hero brandishing a sword in one hand and holding up this object in the other. For 10 points, a Benvenuto Cellini (“chel-LEE-nee”) sculpture depicts Perseus lifting up what severed, snake-covered object?

ANSWER: the head of Medusa [or *Perseus with the* Head of Medusa]

<INB, Painting and Sculpture>

15. As rear admiral of this navy, John Pascoe Grenfell oversaw one of its steam frigates as it rescued passengers from the burning ship *Ocean Monarch*. The liberal use of corporal punishment by this navy’s officers culminated in a mutiny of several thousand sailors after one of them received 250 whiplashes. Another revolt within this navy forced it to rely on Charles Flint’s twelve-ship “dynamite squadron,” which was insultingly mocked as the “cardboard squadron” by opponents of “Iron Marshal” (\*) Peixoto (“pay-SHO-too”). Francisco Barroso’s ingenious ramming tactics enabled this navy’s decisive victory at Riachuelo (“ria-ch’WAY-lo”). Following a period of decline, this navy resurged with the 1906 construction of two dreadnoughts. After 1888, this navy recruited many ex-slaves who were freed by the “Golden Law.” For 10 points, identify this navy that commissioned the *Minas Gerais* (“MEE-nuzz zehh-RICE”) and *São Paulo*.

ANSWER: Brazilian Navy [or the Imperial Navy of Brazil; prompt on “Imperial Navy” with “of which country?”]

<INB, Other History>

16. A book by this thinker features a passage where he meets a god named Izdubar, who dies and is reborn as an egg. This thinker discussed the “union of extreme opposites” in a chapter considering Rabbinic and astrological explanations for “The Sign of the Fishes” in a book on the “Phenomenology of the Self.” This thinker, who names the first codex of the Nag-Hammadi library, wrote a book that was left unpublished until its 2009 translation by Sonu Shamdasani. This author of *Psychology and Religion* wrote a collection of seven texts he attributed to Basilides (“bass-SIL-lee-deez”) of Alexandria known as his (\*) *Seven Sermons to the Dead*. This author produced illustrations for a leather-bound folio known as the *Liber Novus*, or *Red Book*, and theorized a fourth evil aspect of God in *Answer to Job*. For 10 points, name this Swiss thinker whose interpretation of Christianity built on psychological concepts such as archetypes.

ANSWER: Carl Jung [or Carl Gustav Jung]

<AK, Religion>

17. Richard Rennison gained fame for incorporating an anvil into this action. The “Farran exemption” concerns a 1772 law regulating this action that was inspired by an event involving Anne Horton and was repealed in 2015. Indices recording this practice were compiled by Percival Boyd and Messrs. Pallot & Co. A building in London named after Peter of Savoy was a common site for this practice until the passage of Lord Hardwicke’s 1753 act regulating it, after which the border village of (\*) Gretna Green gained a reputation for this practice. *De praesenti* and *de futuro* were two common types of this practice, which was historically referred to as “handfasting.” Commoners often visited London’s Fleet Prison to engage in a “clandestine” form of this practice that did not require the issuing of banns or a license from the church. For 10 points, “jumping the broom” was once synonymous in England with what action, which Queen Victoria and Prince Albert did in 1840?

ANSWER: marriage [or weddings]

<KS, European History (Commonwealth, Ancient, Historiography)>

18. The density of states of these materials depends on the fraction of floppy modes in Naumis (“now-MEES”) models. The Hrubý coefficient is a figure of merit for the formation of these materials equal to “ $T_{\text{sub-}x} \text{ minus } T_{\text{sub-}g}$ ” over “ $T_{\text{sub-}m} \text{ minus } T_{\text{sub-}x}$ .” The “eight minus  $n$ ” rule characterizes these materials’ insensitivity to impurities. Topological constraint theory is used to determine the structure of these materials. Cation polyhedra must share corners in a network theory of these materials developed by (\*) Zachariassen. On DSC curves, the formation of one these materials manifests as a sharp step down in heat flow with a small change in temperature. An anomaly occurs in the borate type of these materials when the addition of alkali ions increases the formation of non-bonding oxygens. The transition from liquids to these amorphous materials forms ideal states when the cooling rate is infinitely slow. For 10 points, what solids that don’t form ordered structures include SiO<sub>2</sub> (“S-I-O-two”)?

ANSWER: glasses [prompt on amorphous materials]

<JS, Physics>

19. One of two dueling 1950 Aristotelian Society papers on this concept attacks theories of it that rely on “cat-on-the-mat” examples. Dorothy Grover equates this concept to anaphora in a “prosentential” theory of it. This is the *first* title concept of a book that uses *Euthyphro* (“YOO-thiff-ro”) to model the relation of “superassertibility” to this concept. That Crispin Wright book argues for a “pluralist” view of this concept. P. F. Strawson used a “performative” theory of it in a debate against, ironically, J. L. Austin. This (\*) concept is often characterized with “equivalence schema,” and it is approximated by Karl Popper’s idea of “verisimilitude.” This concept must hold of a statement in both the object language and metalanguage (“meta-language”) in Tarski’s Convention T. “Logical validity” means that a conclusion with this property is entailed when all premises have this property. For 10 points, name this concept that holds by a “correspondence theory” when a statement matches external reality.

ANSWER: **truth** [accept word forms] (The “dueling papers” are the Strawson v. Austin debate: “cat-on-the-mat” are what Strawson calls the only examples that he thinks correspondence theories can deal with.)

<JG, Philosophy>

20. A character who describes this activity as an “erotic thrill” makes repeated use of the conversation starter, “Did you know, by the way, that a race of dwarves once covered the earth?” Three different versions of Chuck participate in this activity during first dates with Annie, Amy, and Alma in *Foreplay, or The Art of the Fugue* by David Ives. In another play, the vice president of a bank engages in this activity with Bernie Smith, for whom he agrees to serve as the “black face” in the purchase of WBTZ. An object intended for this activity is used by (\*) Lee to smash Austin’s typewriter near the end of Sam Shepard’s *True West*. A play titled for this activity ends as Roosevelt Hicks informs the main character of the imminent demolition of the house at 1839 Wiley. That play titled for this activity follows Harmond Wilks as he vies for the office of mayor in the 1990s. For 10 points, the final entry in August Wilson’s *Pittsburgh Cycle* contains a radio broadcast about which activity?

ANSWER: **golf** [accept miniature **golf** or Radio **Golf**]

<INB, Drama>

## Bonuses

1. Answer the following about operations during World War II that were never executed, for 10 points each.

[10] The large-scale amphibious invasion planned by Operation Sea Lion was canceled due to this Nazi air force's failure to defeat the RAF in the Battle of Britain.

ANSWER: **Luftwaffe** ("luft-VAH-fuh")

[10] The Nazis' capture of Paris uncovered secret plans for Operation Pike, which would have bombed cities in this mountain range. The Nazis' own Operation Edelweiss ("ED-el-vice") attempted to secure oil fields surrounding this range.

ANSWER: **Caucasus** Mountains

[10] Operation Alacrity outlined a plan for a joint Allied invasion of this territory with the intent of building air bases. A division of the U.S. Air Force still operates from this territory's Lajes ("LAH-zhizh") Field.

ANSWER: the **Azores**

<KS, European History (Continental)>

2. Angela Harris paired race with this viewpoint for an essay in the Stanford Law Review, while a "strategic" form of this viewpoint was endorsed and then rejected by Gayatri Spivak. For 10 points each:

[10] Name this viewpoint which affirms the existence of innate and immutable characteristics in individuals based on concepts such as biology or gender.

ANSWER: **essentialism** [or biological **essentialism**; or gender **essentialism**]

[10] Kimberlé Crenshaw introduced this concept of critical race theory, which describes how an individual's experience is affected by the overlapping of different minority statuses for concepts such as race or gender.

ANSWER: **intersectionality** [accept word forms]

[10] Daniel Farber and Suzanna Sherry have criticized the use of this technique by critical race theorists, which was introduced in a 1989 paper by Richard Delgado that is subtitled "A Plea for Narrative."

ANSWER: **storytelling** [or **counter-storytelling**]

<AK, Sociology>

3. Andrew Wylie served as this author's literary agent. For 10 points each:

[10] Identify this author, whose alter ego Arturo appears in his novel *Distant Star*. Four scholars studying the reclusive Benno von Archimboldi appear in "The Part about the Critics," the first section of his final five-part novel.

ANSWER: Roberto **Bolaño** [or Roberto **Bolaño** Ávalos]

[10] Prior to Wylie, Bolaño was represented by this Catalan publicist, whose push for translations of books by her clients Julio Cortázar and Gabriel García Márquez helped propel the Latin American Boom.

ANSWER: Carmen **Balcells** [or Carmen **Balcells** Segala]

[10] When he learned of Balcells's death in 2015, this author said, "Carmen dearest, [I'll] see you soon." This Peruvian author wrote *Aunt Julia and the Scriptwriter*.

ANSWER: Mario **Vargas Llosa**

<INB, Long Fiction>

4. This Nahuatl word denotes the aspect of the soul imbibed in blood and used in Aztec sacrifice. For 10 points each:

[10] Give this Nahuatl word that also means "day." The 260-day calendar is called the *pohualli* ("poh-WAHL-lee") of this term, and divinatory texts are called the *amatl* ("AH-mah-tull") of this term.

ANSWER: **tonal** [or **tonalli**]

[10] For example, the day of *itzcuīntli* ("eets-CWEEN-t'lee") evokes this animal exemplified by the waterproof spike-skinned human-eating ahuizotl ("ah-WEE-soh-tull"). These sacred animals guide souls to the Aztec afterlife.

ANSWER: **dog** [or **chichi**; accept **covote** or **coyōtl**; accept **jackal**]

[10] This neighbouring civilisation had a 260-day calendar called the *tzolk'in* ("tsol-KEEN"). The most recent *b'akt'un* ("bahk-TOON") of their Long Count calendar concluded with the end of our world on 21 December 2012.

ANSWER: **Maya**  
<KL, Mythology>

5. For 10 points each, identify these things about mineral identification.

[10] A useful identification technique is to measure the intersection angle between cleavages. Cleavages and other crystal planes are written using this representation in which the basal cleavage plane is denoted {001} (“zero-zero-one”).

ANSWER: **Miller indices** [or **Miller index**]

[10] Another technique is to rotate the mineral under a microscope until this phenomenon is seen, then rotate the stage until the cleavage aligns with the cross-wires and report the difference between the two rotations. This phenomenon occurs at four different positions as an anisotropic mineral is rotated through 360°.

ANSWER: **extinction**

[10] Perhaps the most important mineral test is to scratch the mineral with reference materials to determine its value for this property measured on the Mohs scale.

ANSWER: **hardness**

<JS, Earth Science>

6. Carlo Aymonino installed a glass roof over a recently remodeled room in these museums to allow sunlight to illuminate the only surviving “*equi magna*” sculpture in the world. For 10 points each:

[10] Identify these museums whose two wings are connected by an underground “epigraphy gallery” and separated by an oval courtyard whose center bears a replica of the equestrian statue of Marcus Aurelius kept inside.

ANSWER: **Capitoline** Museums [or Musei **Capitolini**]

[10] The Capitoline Museums house a bronze statue of one of these animals suckled by Romulus and Remus, which radiometric dating revealed was actually produced in around AD 1100 rather than in antiquity.

ANSWER: Capitoline **Wolf**

[10] Yet another artwork named after the Capitoline Hill is a marble statue of a male nude, once thought to depict Antinous, which was unearthed at this complex in Tivoli. A marble copy of *Discobolus* was found here in the 1790s.

ANSWER: **Hadrian’s Villa** [or **Villa Adriana**]

<INB, Architecture>

7. A stretcher-bound man slowly realizes that the hospital he’s in was his former art school in “Stranger, Bear Word to the Spartans We...”, a story written by an author from this movement. For 10 points each:

[10] Identify this literary movement. In a story by another author from this movement, an elderly woman wakes up in the middle of the night to discover her husband sneaking an extra slice of rationed bread.

ANSWER: **rubble** literature [or **Trümmerliteratur**]

[10] In “Stranger, Bear Words to the Spartans We...”, the narrator observes the title truncated phrase on one of these objects. In Albert Camus’s “The Guest,” the lines “You handed over our brother. You will pay for this” appear written on one of these objects.

ANSWER: **chalkboard**s [or **blackboard**s]

[10] This foremost author of German “rubble literature” wrote “Stranger, Bear Word to the Spartans We...” He also chronicled three generations of the Faehmel family in *Billiards at Half-Past Nine*.

ANSWER: Heinrich **Böll** (“berl” or “boll”) [or Heinrich Theodor **Böll**]

<INB, Short Fiction>

8. The man who accomplished this feat followed it up by writing a poem which ends, “The mountain goddess if she is still there / Will marvel at a world so changed.” For 10 points each:

[10] Identify this feat performed by a world leader once in 1956 and again in 1966. During its second instance, the 73-year-old who performed this feat supposedly broke the world speed record by traveling at the impossibly speedy pace of seven minutes per mile.

ANSWER: (Mao Zedong) swimming across the Yangtze (“yang-tsee”) River [accept Chang Jiang in place of “Yangtze”]

[10] The bolstering of cults of personality by swimming didn’t end with Mao; this “paramount leader” from 1978 to 1992 supposedly went for a dip in the pool after suppressing the Tiananmen Square protests.

ANSWER: Deng Xiaoping (“shao-ping”)

[10] Mao’s own cult of personality was bolstered by this politician, who delivered a speech praising Mao as a genius. This man helped assemble and publish “quotations from Chairman Mao Tse-tung” into the *Little Red Book*.

ANSWER: Lin Biao

<INB, Other History>

9. Answer the following about climate change policy, for 10 points each.

[10] The WWF, UNEP, and WEF have all called for one of these plans “for Nature” to push for public-private partnerships for biodiversity conservation. A “Green” one of these plans is championed by Justice Democrats.

ANSWER: New Deal [accept Green New Deal; accept New Deal for Nature; accept New Deal for Nature and People]

[10] Some argue that the movement for a New Deal for Nature and the Green New Deal are part of a larger campaign to enact this policy on a global scale. This four-word policy of rewarding whoever preserves or maintains nature relies on the commodification of biodiversity and living things.

ANSWER: payments for ecosystem services [or PES; accept payments for environmental services]

[10] The Green New Deal is criticized by economists who prefer carbon pricing. In this carbon pricing mechanism, entities pay an amount based off of measured carbon dioxide equivalents toward greenhouse gas reduction projects.

ANSWER: carbon offsets

<JS, Current Events>

10. A technique known as “heart cutting” involves performing this process two or more times in succession. For 10 points each:

[10] Name this process that occurs in isocratic or gradient types in one technique. A tradeoff resulting in either peak broadening or weak separation in strongly or weakly bound species is the “general problem” of this process.

ANSWER: elution

[10] Temperature programming can solve the general elution problem in this form of chromatography, in which the analyte is vaporized.

ANSWER: gas chromatography [or GC]

[10] Along with flame ionization detectors, these are the most common detectors for elution in gas chromatography. These detectors use a Wheatstone bridge with a chamber containing a reference gas to measure a namesake quantity.

ANSWER: thermal conductivity detectors [or TCDs; or katharometers]

<AK, Chemistry>

11. One of these artworks is attributed to the awesomely named Master of the Symbolic Execution, and appropriately shows an executioner with six severed heads on its lid. For 10 points each:

[10] Name these objects produced by the Sapi people of Sierra Leone. These ivory objects often featured zigzagging motifs and human figures that combined African and European representational styles.

ANSWER: saltcellars

[10] Unlike the Sapi saltcellars, so called “Bronze Heads” found in this modern day country’s ancient city of Ife (“EE-fay”) did not display European influence. Ife was a major city of the Yoruban ethnic group primarily located in this country.

ANSWER: Nigeria [or the Federal Republic of Nigeria]

[10] This city in the Mali empire is known for its terracotta statuettes of seated figures, and was also the site of a Great Mosque known for its striking *toron* that project out from its earthen surface.

ANSWER: Djenné (“JEN-nay”)

<AK, Painting and Sculpture>

12. Much of Steven Gubser's research is dedicated to this result, the first physical application of which was the result that the ratio of shear viscosity to entropy density is constant at large 't Hooft ("teh hooft") coupling. For 10 points each:

[10] Name this result. This result was stated in a paper that includes the condition that the coupling "little- $g$  times capital- $N$ " be much greater than one, where capital- $N$  is equal to a large number of D3 objects in a type IIB ("two-B") theory.

ANSWER: **AdS/CFT** correspondence [or **anti-de Sitter/conformal field theory** correspondence; accept **gauge-gravity** duality; accept **Maldacena** duality]

[10] By the AdS/CFT ("A-D-S-C-F-T") correspondence, string theory on  $AdS_5 \times S^5$  ("A-D-S-five cross S-five") is equivalent to a four-dimensional supersymmetric one of these theories. Finding one of these doubly-eponymous theories with a nonzero mass gap is a Millennium Prize Problem.

ANSWER: **Yang-Mills** theories

[10] Yang-Mills theories are non-abelian gauge theories because the group operation of the symmetry groups lacks this property. The cross product has the "anti-" form of this property, because " $x$  cross  $y$ " equals "negative- $y$  cross  $x$ ".

ANSWER: **commutative** [accept anti**commutative**]

<AK, Physics>

13. A teacher known only as "Monsieur Chouchani" inspired this philosopher to apply modern phenomenology and his theory of "ethics as first philosophy" to traditional Talmudic scholarship. For 10 points each:

[10] Name this author of *Nine Talmudic Readings*. The essay "Violence and Metaphysics" posits a tension between this thinker's privileging of orality over sight and "light" works like *Totality and Infinity*.

ANSWER: Emmanuel **Levinas**

[10] "Violence and Metaphysics" joins "Structure, Sign, and Play" and "Cogito and the History of Madness" in this philosopher's collection *Writing and Difference*. This philosopher wrote *Of Grammatology*.

ANSWER: Jacques **Derrida** [or Jackie Élie **Derrida**]

[10] This British continental philosopher argued that Levinasian ethical commitments are central to Derrida's work in *The Ethics of Deconstruction*. This moderator of "The Stone" roots philosophical inquiry in disappointment.

ANSWER: Simon **Critchley**

<JG, Philosophy>

14. This man's grandson Gary Rapoport expressed interest in receiving compensation for the seizure of the Hotel Riviera, from which this man made three million dollars. For 10 points each:

[10] Name this member of the Jewish mob, nicknamed the "Mob's Accountant," who took over Bugsy Siegel's Flamingo hotel after convening America's crime bosses to the Havana Conference alongside Lucky Luciano.

ANSWER: Meyer **Lansky** [or Meier **Suchowlański**]

[10] Lansky served as an unofficial "gambling minister" to this president of Cuba, whose overthrow in the 1959 revolution led to the nationalization of Cuba's casinos.

ANSWER: Fulgencio **Batista** [or Fulgencio **Batista** y Zaldívar; or Rubén **Zaldivar**]

[10] This leader of the Federal Bureau of Narcotics had Harry S. Truman block all shipments of prescription drugs to Cuba upon learning of Luciano's presence there. This notorious racist published several "gore files" detailing crimes that were supposedly caused by marijuana usage.

ANSWER: Harry Jacob **Anslinger**

<KS, US History>

15. Pulse-chase experiments are a powerful technique used to study biochemical pathways, for 10 points each.

[10] With Philip Siekevitz, George Palade used pulse-labeled leucine (“LOO-seen”) to study the mechanism of this pathway. When this pathway occurs in response to external signals it is said to be “regulated” rather than “constitutive.”

ANSWER: **secretory** pathway [or **secretion**; accept **exocytosis**]

[10] Many pulse-chase experiments radioactively label this amino acid because it is easily detected and not synthesized by human cells de novo. A molecule consisting of this amino acid bound to adenosine serves as a major donor in methylation (“meth-ell-ay-shun”) reactions.

ANSWER: **methionine** [accept **Met** or **M**; accept S-adenosyl**methionine**, **SAM-e**, or **AdoMet**; accept 35S **methionine** or 35S-**Met**]

[10] Meselson and Stahl’s pulse-chase experiment showed that DNA replication was semi-conservative, as had been predicted by this *pair* of scientists who used Rosalind Franklin’s data to determine the structure of DNA.

ANSWER: James **Watson** AND Francis **Crick** [prompt on partial answers with “We need *both* scientists.”]

<JS, Biology>

16. A poem inspired by this event was first published in 1790 as a Pindaric ode but was revised intermittently until its final publication in 1834. For 10 points each:

[10] Identify this event that inspired a John Keats sonnet describing its subject as a “half-blown flow’ret which cold blasts amate.”

ANSWER: the **death** of Thomas **Chatterton**

[10] This poet wrote of Chatterton’s “sleepless soul,” and of how the lives of poets “begin in gladness” but end in “despondency and madness” in his poem “Resolution and Independence.”

ANSWER: William **Wordsworth**

[10] This other poet described Chatterton, who “rose pale, his solemn agony... not yet faded from him,” in a pastoral elegy lamenting John Keats’s early death titled *Adonais* (“AD-oh-NAY-iss”).

ANSWER: Percy Bysshe **Shelley**

<INB, Non-epic Poetry>

17. As in its ancestor tradition of *Ifá*, priests in this tradition often conduct divinations or simply provide guidance by interpreting intricate, orally transmitted parables called *patakís*. For 10 points each:

[10] Name this Afro-Cuban tradition, which syncretizes Yoruba, traditions with Catholic saint-veneration in its worship of *orishas*. Its practice of chicken-sacrifice in its divination has occasionally proved controversial.

ANSWER: **Santería** [accept La **Regla de Ocha** or **Lucumí**; prompt on “Way of the Saints”]

[10] This Afro-Cuban tradition uses *nganga* (“ung-GANG-gah”), cup-shaped altars holding bundles of sticks, to contact spirits called *nkisis* (“ung-KEE-seess”). Branches of this Kongo-derived tradition that refuse to Christianize are amusingly termed “Jewish.”

ANSWER: **Palo** [accept any word forms of **Palero**; prompt on Las **Reglas de Kongo**]

[10] This non-Cuban tradition venerates both *nkisis* and *orishas*, with emphasis shifting between its “nations” like the “Jeje” and “Ketu.” This dance-heavy tradition contrasts with younger *macumba*-derived faiths like Umbanda.

ANSWER: **Candomblé** [accept “**dance in honor of the gods**” and prompt on partial answer; prompt on *povo de santo* or “*people of the saints*” and equivalents]

<JG, Religion>

18. Act III of this opera begins with drumming soldiers singing “*Prenant son sabre de bataille*” (“pruh-NON sawn SAH-bruh duh bah-TYE”), in contrast to peaceful schoolgirls singing “*Vierge Marie, soyez bénie*” (“vee-ERZH mah-REE, swah-YAY bay-NEE”). For 10 points each:

[10] Name this lengthy opera which is frequently performed only up to Act Four, in which swords are blessed by murderous priests, one final love duet is sung, and a distant bell tolls forebodingly.

ANSWER: *Les* **Huguenots** [or *The* **Huguenots**]

[10] *Les Huguenots* was written by this German-born French Jewish composer who took an Italian first name.

ANSWER: Giacomo **Meyerbeer** [or Jacob Liebmann **Beer**]

[10] This Protestant protagonist of *Les Huguenots* is unable to reconcile his love for the Catholic Valentine, for they are both murdered in the St. Bartholomew's Day massacre.

ANSWER: **Raoul**

<KL, Classical Music and Opera>

19. In 2007, André Aciman received one of these awards for a novel about a summer fling between the teenager Elio and the doctoral student Oliver, titled *Call Me by Your Name*. For 10 points each:

[10] Identify these annual awards for exemplary LGBTQ literature. Colm Tóibín ("toh-BEAN") is the only author to have received two of these awards in the "Gay Fiction" category, for his novel *The Master* and collection *The Empty Family*.

ANSWER: **Lambda** Literary Awards [or **Lammys**]

[10] The Lambda Literary Awards discontinued their prize for literature addressing this condition, which afflicts Prior Walter and Roy Cohn in Tony Kushner's play *Angels in America*.

ANSWER: **AIDS** [accept **HIV**]

[10] The 2016 Lammy for Drama was awarded to a playwright with this surname for his play *Barbecue/Bootycandy*. A poet with this surname described a Friday afternoon "three days after Bastille day" in "The Day Lady Died."

ANSWER: **O'Hara** [accept Robert **O'Hara** or Frank **O'Hara**]

<INB, Miscellaneous Lit>

20. The location where Megaran settlers established this colony was so terrible that the Oracle of Delphi called it the "city of the blind." For 10 points each:

[10] Identify this colony which nonetheless flourished throughout the seventh and sixth centuries BC, until it was captured by the Persian satrap Otanes ("OH-tah-neeZ"). According to Livy, it was previously named Procerastis ("pro-ser-ASS-tiss") and Colpusa.

ANSWER: **Chalcedon**

[10] The Megarans made a much better decision when they established this colony across the Bosphorus from Chalcedon. Its harbor was formed by a natural inlet known as the Golden Horn.

ANSWER: **Byzantium**

[10] The story of the Delphic oracle and Chalcedon, as well as a description of the Byzantine harbor as a "stag's horn," appears in this Greek writer's massive *Geographica*.

ANSWER: **Strabo**

<INB, European History (Commonwealth, Ancient, Historiography)>