

ACF Fall 2019

Packet by MIT A, Oxford A, Rutgers B

Edited by Rahul Keyal, Ganon Evans, Justin French, Halle Friedman, Katherine Lei, Caroline Mao, Ben Miller, Tracy Mirkin, Clark Smith, Kevin Yu

Tossups

1. While hunting, one ruler of this name decided to begin a resistance campaign after Henry II of France accidentally revealed a plot to genocide that ruler's countrymen. Balthasar Gérard ("BAL-tah-sar zhay-RARR") was brutally executed for shooting that ruler of this name, who had earlier financed many privateers known as "sea beggars." Along with a man known as "the Silent," a ruler of this name was supported by the "Immortal Seven" during a conflict that included his victory at the Battle of the Boyne. Along with his wife Mary, a prince of this name invaded England in 1688, thereby deposing James II during the Glorious Revolution. For 10 points, give this name of numerous Dutch rulers from the House of Orange.

ANSWER: William [or Willem; accept William the Silent; accept William of Orange]
<European History>

2. One of this artist's early Post-Impressionist works is a painting of a leafless red tree against a blue sky, titled *Evening*. This artist's paintings served as the inspiration for a 1965 collection of dresses by Yves Saint Laurent ("EEV san lo-RON"). This painter used diamond-shaped canvases for his "lozenge" paintings. This artist used the term "Neoplasticism" for the style of his most famous works, which completely reject diagonal lines in favor of red, yellow, and blue rectangles and black lines and grids. For 10 points, name this Dutch founder of De Stijl ("duh style") who abstractly depicted New York City in his painting *Broadway Boogie-Woogie*.

ANSWER: Piet Mondrian ("peet MON-dree-ahn") [or Pieter Cornelis Mondriaan]
<Painting/Sculpture>

3. This poet was inspired by an incident in which Assia Wevill ("WEV-ill") pretended to be a man on the telephone to write the line, "The black telephone's off at the root, / The voices just can't worm through." A poem by this author lists "A cake of soap, / A wedding ring, / A gold filling" and says "they had to pick the worms off me like sticky pearls." That poem by this author ends, "Out of the ash / I rise with my red hair / And I eat men like air." This poet's description of "a man in black with a Meinkampf look" alludes to Ted Hughes, who reordered the poems in her collection *Ariel*. For 10 points, name this Confessional poet who wrote about Esther Greenwood in *The Bell Jar*.

ANSWER: Sylvia Plath [or Victoria Lucas]
<American Literature>

4. Greg Mankiw ("MAN-kyoo") debated Jared Bernstein on this phenomenon after writing that it wasn't a problem in a paper "Defending" its primary beneficiaries. The hypothesis that the severity of this condition first increases, then decreases as an economy develops is captured by Simon Kuznets's namesake curve. The fact that r is greater than g drives the spread of this state of affairs according to a 2013 book. This condition may be quantified with the Gini ("JEE-nee") coefficient. As progressive taxes decrease this phenomenon, Thomas Piketty ("toh-MAH pee-keh-TEE") has recommended a top tax rate of over fifty percent. For 10 points, identify this disparity in capital between the rich and poor in an economy.

ANSWER: income inequality [or wealth inequality; or economic inequality] (Mankiw's paper is "Defending the One Percent," and the 2013 book is *Capital in the Twenty-First Century*.)
<Social Science>

5. A left-wing candidate in this election was mocked after the "Guru letters" that he wrote to a Russian spiritualist were published. Another candidate in this election said "you can't shoot an idea with a gun" during a primary debate with Harold Stassen. During this election, Hubert Humphrey secured the addition of a civil rights plank to the

Democratic platform, leading Southerners to nominate Strom Thurmond for president on the “Dixiecrat” ticket. After winning this election, an incumbent president from Missouri posed with a *Chicago Tribune* headline falsely declaring he lost. For 10 points, name this presidential election in which Thomas Dewey [emphasize] *did not* in fact defeat Harry Truman.

ANSWER: **1948** U.S. presidential election [prompt on '48]

<American History>

6. Within this body of water, ritual sacrifices were performed in the meteor crater Lake Kaali on Saaremaa Island. This body of water’s island of Öland (“ER-land”) contains the Stora Alvaret, a large limestone terrace near the town of Alby. Continuing post-glacial rebound in this body of water may push the Kvarken Archipelago and the High Coast region to seal off the Gulf of Bothnia from the rest of this body of water. The city of Visby can be found in Gotland, the largest island in this sea. The Kiel (“keel”) canal is a direct route to this sea, bypassing Copenhagen and Malmö. The Åland (“OH-land”) Archipelago separates Sweden from Finland in, for 10 points, what Northern European sea?

ANSWER: **Baltic** Sea [prompt on anything mentioning Bothnia until “Kaali” is read]

<CE/Geo/Other/Pop Culture>

7. A compound of this element and fluorine has the highest global warming potential so far evaluated. Arsenic and this element are found in the minerals realgar (“ree-AL-gar”) and orpiment. This element can be extracted from mineral deposits by being pumped with superheated water in the Frasch process. The most common allotrope of this element is a cyclic molecule containing eight atoms. The trioxide of this element is introduced in the fourth stage of the contact process, which produces a strong acid containing this element. For 10 points, name this chemical element with atomic number 16 and a distinctive yellow color.

ANSWER: **sulfur** [or **S**]

<Chemistry>

8. *Description acceptable.* Some ancient interpretations of this event conclude that its perpetrator was motivated by a desire to marry Aclima instead of Awan. The ground “opened its mouth” after this event, which followed one man’s request that another “go out to the field.” After participating in this event, one man spent the rest of his days wandering in the Land of Nod, protected by a threat of “sevenfold vengeance” for anyone who harmed him. Angry over the rejection of his sacrifice, a farmer carried out this event before trying to hide his role in it by asking “Am I my brother’s keeper?” For 10 points, name this Biblical event, the homicide of Adam’s second-born son by his first.

ANSWER: the **murder** of **Abel** [accept any descriptions of Cain **kill**ing **Abel**, **Abel dying**, or **Cain** committing **murder**; prompt on the first murder]

<Religion>

9. In a play titled for this profession, a police sergeant holds aloft Winston Churchill’s penis after Dr. Rance attempts to certify a secretary, a pageboy, and Dr. Prentice and his wife as insane. In a novel, a man with this profession makes a “witticism” about the “migratory aspect” of swallows and gypsies in an attempt to banter with his employer, Mr. Faraday. That man with this profession reminisces on drinking cocoa with Miss Kenton while he was employed by the Nazi sympathizer Lord Darlington. For 10 points, name this profession held by Stevens in Kazuo Ishiguro’s *The Remains of the Day*, as well as an employee of Bertie Wooster created by P. G. Wodehouse named Jeeves.

ANSWER: **butler** [prompt on servant; prompt on valet; accept *What the **Butler** Saw*]

<British Literature>

10. The disease caused by this agent was first clinically reported when patients arrived to emergency rooms presenting symptoms of *Pneumocystis jiroveci* (“yee-ro-VETCH-ee”) pneumonia. Syncytia (“sin-SISH-uh”)-inducing strains of this agent enter cells with the CXCR4 receptor, while M-tropic strains of it have

a gp120 (“G-P-one-twenty”) ligand (“LIG-und”) that binds to a receptor inhibited by Selzentry called CCR5. This lentivirus infects macrophages, dendritic cells, and CD4+ (“C-D-four-plus”) T cells. The leading cause of death for hemophiliacs is caused by this virus because of its spread through blood transfusions. For 10 points, name this retrovirus, the causative agent of AIDS.

ANSWER: **HIV** [or **Human Immunodeficiency Virus**; accept **HIV/AIDS**; do not accept or prompt on “AIDS”]
<Biology>

11. The last of an Opus 5 collection of twelve pieces in this genre consists of 23 variations on “La Folia”; that set of works of this type was written by Arcangelo Corelli. Two violins play over continuo in Corelli’s “trio” pieces in this genre. After giving his bow and instrument to Satan in a dream, Giuseppe Tartini wrote a work in this genre now nicknamed “Devil’s Trill.” 555 keyboard pieces of this type were written by Domenico Scarlatti. Later examples of this broad genre that use piano in place of continuo include Beethoven’s *Kreutzer* (“KROY-tser”). For 10 points, identify this genre of instrumental music for a solo instrument without orchestral backing, contrasted with the sung cantata.

ANSWER: **sonatas** [accept **violin sonata**, **trio sonata**, **keyboard sonata**, or **keyboard sonata**; accept **harpsichord sonata**]
<Classical Music>

12. According to Plutarch, upon hearing of this man’s death, his main rival wept after being given this man’s seal-ring. This man became known as the “adolescent butcher” following his execution of Gnaeus Papirius Carbo in Sicily. This man’s remark “If Sulla could, why can’t I?” showed the attitude that would also lead to his illegal first triumph of an eventual three. Lucullus called this man a “vulture” after being replaced by him in command during the Third Mithridatic (“mith-ree-DAY-tick”) War. Ptolemy XIII (“the thirteenth”) ordered this man’s assassination after his decisive defeat at the Battle of Pharsalus. For 10 points, name this Roman statesman who made up the First Triumvirate with Crassus and Julius Caesar.

ANSWER: **Pompey** the Great [or Gnaeus **Pompeius** Magnus]
<European History>

13. In a novel by this author, a man remembers his mother covered in blood after she cuts her hand on a razor blade while washing his clothes. A mother in a novel by this author follows her daughter while she is carried by the Oracle of the Hills and Caves. The protagonist of a novel by this author arranges an abortion for his *osu* girlfriend Clara before being put on trial for bribery. Ikemefuna (“EE-kay-may-FOO-nah”) is killed by his adoptive father in a novel by this author, which ends with the protagonist hanging himself after Christianity is introduced to Umuofia (“oo-moo-OH-fee-ah”). For 10 points, name this Nigerian author who wrote about the Okonkwo family in *No Longer at Ease* and *Things Fall Apart*.

ANSWER: Chinua **Achebe** (“uh-CHAY-bay”) [or Albert Chinualumogu **Achebe**]
<World/Other Literature>

14. “Impartial” types of these constructs can be reduced to sets of Grundy numbers according to the Sprague–Grundy theorem. Trees representing these constructs are often simplified using alpha–beta pruning. “Combinatorial” examples of these constructs include Sylver Coinage and Hackenbush. John von Neumann (“NOY-mahn”) proved that the minimax algorithm for these constructs is optimal if these constructs are “zero-sum.” One of these constructs has a Nash equilibrium if none of its players can unilaterally improve their strategy. For 10 points, name these constructs studied in a namesake theory of rational decisions, and include nim, prisoner’s dilemma, and chess.

ANSWER: **games** [accept combinatorial **games**; accept zero-sum **games**]
<Other Science>

15. This man's government agreed to the Five Principles of Peaceful Coexistence with a country that later defeated his nation in a 1962 war. This man responded to the death of his mentor by declaring "the light has gone out of our lives." This man said his countrymen would "awake to life and freedom" in an address he gave on the night of his country's independence called the "Tryst with Destiny" speech. The daughter of this leader of the INC was murdered by her Sikh bodyguards in 1984 and shared her last name with this leader's longtime ally Mahatma Gandhi. For 10 points, name this first prime minister of India.

ANSWER: Jawaharlal **Nehru** ("NAY-roo")

<World History>

16. Ovid is shown to have considered this concept a terrible disease in a 1936 study that claims our modern view on it is derived from parodic Occitan ("OCK-sit-in") poetry. In Empedocles's ("em-PED-uh-kleez's") cosmology, an attractive force of this name opposes the repulsive force of Strife. A theory of a ladder of this concept ascending from human to metaphysical forms is attributed to the likely fictitious Diotima. According to C. S. Lewis, Greek philosophy divided this concept into *storge* ("STORG-ee"), *agape* ("ah-GAH-pay"), and two other forms. Aristophanes tells a myth about people stuck together in pairs to explain this concept in Plato's *Symposium*. For 10 points, the Greeks used *eros* to describe the "romantic" form of what feeling?

ANSWER: **love** [accept **eros**, **storge**, or **agape** until read; accept **phileo**; accept **amor**] (The first clue is from the first chapter of C. S. Lewis's *The Allegory of Love*; the following clues are from *The Four Loves*.)

<Philosophy>

17. A play written in this language begins with a nonsense word resembling this language's word for "shit." In a play in this language, Claire and her sister act out sadomasochistic rituals based around the murder of their mistress. This language, which was used for *Ubu the King* and *The Maids*, was used for a play in which three characters are trapped in a room by a valet with no eyelids. Most playwrights associated with the Theater of the Absurd wrote primarily in this language, including Eugene Ionesco and Samuel Beckett. In a play in this language, Garcin ("gar-SAN") remarks that "Hell is other people." For 10 points, name this language used to write *No Exit* by Jean-Paul Sartre.

ANSWER: **French** [or **français**]

<European Literature>

18. Homer states that one of these objects was used to kill Iasion ("eye-AY-see-on") after he slept with Demeter in a thrice-ploughed field. One of these objects caused the earth to open up and swallow Amphiaraus ("AM-fee-uh-RAY-us") as he fled from Periclymenus during his assault on Thebes. Salomeneus tried to mimic these objects using torches and a chariot that dragged bronze kettles on the ground. As punishment for raising the dead, Asclepius was killed by one of these weapons, which were also used to kill Phaethon ("FAY-uh-thon"). Hades' helm and Poseidon's trident were crafted alongside these objects by the Cyclopes. For 10 points, name these elemental weapons wielded by the sky god Zeus.

ANSWER: **lightning** bolts [or **thunderbolts**; or **lightning** strikes]

<Mythology>

19. Before the premiere, tenor Raffaele Mirate ("mee-RAH-tay") was banned from humming an infectious canzone from this opera whose melody uses the following rhythm: "three accented eighths, then dotted sixteenth, descending thirty-second, quarter." In "Caro Nome" ("KA-ro NO-may"), the soprano lead of this opera praises her lover's fake name of "Gaultier Malde" ("go-tee-AY mald"). Francesco Piave's libretto for this opera, which adapts *Le roi s'amuse* ("luh RWAH sah-myooz"), was considered plagiaristic by the play's author Victor Hugo. This opera's title character remembers Count Monterone's curse when he opens a sack to find his dying daughter Gilda; that happens after he hears the Duke of Mantua reprise "La donna è mobile." For 10 points, name this Giuseppe Verdi opera titled for a hunchbacked jester.

ANSWER: **Rigoletto**

<Other Arts>

20. It's not "wave," but this word appears in the name of a theory by C. C. Lin and Frank Shu to explain the structure of the arms in spiral galaxies. A theory starting with this word is used to computationally determine quantum mechanical properties of many body systems; that is a "functional theory" named for this quantity. This quantity, whose gradient is maximized along a pycnocline ("PICK-no-klyne"), equals its "critical" value for a flat universe. This quantity for electric current is symbolized with a vector j . Specific gravity is the "relative" form of this quantity with respect to water. Among elements, this quantity is highest in osmium and iridium. For 10 points, rho often symbolizes what quantity, defined as mass over volume?

ANSWER: **density** [accept **density** wave theory; or **density** functional theory; or critical **density**; or current **density**]

<Physics>

Bonuses

1. The speaker of this poem says, “The rain is kind to come / And speak to me in my new home.” For 10 points each:

[10] Name this poem in which the speaker “felt the rain’s cool finger-tips / Brushed tenderly across my lips.” This poem begins, “All I could see from where I stood / Was three long mountains and a wood.”

ANSWER: “**Renascence**” (by Edna St. Vincent Millay)

[10] One of this poet’s speakers claimed “nobody, not even the rain, has such small hands.” Known for his unusual punctuation, this poet used the refrain “sun moon stars rain” in his poem “anyone lived in a pretty how town.”

ANSWER: e. e. **cummings** [or Edward Estlin **Cummings**] (The unnamed poem is “somewhere i have never travelled,gladly beyond.”)

[10] “Water blooms up to his reflection / like a cut swaying” in this poet’s “Gifts of Rain.” This man, who published a 1999 translation of *Beowulf*, described “great slime kings” in his poem “Death of a Naturalist.”

ANSWER: Seamus **Heaney** (“SHAY-muss HEE-nee”) [or Seamus Justin **Heaney**]

<World/Other Literature>

2. The *Huainanzi* (“h’WYE-nahn-dzuh”) states that this man was killed with a stick made from the wood of a peach tree. For 10 points each:

[10] Name this master archer from Chinese mythology. King Yao requested that this man shoot down nine of the ten suns that had been simultaneously rising and scorching the earth.

ANSWER: **Houyi** (“ho-yee”) [or Hou **Yi** or I **Yi** or Ren **Yi**]

[10] In some versions of the myth, Houyi is rewarded by being given this sort of substance, but his wife Chang’e (“chong-UH”) drinks it before he can. Qin (“chin”) Shi Huangdi is believed to have died by drinking mercury, which he thought was this substance.

ANSWER: elixir of **immortality** [or elixir of **life**; accept descriptions of a substance that provides eternal life when drunk]

[10] When Chang’e drinks the elixir of immortality, she is exiled to the moon, where she is accompanied by one of these animals. These animals’ feet are considered good luck.

ANSWER: **rabbits** [or **hare**]

<Mythology>

3. You are on the Oregon Trail, but have not yet died of dysentery (“DISS-in-TAIR-ee”). For 10 points each:

[10] You began your journey west upon leaving this state’s city of Independence. Other families you meet along the trail left from cities in this state like St. Joseph and Kansas City.

ANSWER: **Missouri**

[10] You and all your worldly possessions traverse the trail in one of these wagons named for a river in Pennsylvania. These wagons were typically caulked to enable them to cross rivers.

ANSWER: **Conestoga** wagon

[10] Your journey ends at this Oregon town, after which the trail becomes impassable due to steep cliffs. After avoiding rapids in this town that prevent navigation along the Columbia River, you arrive in the Willamette (“will-AM-it”) Valley to start your life in the west.

ANSWER: The **Dalles** (“dals”)

<American History>

4. This piece was originally titled *A Contemplation of Nothing Serious*, as it was paired with *A Contemplation of a Serious Matter* now known as *The Unanswered Question*. For 10 points each:

[10] Name this 1906 programmatic work for chamber orchestra. A “street band” plays the Washington Post March and pianos duel with quotations of “Hello Ma Baby” to evoke ragtime in this piece by Charles Ives.

ANSWER: **Central Park in the Dark**

[10] “Hello Ma Baby” was originally a racist “coon song.” Like members of minstrel shows, performers of coon songs often used this controversial cosmetic technique to get in character.

ANSWER: **blackface** [or equivalents of wearing **black** makeup]

[10] Ragtime was repopularized by the 1971 movie *The Sting*, which uses this Scott Joplin rag as a theme. This song, which may refer to James Brown’s mandolin playing, is somewhat easier than the “Maple Leaf Rag.”

ANSWER: “The **Entertainer**”

<Classical Music>

5. The lecture series “Society Must Be Defended” argues that Marx and Engels transmuted a “counterhistory” of struggle on account of this thing into “class struggle.” For 10 points each:

[10] Name this concept. An influential taxonomy of these things created by Johann Friedrich Blumenbach divides humans into Malayan, American, Mongolian, Ethiopian, and Caucasian varieties.

ANSWER: **racism**

[10] Michel Foucault’s analysis of race in “Society Must Be Defended” is largely based upon this Foucauldian (“foo-KO-dee-in”) concept. It refers to the means that the State uses to control the bodies of their subjects.

ANSWER: **biopower**

[10] This three-volume study by Foucault contains the first printed use of “biopower.” It rejects the “Victorian” hypothesis that bourgeois capitalism repressed the title concept before examining Greco-Roman homoeroticism.

ANSWER: *The **History of Sexuality***

<Philosophy>

6. The first one of these events recorded in the South Atlantic, Catarina, was named after the Brazilian state it struck. For 10 points each:

[10] Name these natural disasters. The name Katrina has been retired from their naming system.

ANSWER: **hurricanes** [or **typoons**; or **cyclones**]

[10] This process can occur in hurricanes of Category 3 or higher. The hurricane loses some intensity during this process as its inner wall is “choked” by the outer wall.

ANSWER: **eyewall replacement** cycle

[10] Hurricanes in the Atlantic are usually more frequent during the La Niña (“la NEEN-ya”) phase of this cycle. This oscillation in winds and sea surface temperatures is partially named for La Niña’s warmer counterpart.

ANSWER: **ENSO** [accept **El Niño–Southern Oscillation**; prompt on **El Niño**; prompt on **Southern Oscillation**]

<Other Science>

7. This author wrote “say goodbye to her, to the Alexandria you are losing” in his poem “The God Abandons Antony.” For 10 points each:

[10] Name this author, who wrote “hope your road is a long one” in his poem “Ithaka.” He also wrote a poem about some people who “were a kind of solution.”

ANSWER: Constantine Peter **Cavafy** (“kuh-VAH-fee”) (The poem is “Waiting for the Barbarians.”)

[10] Cavafy wrote in the modern form of this language. Cavafy drew on authors like Lysias (“LYE-see-us”) and Homer, who wrote in the ancient form of this language.

ANSWER: **Greek** [accept Modern **Greek**; accept ancient **Greek**; accept Koine **Greek**]

[10] The Delphic oracle warns this person to “Beware the age of seventy-three” in a Cavafy poem titled for this person’s “Deadline.” This leader reads poetry to a mob in Henryk Sienkiewicz’s (“shen-KYEH-vitch’s”) *Quo Vadis*, which is set during his reign.

ANSWER: **Nero** [or **Nero** Claudius Caesar Augustus Germanicus]

<European Literature>

8. A signal peak at 50 degrees and 54 volts was observed in this experiment. For 10 points each:

[10] Name this experiment that fired electrons at a crystalline nickel target.

ANSWER: **Davisson–Germer** experiment

[10] The Davisson–Germer experiment confirmed a hypothesis proposed by this physicist, whose namesake wavelength is Planck’s constant over a particle’s momentum.

ANSWER: Louis **de Broglie** (“duh BROY”)

[10] The wave–particle duality of light was observed in this scientist’s double slit experiment. This scientist also names a modulus equal to stress over strain.

ANSWER: Thomas **Young** [accept Young’s **modulus**]

<Physics>

9. In a film from this country set during its Japanese occupation, Sook-hee ends up falling in love with the heiress whom she was supposed to trick. For 10 points each:

[10] Name this home country of Park Chan-wook, who directed *The Handmaiden* as well as *Oldboy* and *Lady Vengeance*.

ANSWER: **South Korea** [or **Republic of Korea**; or **ROK**; accept **Hanguk** or **Namhan**; prompt on **Korea**; do not accept or prompt on “Democratic People’s Republic of Korea” or “DPRK” or “North Korea”]

[10] This man became the first Korean director to win the Palme d’Or at Cannes (“can”) with his 2019 film *Parasite*. His other films include *Okja*, *Snowpiercer*, and *The Host*.

ANSWER: **Bong** Joon-ho

[10] *Snowpiercer* is set in one of these locations, which shelters the remaining population of a frozen Earth. In a 2016 South Korean film, a man and his daughter survive a zombie outbreak while in one of these locations.

ANSWER: **trains** [accept **Train to Busan**]

<Other Arts>

10. The Elbe (“ELL-buh”) River is home to a number of submerged stones whose purpose is to remind future generations about the eventuality of these events. For 10 points each:

[10] Name these events that may be explained by the “entitlement” approach. One of these events in the 14th century likely inspired the legend of Hansel and Gretel, and was precipitated by a series of depressing rainy seasons.

ANSWER: **famines** [accept **scarcity of food**, **lack of food**, or other synonyms; prompt on answers that describe a **poor harvest**] (The rain caused the rotting of crops and an inability to evaporate salt for meat curing.)

[10] In the 1840s, the affliction of a variety of this crop known as the “Lumper” with a namesake “blight” resulted in a devastating famine that reduced the Irish population by 20%.

ANSWER: **potatoes** [accept **taters**; accept **spuds**; accept **Solanum tuberosum**]

[10] During World War II, the Allies failed to allay this country’s *Hongerwinter* via Operation Chowhound. This country’s wartime food shortages were described by a young memoirist who spent two years in this country’s *Achterhuis* (“AHK-ter-house”).

ANSWER: the **Netherlands** [accept **Nederland**] (The memoirist was Anne Frank.)

<European History>

11. Roman accounts of this ethnic group’s early religious traditions describe how these people would decapitate human sacrifices, and hang the heads from their horses’ necks as a divine symbol. For 10 points each:

[10] Name this ethnic group. One man claimed to see members of this group burn sacrifices alive in human-shaped wicker cages, while another reported their priests to sacrifice a pair of white bulls, and then brew elixirs of mistletoe.

ANSWER: **Celtic** people [accept **Celts**; accept **Gauls** or **Gallie** people; prompt on **Britons**; prompt on **Gaels**; prompt on **Irish** people; prompt on the **Hallstatt** Culture] (The two men were Julius Caesar and Pliny the Elder.)

[10] Those ceremonies were typically carried out by these peculiar Celtic priests. Diodorus Siculus claimed that these people could divine the future by observing the spasms of stabbed humans.

ANSWER: **druids** [accept **derwydd**; accept **druí**; accept **draoidh**]

[10] These objects were pervasive in Celtic religion, demonstrated by the shared etymological root between the word “druid” and this type of plant. The Buddha meditated under one of these plants for 49 days to reach Nirvana.

ANSWER: **trees** [accept oak **tree** or Bodhi **tree**]

<Religion>

12. This vessel was christened with an alternate name for the god Viracocha. For 10 points each:

[10] Name this balsa-wood boat on which a research team led by experimental archaeologist Thor Heyerdahl successfully sailed to the Tuamotu Islands.

ANSWER: ***Kon-Tiki***

[10] Heyerdahl voyaged on *Kon-Tiki* to prove that these people could have settled the islands of Polynesia. More conventional archaeologists studying this civilization have dug around Cusco and Machu Picchu.

ANSWER: **Incans** [or **Incan** Empire; accept **Quechua** or **Quecha**]

[10] This thinker denied that the *Kon-Tiki* voyage implied more than a possibility of ancient trans-Pacific movement when discussing the Nambikwara in *Triste Tropiques* (“TREEST tro-PEEK”). This Belgian-born anthropologist described mythological thought in terms of *bricolage* in *The Savage Mind*.

ANSWER: Claude **Lévi-Strauss**

<Social Science>

13. This battle is commemorated by the holiday of Ashura, which is celebrated during the month of Muharram. For 10 points each:

[10] Name this 680 AD battle in which a small force led by Muhammad’s grandson Husayn was wiped out in Iraq. It triggered the Second Fitna, or Islamic civil war.

ANSWER: Battle of **Karbala**

[10] Husayn was killed after refusing to submit to the authority of this second Islamic caliphate founded by Muawiyah (“moo-ah-WEE-yuh”). Its capital was Damascus, and it was eventually toppled by the Abbasids.

ANSWER: **Umayyad** caliphate

[10] Husayn specifically opposed the ascension of this second Umayyad caliph, Muawiyah’s son. While fighting revolts that followed Husayn’s death, this man’s forces sacked Medina and only ended their siege of Mecca after this ruler died.

ANSWER: **Yazid I**

<World History>

14. Copernicus attempts to gain entrance to Hell but is stopped by Ignatius of Loyola in this author’s anti-Jesuit pamphlet *Ignatius His Conclave*, which also name-drops Kepler, Galileo, and Tycho Brahe. For 10 points each:

[10] Name this poet and cleric, who drew from astronomy for the conceits of his poems “Lecture upon the Shadow” and “The Sun Rising.” A sonnet by him addresses a force “slave to Fate, Chance, kings, and desperate men.”

ANSWER: John **Donne** (That sonnet is “Death, be not proud.”)

[10] In “The Sun Rising,” Donne tells the sun that the walls of his bedroom form one of these things. In “A Valediction: Forbidding Mourning,” Donne writes that “trepidation of” these things “though greater far, is innocent.”

ANSWER: **spheres** (Donne refers to the ancient theory that celestial bodies are fixed on the surfaces of concentric spheres.)

[10] Donne also wrote a song beginning “Go and catch a falling” one of these objects. A poem by Jane Taylor tells one of these objects to “Twinkle, twinkle.”

ANSWER: **stars** [accept “Go and catch a falling **star**” or “Twinkle, twinkle, little **star**”]

<British Literature>

15. This effect is conjectured to occur between 8p-sub-three-halves and 9p-sub-one-half orbitals in late period 8 elements. For 10 points each:

[10] Name this phenomenon, an example of which is observed when s and p orbitals combine into sp³ orbitals. Linus Pauling explained methane's tetrahedral structure using this phenomenon.

ANSWER: orbital **hybridization**

[10] These covalent bonds are present in methane. These bonds typically consist of a sigma bond and occur when one pair of electrons is shared between two atoms.

ANSWER: **single** bond

[10] This type of molecular orbital, symbolized by a star, remains unfilled in most stable bonds. When this type of orbital is filled, it destabilizes covalent chemical interactions.

ANSWER: **antibonding** orbitals

<Chemistry>

16. This artist's *Young Sick Bacchus* is thought to be a self-portrait, and he used Mario Minniti as his model for works like *Boy with a Basket of Fruit* and *The Fortune Teller*. For 10 points each:

[10] Name this Italian painter whose characteristic tenebrism, or sharp contrast between light and shadow, features in his painting *The Calling of St. Matthew*.

ANSWER: **Caravaggio** [or Michelangelo **Merisi**]

[10] Caravaggio painted many depictions of John the Baptist, including some portraying him after he was killed in this manner. In another painting by Caravaggio, an elderly maid looks on as Judith does this to Holofernes ("huh-LAW-fer-neeZ").

ANSWER: **beheading** [accept equivalents like **decapitation**; accept word forms]

[10] This artist's paintings of Judith slaying Holofernes might have been inspired by her own rape by Agostino Tassi. She painted a *Self-Portrait as the Allegory of Painting*, and was taught by her father Orazio.

ANSWER: Artemisia **Gentileschi** ("jen-tee-LESS-kee")

<Painting/Sculpture>

17. Throwing shade upon the beard has been a somewhat common occurrence for many millennia. Answer the following about historical haters of hirsute ("her-SUIT") hijinks, for 10 points each.

[10] Russian nobles known as *boyars* were quite put-off when this man implemented a tax upon his subjects' beards. This westernizing tsar replaced Moscow with a newly-built Russian capital named after himself.

ANSWER: **Peter** the **Great** [or **Peter I**; prompt on **Peter Alexeyevich**; prompt on **Peter** of Russia]

[10] This man's satire *Misopogon*, or "Beard-Hater," was inspired by the vitriol he received towards his scruffy face while staying in Antioch. This emperor largely failed in his attempts to revive Roman paganism over Christianity.

ANSWER: **Julian** the Apostate [accept **Julian II**; accept *Flavius Claudius Julianus*]

[10] This man's raid on the city of Cádiz earned the sassy nickname "Singeing the King of Spain's Beard." This bearded fellow claimed New Albion, largely today's California, for Elizabeth I while travelling on the *Golden Hind*.

ANSWER: Sir Francis **Drake**

<European History>

18. In one poem, a character "said aloud, / For no man else in [this place] to hear" that "we have the harvest moon / Again, and we may not have many more." For 10 points each:

[10] Name this location home to a character who "mourned Romance, now on the town, / And Art, a vagrant ("VAY-grint")."

ANSWER: **Tilbury** Town

[10] This poem about another resident of Tilbury Town "loved the days of old" but "was born too late" and "coughed, and called it fate, / And kept on drinking."

ANSWER: "**Miniver Cheevy**"

[10] This creator of Tilbury Town also described "a gentleman" who "went home and put a bullet through his head" in his poem "Richard Cory."

ANSWER: Edwin Arlington **Robinson** (The poem in the lead-in is "Mr. Flood's Party.")

<American Literature>

19. Answer the following about preparing tissue slides, for 10 points each.

[10] To deparaffinize the sample, slides are commonly washed in this reagent and ethanol. This reagent is also known as dimethylbenzene and can be substituted for more toxic benzene or toluene (“TALL-yoo-een”).

ANSWER: **xylene** [accept *ortho-*, *meta-*, or *para-xylene*; accept **xytol**]

[10] Washing the slides in different concentrations of ethanol is used to prepare them for rinsing in this substance, whose pure form has formula H₂O.

ANSWER: **water**

[10] This type of substance may also be used to prepare tissue slides. Examples include Sudan III, DAPI (“dappy”), and Coomassie blue, and safranin is a common “counter” one of these substances.

ANSWER: **stain** [prompt on **dye**]

<Biology>

20. In 1971, this team lost 4–0 to France in the first women’s international soccer match recognized by FIFA. For 10 points each:

[10] Name this team, whose top scorer Vivianne Miedema helped defeat a Sofia Jakobssen-led Sweden in the semifinals of the 2019 Women’s World Cup.

ANSWER: The **Netherlands** women’s national football team [or **Nederlands** vrouwenvoetbalelftal]

[10] This team, the eventual winner of the 2019 Women’s World Cup, opened the tournament with a 13–0 victory against Thailand.

ANSWER: **United States** women’s national soccer team [or **USWNT**; accept synonyms like **America**, **US**, **USA** in place of “United States”]

[10] This forward and co-captain of the USWNT with Megan Rapinoe (“ruh-PEE-no”) matched Michelle Akers’ single-game goal record against Thailand. This player co-captained Team USA with Megan Rapinoe.

ANSWER: Alex **Morgan** [or Alexandra Patricia **Morgan** Carrasco]

<CE/Geo/Other/Pop Culture>