



ACADEMIC
COMPETITION
FEDERATION

ACF NATIONALS 2019

PLAYOFFS 8

Packet by

The Editors (8)

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Tossups

1. Vanya Bellinger wrote a biography of this man's wife and intellectual partner, who was lady-in-waiting to the dowager queen Frederika Louisa and later edited and published this man's unfinished magnum opus. Michael Howard and Peter Paret created the canonical translation of this person's most famous work. This husband of Marie von Brühl illustrated a theory with an analogy to an object suspended between three magnets, which represent his "paradoxical trinity." In his major work, this theorist wrote that the real version of the title activity was distinguished from the title activity "on paper" by a concept called friction. This man was chief of staff to Gneisenau [g'NAIS-uh-now] when he died and had earlier served as personal assistant to Gerhard von Scharnhorst. This thinker argued that his major subject was "a continuation of politics by other means." For 10 points, name this Prussian military theorist who wrote "On War."

ANSWER: Carl (Philipp Gottlieb) von Clausewitz

<European History>

2. A paper by Susan Kieffer et al. proposes that this object is home to a "snowfield" of sulfur, which may explain why a patera [PAT-err-uh] on it may have wandered 100 kilometers west in the last twenty years. A landmark paper by Peale, Cassen, and Reynolds proposed that this object has a largely molten interior and that the dissipation of tidal energy is responsible for depleting much of its solid mass. Neutral ejecta from this object is ionized, creating a plasma torus that completely surrounds the atmosphere of this object's parent body. Eclipses of this object were used to provide the first measurement of the speed of light, which was recorded in the seventeenth century by the physicist Ole Rømer [OH-luh ROY-muh]. This densest-known natural satellite in the solar system features over 410 volcanoes. The extreme heat of this moon partly results from its being in resonant orbit with Ganymede and Europa. For 10 points, name this innermost of the Galilean moons of Jupiter.

ANSWER: Io

<Other Science>

3. The first-ever *New Yorker* "Profile" that was not of a person was an abridgement of a book by this author, which describes a "steady, unremitting, downward drift, flake upon flake, layer upon layer," in its chapter "The Long Snowfall." The book *Always, [this author]* comprises the hundreds of passionate love letters she sent to her neighbor Dorothy Freeman. A lawsuit partly filed by Benjamin Spock's sister, Marjorie, inspired a book by this author, which begins with an allegory about a "town in the heart of America where all life seemed to live in harmony with its surroundings." This alumna of the Woods Hole Marine Biological Laboratory included the chapter "The Birth of an Island" in the middle entry of a trilogy about the sea, titled *The Sea around Us*. This author's best-known book attributes the thinning of the shells of the eggs laid by birds to bioaccumulation. For 10 points, name this author who railed against the use of DDT in her book *Silent Spring*.

ANSWER: Rachel (Louise) Carson [the *New Yorker* profile was of "The Sea"]

<Other Academic>

4. This novel's protagonist claims that her idea of hell is "a large party in a cold room where everybody has to play hockey properly," and her education is said to have been "expensive, athletic, and prolonged." At a screening of the Norwegian-Japanese film "Yēs," this novel's protagonist is relieved to meet the "properly and conventionally dressed" American movie producer Earl Neck, who turns her cousin into the star of "Small-Town Sheik." Especially turgid passages of this novel are preceded by Baedeker ratings of their prose, and it frequently mentions the "sukebind." Near the climax of this novel, Neck retorts, "Did it see you?" while dragging the aggressively smoldering Seth away from a wedding. This novel's protagonist is forced to stay with her relatives near Howling, where she efficiently solves the problems of the Starkadders and confronts a tyrannical matriarch who "saw something nasty in the woodshed." For 10 points, name this comic novel by Stella Gibbons in which Flora Poste moves to the title rural property.

ANSWER: Cold Comfort Farm

<British Literature>

5. One of this man's photographs highlights the winding, S-shaped path followed by an open gutter. This artist examined "the gigantic photograph constituted by *In Search of Lost Time*" in his book *Proust in the Power of Photography*, which is illustrated with some of his photographs of operagoers and balletgoers. More of those high society photographs appear in this artist's book titled for a "secret" city "of the thirties," alongside a photograph of a woman nicknamed "Bijou" interlacing her heavily jeweled fingers. He captured the reflections of an embracing couple in mirrors to their back and side in his photograph *Lovers in a Small Café, near the Place d'Italie*. This man, whom Henry Miller nicknamed "the eye of Paris," compiled many photographs of the city's brothels in his best-known series. For 10 points, name this author of the photobook *Paris by Night*, a Hungarian-born photographer who went by a single name.

ANSWER: **Brassaï** [or Gyula **Halász**; or Jules **Halasz**]

<Other Fine Arts>

6. A theory of coupling between these devices was developed by Allan Snyder, who co-authored a classic textbook on them with J. D. Love. The double crucible method of creating these devices is generally only used with softer materials. More commonly, these devices are created in draw towers by vertically feeding a preform into a furnace and allowing gravity to stretch out the molten material. These devices can be turned into amplifiers by doping them with erbium. Multimode devices of this type allow a higher data throughput at the expense of a reduction in signal quality over long distances. These devices use total internal reflection to prevent signal from leaking out of their core into their cladding, enabling transmission over long distances. For 10 points, name these devices which undergird modern telecommunications and consist of very long, thin, flexible pieces of glass.

ANSWER: **optical fibers** [or **fiber optics** or **optical waveguides**; prompt on partial answer]

<Physics>

7. The first movement of Schumann's *Faschingsschwank aus Wien* for solo piano quotes this song, setting it in a jaunty dotted quarter-eighth-quarter triple meter instead of its usual duple meter. After a sudden modulation from G minor to G major, Schumann quotes this song in his setting of the poem "The Two Grenadiers." Debussy very briefly quoted this song over a hushed left-hand tremolo in the "Fireworks" movement of his *Preludes, Book II*. Debussy later quoted this song blended with "A Mighty Fortress Is Our God" in his *En Blanc et Noir* and wrote to his publisher to say, "The very pavements and the trees of the forest are vibrating to" this song. Because this song was banned for decades in Austria-Hungary, Beethoven avoided using it alongside "Rule Britannia" in the piece *Wellington's Victory*. Descending scale runs represent a military retreat in a piece that uses this song alongside "U vorot" and "God Save the Tsar." For 10 points, name this song that Tchaikovsky's *1812 Overture* used to represent France.

ANSWER: "La **Marseillaise**" [MAR-say-ez] [prompt on the "**French national anthem**" before "France"]

<Classical Music>

8. A person with this profession thinks, "You will never be done with it. It'll be done with you first" at the end of a story by Zadie Smith. A character referred to by this profession can "cure" a problem "every man in the ghetto born with" in a novel that opens with the line: "*Listen*. Dead people never stop talking." Dead politician Sir Arthur George Jennings partly narrates a novel in which a man referred to by this name is shot in front of Nina in Copenhagen City. The narrator asks for "a carton of Picayunes, and a NEW YORK POST with her face on it" in a poem inspired by the death of a person with this profession; that poem opens at "12:20 in New York a Friday" and ends: "and everyone and I stopped breathing." Josey Wales shoots a person with this profession in Marlon James's *A Brief History of Seven Killings*. For 10 points, name this profession held by the dedicatee of Frank O'Hara's "The Day Lady Died," Billie Holiday.

ANSWER: **singer** [accept "the **Singer**"; accept **vocalist**; or singer-**songwriter**; or jazz **singer**; or reggae **singer**; accept **musician**; prompt on **performer**] (the leadin is Zadie Smith's "Crazy They Call Me," told from the perspective of Billie Holiday)

<World Literature>

9. In the middle of this decade, the British researcher Stafford Beer wrote the book *Platform of Change*, which described his efforts earlier in the decade to work with CORFO on a solution to the economic calculation problem. By the middle of this decade, most of the promises made near its beginning in the Smithsonian Agreement had been reneged upon. A book chapter titled for the quote “don’t let yourself get attached to anything” from the 1995 film *Heat* is also titled for “October 6” of a year in this decade, a date that, according to the economist Christian Marazzi, marked the end of “Fordism.” Yanis Varoufakis argued that, during this decade, the U.S. became the “global minotaur.” In the final year of this decade, the Fed sharply raised interest rates in the “Volcker shock.” The end of capital control, the rise of “petrodollar” finance, and the breakdown of the fixed-exchange-rate system occurred in, for 10 points, what decade of economic tumult in which the U.S. ended the gold standard and experienced stagflation?

ANSWER: **1970s** [prompt on “the seventies”]

<Social Science>

10. A general justified his cautious approach in this war to his soldiers by citing omens taken by his personal Syrian witch, Martha. Pompeius Trogus claims that a commander in this war lost a battle as divine punishment for stealing a Delphic treasure hoard, the cursed “Gold of Tolosa.” In this war, Quintus Servilius Caepio had his consular command immediately revoked after a humiliating defeat in which he lost 80,000 soldiers to an army under Boiorix. Because they had to carry seventy-pound packs, soldiers in this war became known as the “mules” of their commander, who won its decisive battles of Aquae Sextiae and Vercellae. In the wake of a disastrous defeat at Arausio during this war, the newly elected consul Gaius Marius was allowed to enact his namesake military reforms. For 10 points, name this conflict lasting from 113 to 101 BCE, in which Rome drove back an invading barbarian tribe that allied with the Teutones.

ANSWER: **Cimbrian War** [or **Cimbric War**; or equivalents that mention a war with the **Cimbri** and Teutones]

<European History>

11. This text asks us to consider “the physician attending to Frau Hitler at the birth of little Adolf” to argue that less-moral actions can have better ultimate consequences, just as justified beliefs can easily be false or fallible. A diagram in this text illustrates how beliefs like “it will rain or snow all night” lead to the belief that “driving will be dangerous tonight,” forming the tip of a justificatory “iceberg.” This essay analyzes how the doxastic ascent and regress arguments affect the “substantive” form of a theory. It opens by comparing the “solid security” and the “risky adventure” of two options, which this essay traces back to Descartes and Neurath respectively. This essay promotes “reliabilism,” a precursor to virtue epistemology, as an alternative to traditional theories of justification. For 10 points, name this essay that is titled for two structures representing coherentism and foundationalism and was written by Ernest Sosa.

ANSWER: “The **Raft and the Pyramid**”

<Philosophy>

12. An official loyal to this dynasty quipped, “If anyone carves up my brother, remember to send me some of the soup,” in response to the desecration of his family’s tombs. A ruler from this dynasty built the “Tiger’s Arena,” where tamers rode elephants to kill defanged, declawed tigers. The “Save the King” guerrilla movement fought to restore a boy king from this dynasty, which employed Liu Yongfu’s “Black Flag Army” of bandits against colonial powers. An ambassador reluctantly serving this dynasty wrote an epic about a woman forced into prostitution by her husband, Scholar Ma, in the *Tale of Kieu*. The priest Pigneau de Behaine [pee-nyo de BAY-en-uh] provided superior military technology to the first ruler from this dynasty, who reimposed Confucian administration on conquered Tay Son territories. Because of his love for casinos on the French Riviera, the last ruler of this dynasty was nicknamed the “Playboy Emperor.” For 10 points, the French puppet Bao Dai was the final emperor of what last Vietnamese royal dynasty?

ANSWER: **Nguyen** [ng-win] Dynasty

<World History>

13. *Description acceptable.* In August 2018, unknown activists hung a banner at the site of this project demanding the immediate release of the director of the film *Gamer*, who carried out a 145-day hunger strike in prison. Builders working on this project adopted a stray kitten named Mostik, who wears a tiny construction hat and vest in his role as this project's unofficial mascot. A March 2017 *New Yorker* article highlights a fateful childhood judo class that this project's director, Arkady Rotenberg, took with a future head of state. In March 2019, a government simultaneously filed hundreds of sanctions against people involved in this project and in holding elections in the Luhansk and Donetsk's People's Republics. In November 2018, a tanker blocked off this structure as the Federal Security Bureau coast guard intercepted three warships trying to pass under it. For 10 points, construction started in 2015 on what infrastructure project across the Strait of Kerch, which will link the Russian mainland with a newly annexed territory?

ANSWER: the **Crimean Bridge** [or any answer mentioning a **bridge to Crimea**; accept the **Kerch Strait Bridge** before "Kerch" is read]

<Current Events>

14. A slight increase in this behavior shifts a system from a stable region of high productivity to one of low productivity, according to the Noy-Meir model. According to the range succession model, the namesake "pressure" resulting from this behavior transforms the environment along a monotonic gradient from an undisturbed climax community to a subclimax state. In aquatic ecosystems, the word "scrapper" is often appended to the name of the types of animals that engage in this behavior. The name of this behavior follows the prefix "over-" when describing a situation in which the exposure of bare soil potentially results in erosion and desertification. Both fire and this feeding behavior are crucial to the maintenance of prairies. For 10 points, name this method of feeding in which an herbivore eats grasses.

ANSWER: **grazing** [or **grazing** pressure; or over**grazing**; accept word forms, such as **grazer**-scrapers; prompt on **herbivory**; prompt on **foraging**]

<Biology>

15. As evidence of this author's homosexuality, critics cite a story about a house party hosted for profit by Marcel de la Smith; that story, "Seven People Dancing," was published in 2016, decades after Arnold Rampersad found it while researching his two-volume biography of this author. Mrs. Luella Bates Washington Jones feeds and hands money to a boy who had tried to steal her pocketbook in this author's story "Thank You, Ma'am." This author wrote of being inspired by Maupassant to write true-to-life stories about black life, culminating in hundreds of satirical stories about Jesse B. Semple in his first autobiography; that book, *The Big Sea*, recounts a train trip to Mexico during which this author jotted the words "when Abe Lincoln / went down to New Orleans" while composing a poem about places that are "older than the / flow of human blood in human veins." For 10 points, name this American poet who invoked the Euphrates, Congo, Nile, and Mississippi in "The Negro Speaks of Rivers."

ANSWER: (James Mercer) Langston **Hughes**

<American Literature>

16. For the facade of this building, an artist painted twenty-four Roman numerals running counterclockwise along the dial of a giant clock. A small marble Hercules with a lion skin draped over his shoulder decorates the inner reveal to this building's north door, which lies below a tympanum relief of the Assumption of the Virgin sculpted by Nanni di Banco, and is known as the Porta della Mandorla. Marble reliefs of children playing music and singing from hymn books comprise Luca della Robbia's *cantoria*, which was designed for this building's organ loft. Andrea del Castagno's *Equestrian Monument of Niccolò da Tolentino* is adjacent to Paolo Uccello's similar *Funerary Monument to Sir John Hawkwood* in this church. The entrance to the Palazzo Vecchio was chosen as the site for Michelangelo's *David* after it was deemed too heavy to lift up to the roof of this church. For 10 points, name this cathedral that lies at the opposite end of a piazza from a baptistry featuring Lorenzo Ghiberti's "Gates of Paradise."

ANSWER: **Florence Cathedral** [or Cattedrale di **Santa Maria del Fiore**; or **Duomo** di Firenze; or Cathedral of **Saint Mary of the Flower**; or Cathedral **Sanctae Mariae Floris**; accept **Florence** after "cathedral" is read]

<Painting and Sculpture>

17. Two characters in this work discuss a novelist who exclaimed, "God damn the spring!" because the season's "irrelevant sensations" make it impossible to write. After leaving his old home, which has been converted to a public library, a character in this work is detained by the police and is forced to show a proof sheet bearing his name. This story ends with the protagonist referencing his father's "temperament of the north" and his indeterminately foreign mother's sensuousness to explain how he "stands between two worlds" in a letter to a female painter who had earlier called him a "bourgeois manqué." In the first episode of this novella, the main character is disappointed that his friend is more interested in photographs of horses than in Schiller's *Don Carlos*. The title character of this novella travels to Denmark, where he sees doppelgangers of his childhood crushes Hans and Ingeborg dancing at a ball. For 10 points, name this Thomas Mann novella.

ANSWER: Tonio Kröger

<European Literature>

18. A method for halogenating these compounds was proposed to undergo a radical relay mechanism by Ronald Breslow. The addition of a benzophenone group to one of these compounds allowed selective functionalization of its carbons in an early example of the method of remote oxidation. The removal of a spiro acetal side chain from a class of these compounds called sapogenins was discovered by Syntex founder Russell Marker; that Marker degradation was the first process used to synthesize these compounds at industrial quantities. The Wieland–Miescher ketone is a common starting material for these compounds due to that ketone already possessing their AB ring structure. The biological precursors to these compounds are typically triterpenes that form a cucurbitane core. Prednisone is one of these compounds, which contain a core of seventeen carbon atoms arranged in four rings. For 10 points, name this class of compounds that includes sex hormones and cholesterol.

ANSWER: steroids [accept corticosteroids; prompt on sterols; prompt on glucocorticoids; prompt on hormones]

<Chemistry>

19. A group inspired by the ideas of Laurence Gronlund and this American man operated the Kaweah Colony around the "Karl Marx" sequoia tree until the creation of Yosemite National Park enabled their arrest for lumber cutting. Cyrus Field Willard led a movement inspired by this person's writings, which were also the source for the design of the Bradbury Building in San Francisco. For school programs coinciding with the Columbian Exposition, this man's Christian Socialist cousin developed a namesake salute identical to the later Nazi salute and wrote the Pledge of Allegiance. This author's advocacy of state ownership of industry was taken up by a network of over 150 Nationalist Clubs formed around the country. The Equality Colony in Washington was named for this author's sequel to his best-known book, in which Julian West wakes up in the year 2000. For 10 points, name this author of *Looking Backward*.

ANSWER: Edward Bellamy

<American History>

20. According to the Talmud, the status of this prophet's namesake book was questioned until Hananiah ben Hezekiah spent so many nights working to resolve its contradictions with the Torah that he burned 300 barrels of oil. When this prophet tells a group of twenty-five men that the corpses they have piled up in Jerusalem "are the meat for which [Jerusalem] is the pot," Pelatiah drops dead. In one vision, this prophet is guided by a man who shines "like copper" and carries a cord of linen and a measuring rod. In another vision, God commands this prophet to inscribe "Judah's" on one stick and "Joseph's" on another stick and then hold the two sticks together. God forbids this prophet to mourn after the death of his wife. This prophet builds a model of Jerusalem under siege and lies on his left side next to it shortly after he eats a scroll listing Israel's punishments. God commands this man to prophecy against Gog, the ruler of Magog. For 10 points, name this prophet who experiences a vision of the valley of dry bones.

ANSWER: Ezekiel [or Yechezkel]

<Religion>

Bonuses

1. A volume in this series pays a surprising amount of attention to the work of the editor's friends Oliver Gogarty and Shri Purohit Swami and lover Margot Ruddock. For 10 points each:

[10] Name this long-running series of poetry anthologies whose 1936 entry on "Modern Verse" contains an introduction by W. B. Yeats decrying Victorian poetry's "irrelevant descriptions of nature." Its taste-shaping first entry was edited by Arthur Quiller-Couch.

ANSWER: **Oxford Books** [accept **Oxford poetry** anthologies or any specific books, such as *Oxford Book of English Verse*]

[10] Yeats's introduction explains his odd decision to chop this author's flowery description of the *Mona Lisa* into free verse and use it as the first poem of the book. That description appears in this Victorian critic's book *The Renaissance*.

ANSWER: Walter **Pater**

[10] A better-known introduction by Yeats boosted the popularity of this collection of Bengali poetry by Rabindranath Tagore.

ANSWER: **Gitanjali** [or **Song Offerings**]

<British Literature>

2. In an agreement called this place's "treaty," William Gladstone agreed to have his government pay the back rent of over 100,000 Irish farmers. For 10 points each:

[10] Name this prison whose main entrance lies below a carving of five snakes in chains. This prison in Dublin historically confined many Irish freedom fighters, including the leaders of the Easter Rising.

ANSWER: **Kilmainham** Gaol [or **Kilmainham** Prison]

[10] While held in Kilmainham, this Irish patriot wrote a letter to his love Sarah Curran that was intercepted by English authorities. This man was executed for leading an 1803 Irish uprising in which his men killed the justice Lord Kilwarden.

ANSWER: Robert **Emmet**

[10] The Kilmainham Treaty was an agreement between William Gladstone and this longtime leader of the struggle for Irish Home Rule. He was ruined by the story of his affair with Kitty O'Shea.

ANSWER: Charles (Stewart) **Parnell**

<European History>

3. Answer the following about the blind virtuoso multi-instrumentalist Rahsaan Roland Kirk, for 10 points each:

[10] Kirk's live performances, such as the one recorded on *Bright Moments*, were known for their colorful banter and use of this technique, which Kirk often used with the aid of a custom-made "manzello."

ANSWER: playing **multiple saxophones** at the same time [prompt on playing the saxophone; prompt on playing more than one instrument at once with "which instrument"]

[10] In addition to playing up to three saxophones simultaneously, Kirk could use his nose to play two of these non-reed woodwind instruments at once. Eric Dolphy played this instrument on the third track of *Out to Lunch*.

ANSWER: (nose) **flute**

[10] Kirk contributed the flute solo to "Soul Bossa Nova," a track by this bandleader. He conducted Miles Davis at Montreux in Davis's last recorded performance before his 1991 death.

ANSWER: Quincy (Delight) **Jones** (Jr.)

<Other Fine Arts>

4. Ludwig Prandtl hypothesized that viscous effects on a solid body would be confined to this region. For 10 points each:

[10] Name this thin region of a fluid that lies near the interface with a body moving relative to the fluid.

ANSWER: **boundary layer**

[10] In Blasius's model of a laminar boundary layer, the thickness of the layer is proportional to this function of the distance from the leading edge, while the shear stress at the boundary is proportional to the inverse of this function of the same distance.

ANSWER: **square root** [or **one-half power**]

[10] Most descriptions of boundary layers impose this condition, which requires that at the interface itself, the fluid does not move relative to the solid body. This condition is also used to derive the equations for Couette and Hele-Shaw flow.

ANSWER: **no-slip** condition [accept word forms like "**not slipping**"]

<Physics>

5. One of these places, the Mahāpadma, is so cold that the body freezes and cracks and then the internal organs freeze and break too. For 10 points each:

[10] Name these places from Buddhist cosmology where beings remain for upwards of sextillions of years, in proportion to their accumulated karma.

ANSWER: **narakas** [or **nirayas**; prompt on Buddhist **hells**]

[10] A sutra enumerating the "fundamental vows" of Ksitigarbha describes how he empties the *narakas* of suffering sinners to fulfill his role as one of these beings. These beings forgo nirvana to help others attain enlightenment.

ANSWER: **bodhisattvas**

[10] Gruesome descriptions of the *narakas* appear in the *Devaduta Sutta*, which is titled for a set of five "divine messengers" consisting of an infant, a criminal, and these three individuals. Siddhartha Gautama encountered these three individuals along with an ascetic when he first left his palace.

ANSWER: a **sick** man, an **old** man, and a **corpse** [all three answers required, accept equivalents like an **elderly** person or a **dead** person]

<Religion>

6. In *Syllogismes de l'amertume*, this author claimed, "All my life, I wanted to be something else: Spanish, Russian, German, cannibal—anything but what I was." For 10 points each:

[10] Name this author who may have used French for later works like *The Trouble with Being Born* in an attempt to distance himself from his previous Fascist apologetics.

ANSWER: E. M. **Cioran** [CHOH-rah] [or Emil Mihai **Cioran**]

[10] Cioran praised fascism in a work titled for the "transfiguration" of this country. The book *Cioran, Eliade, Ionesco: L'oubli du fascisme* criticizes the fascism of three major intellectuals from this country.

ANSWER: **Romania**

[10] Cioran's "On an Entrepreneur of Ideas" is about this other author, whom he often stalked to the Café de Flore. This author claimed to have hidden anti-Nazi protest in a play that ends with a "cowardly" deserter saying, "Well, well, let's get on with it."

ANSWER: Jean-Paul **Sartre**

<European Literature>

7. The namesake of this idea was an Argentine jurist who proposed it in his seminal *The Theoretical and Practical International Law of Europe and America*, published in 1863. For 10 points each:

[10] Name this legal and foreign policy doctrine, enshrined in many Latin American constitutions, under which international disputes over foreign investments within a country must be submitted to the jurisdiction of the courts of that country rather than being settled via diplomatic or military pressure.

ANSWER: **Calvo** doctrine [accept **Calvo** clause; or **Bello** doctrine]

[10] The Calvo doctrine was a refutation of the practice of international enforcement by military intervention that was known as this kind of “diplomacy,” after vessels like the SMS *Panther* that steamed menacingly into foreign harbors in the nineteenth and early twentieth centuries.

ANSWER: **gunboat** diplomacy [accept answers mentioning **gunboats**]

[10] When nationalization leads to expropriation of foreign investors, the Calvo doctrine has clashed with an American doctrine named for this secretary of state, who demanded “prompt, adequate, and effective” compensation in the wake of Mexican agrarian reforms.

ANSWER: Cordell **Hull** [accept **Hull** doctrine; or **Hull** formula]

<Social Science>

8. After the fall of this king’s last *valido*, Luis Méndez de Haro, this king relied on the mystical nun María de Agreda for advice on governance. For 10 points each:

[10] Name this “Planet King.” His chief minister for the first twenty-two years of his rule was the expansionist Count-Duke of Olivares.

ANSWER: **Philip IV** of Spain [or **Philip III of Portugal**; prompt on **Philip**; do not accept or prompt on “Philip III” alone]

[10] Olivares’s aggressive foreign policy severely hurt the Spanish economy due to the concurrent decline in imports of this resource from the Americas, where it was mined at Potosí.

ANSWER: **silver**

[10] Olivares established juntas to enact the economic suggestions of these reformist writers, including intellectuals like Sancho de Moncada, who addressed memorials to the king advising such measures as the abolition of the *alcabala* tax to prevent Spain’s decline.

ANSWER: **arbitristas**

<European History>

9. These two computer scientists name a theorem stating that a formal power series over a language is algebraic over the natural numbers if the underlying grammar is unambiguous. For 10 points each:

[10] Name these two computer scientists who name that “enumeration theorem.” They also name a “representation theorem” that gives conditions for when a language is context-free.

ANSWER: Marco **Schützenberger** and Noam **Chomsky** [or Marcel-Paul **Schützenberger**]

[10] Marco Schützenberger and Noam Chomsky also name a hierarchy for organizing formal languages. Type-zero languages on the hierarchy are the most powerful and can be recognized by these devices, which consist of a read/write head and an infinite tape.

ANSWER: **Turing** machines

[10] Chomsky also names a normal form used to describe context-free grammars. In Chomsky normal form, nothing is allowed to produce this kind of terminal, which is represented by the letter epsilon.

ANSWER: **empty** string [or **empty** terminal; grudgingly accept **null string** because some books abuse terminology]

<Other Science>

10. Answer the following about philosophical interpretations of Ursula K. Le Guin's work, for 10 points each.

[10] Le Guin's story "The Ones Who Walk Away from Omelas" is often taken as a critique of this ethical theory, whose originator developed the felicitic [fee-luh-SIH-fik] calculus.

ANSWER: utilitarianism [prompt on consequentialism]

[10] The title ideology's "dreamwork and memory disorder" is compared to the confabulations in Le Guin's novel *The Lathe of Heaven* in this Mark Fisher book about the impossibility of imagining alternatives to the title system.

ANSWER: Capitalist Realism: Is There No Alternative?

[10] This thinker, who has praised the impulse to "world-reduction" in Le Guin's books, wrote a 1991 book discussing the role of pastiche and the crisis of historicity in the title phenomenon.

ANSWER: Fredric Jameson

<Philosophy>

11. The SHRIMP device is used in this surface analysis technique. For 10 points each:

[10] Name this technique that sputters a surface with an ion gun and then analyzes the rejected ions. Although this technique is very fast and sensitive, it is a poor qualitative technique.

ANSWER: secondary-ion mass spectrometry [or SIMS]

[10] The SHRIMP device used for SIMS is considered this type of analyzer due to using both a magnetic and an electric sector instrument in series.

ANSWER: double focusing

[10] A common SIMS ion source is the ionized form of this element from a duoplasmatron. This element is a commonly used inert gas due to forming approximately 1% of the atmosphere.

ANSWER: argon [accept Ar]

<Chemistry>

12. This decision was hinted at by an epigraph reading, "Omissions are not accidents." For 10 points each:

[10] Identify this notorious change that an author made for her 1967 *Complete Poems*, which deleted lines such as "imaginary gardens with real toads in them" from her most famous poem.

ANSWER: Marianne Moore cutting "Poetry" down to its first three lines [accept obvious equivalents of removing most of the lines of "Poetry"; prompt on Marianne Moore revising "Poetry"]

[10] W. H. Auden so loathed this poem's line "We must love one another or die" that he often removed the whole stanza or changed the "or" to an "and" in its various editions.

ANSWER: "September 1, 1939"

[10] Walt Whitman removed some of the homoerotic lines from "Song of Myself" and three of the Calamus poems for the ninth edition of *Leaves of Grass*, the last published during his lifetime, which is known by this name.

ANSWER: the "deathbed" edition

<American Literature>

13. In the aftermath of this event, the Vanguard youth group organized a protest in which participants literally swept Market Street while carrying signs that read, "All trash is before the broom." For 10 points each:

[10] Name this 1966 riot in the Tenderloin district of a major city. Susan Stryker's documentary *Screaming Queens* chronicles this event, which began when a drag queen threw coffee in a police officer's face.

ANSWER: the Gene Compton's Cafeteria riot [or Compton Cafeteria riot]

[10] The Compton's Cafeteria riot took place in this American city, where Gilbert Baker designed the rainbow LGBT pride flag at the request of city supervisor Harvey Milk.

ANSWER: San Francisco, California

[10] In 1975, Milk controversially outed his friend, former marine Billy Sipple, the day after Sipple rose to fame by preventing a woman from performing this action.

ANSWER: shooting President Gerald Ford [or assassinating Gerald Ford; or equivalents]

<American History>

14. Though Franz Joseph Haydn wrote relatively few concerti compared to his symphonic output, he wrote at least two for this instrument. For 10 points each:

[10] Haydn wrote a long D-major concerto for Anton Kraft, a soloist in the Esterházy orchestra, to play on what instrument?

ANSWER: **cello** [or violon**cello**]

[10] This Italian composer, a contemporary of Haydn, wrote a cello concerto that was popularized by an arrangement by Friedrich Grützmacher. He also wrote the quintet *Night Music in the Streets of Madrid*.

ANSWER: Luigi (Rodolfo) **Boccherini**

[10] A minuet from Boccherini's String Quintet in E Major is now a classic example of this courtly style of music. Boccherini was nicknamed "Haydn's wife," referring to his light compositional touch, which is typical of this style.

ANSWER: **galant** [prompt on **rococo**]

<Classical Music>

15. A traditional Spanish custom of this type known as a *moresca* fascinatingly survives today mainly on the island of Korčula off the coast of Croatia. For 10 points each:

[10] Identify this general type of folk custom. The Romanian Căluș is similar to the "rapper" version of this practice, as well as a type originating from Northumbria that was banned by Oliver Cromwell.

ANSWER: **sword dances** [or **weapon dances**; or **Morris dance**; or long **sword**; or rapper **sword**; prompt on **dance**; prompt on **ritual dance**; prompt on **folk dance**]

[10] Sword dances were often part of these amateur plays traditionally put on by all-male acting troupes throughout the British Isles and former colonies. Possibly the oldest folk festival in the United States is a New Years' Day "parade" named for these performances in Philadelphia.

ANSWER: **mummers** plays [or **mumming**]

[10] The Philadelphia Mummers, as well as performers impersonating Moors in various European sword dances, often incorporated this practice that was the key visual feature of American minstrel shows.

ANSWER: **blackface**

<Geography>

16. After one of this author's characters is unable to save a pregnant woman from being kicked to death, she appears in his dreams barefoot, convincing him to never again wear shoes. For 10 points each:

[10] Phoebe Lin is groomed to bomb abortion clinics by John Leal, a survivor of a North Korean prison camp who becomes a cult leader, in what Korean American author's 2018 debut novel *The Incendiaries*?

ANSWER: R. O. **Kwon**

[10] *The Incendiaries* is frequently likened to Donna Tartt's *The Secret History*, as the protagonists of both novels join cults after moving to this type of place. A novelistic genre named for its use of this setting includes Kingsley Amis's *Lucky Jim*.

ANSWER: a **college** campus [or a **university** campus; accept **campus** novel]

[10] In this novel, a dyslexic girl exposes details about a cult run by her father, a diseased, telekinetic man known simply as "The Leader," in a seemingly fantastical novel about supernatural "Little People" titled *Air Chrysalis*.

ANSWER: **1Q84** [or **Ichi-Kyū-Hachi-Yon**] (by Haruki Murakami)

<World Literature>

17. Wilms tumor is an example of this kind of cancer, as it often develops from tissue fragments called nephrogenic rests that develop before birth. For 10 points each:

[10] Identify this type of cancer that is caused by malignancies in precursor cells. The most common type of CNS primary malignancy in adults is prefixed “glio-” followed by this eight-letter suffix.

ANSWER: **blastoma**

[10] Retinoblastoma is caused by a mutation in a gene of this type that is conveniently also known as retinoblastoma. Many blastomas are linked to loss-of-function mutations in these genes, such as p53.

ANSWER: **tumor suppressor** genes

[10] When stained and viewed under a microscope, many blastomas show these wheel-like or halolike patterns of differentiated cells surrounding a central, acellular region.

ANSWER: **rosettes** [or pseudo**rosettes**; accept specific named **rosettes**, like the Homer Wright or the Flexner–Wintersteiner **rosettes**]

<Biology>

18. Gustavus III sarcastically offered to buy a coat for a sculpture that depicts this man with a pen in his right hand and no clothes apart from a drape covering his left shoulder and groin. For 10 points each:

[10] Identify this writer, the subject of four different busts by contemporary sculptor Jean-Antoine Houdon, who also depicted him “seated.”

ANSWER: **Voltaire** [or François-Marie **Arouet**]

[10] The aforementioned nude, anatomically realistic portrait of Voltaire was created by this sculptor of *Mercury Fastening His Sandals*. It must have been a really hot sculpture of Voltaire, because this artist lends his name to the red-light district of Paris.

ANSWER: Jean-Baptiste **Pigalle** [The district is known as Quartier Pigalle.]

[10] A year before his death, Voltaire was the subject of the very first wax sculpture by this female artist, who made death masks for victims of the Reign of Terror and established a namesake museum of wax figurines in London.

ANSWER: (Anna) Marie **Tussaud** [or Madame **Tussaud**; or Marie **Grosholtz**]

<Painting and Sculpture>

19. Within this empire, messengers carrying *paiza* tablets could obtain lodgings and new horses at stations set up as part of the *yam* system. For 10 points each:

[10] Name this empire that administered law and order along its long trade routes according to the *Yassa* law code, whose contents are still unknown but are partly described by Giovanni Pian del Carpine.

ANSWER: **Mongol** Empire [prompt on the **Golden Horde**, the **Chagatai Khanate**, the **Yuan Dynasty**, or the **Ilkhanate**]

[10] After capturing Tata-Tonga, who was a member of this ethnic group, Genghis Khan had the Mongols adopt their writing script. This group now lives mostly in the Xinjiang autonomous region of China.

ANSWER: **Uyghur** people [or **Uighur**; or **Uygur**; or **Weiwu'er**; prompt on **Turks** or **Turkish** people]

[10] A social scientist from this family argued that the Mongol Empire created a polycentric Eurasian world system in *Before European Hegemony*. Another member of this family used fieldwork among the Awlad Ali Bedouin as the basis for the book *Veiled Sentiments* and the article “Writing against Culture.”

ANSWER: **Abu-Lughod** [the authors are Janet and Lila **Abu-Lughod**]

<World History>

20. One of the earliest psychobiographies is a Sigmund Freud essay titled for this artist and “a memory of his childhood.”
For 10 points each:

[10] A *Virgin and Child with St. Anne* supposedly shows the repressed homosexual urges of what Renaissance designer of a mechanical knight, a tank, and a flying machine?

ANSWER: Leonardo **da Vinci** [or **Leonardo** di ser Piero da Vinci]

[10] A 1943 psychobiography of Adolf Hitler that correctly predicted his suicide two years later was written by Henry Murray, who is better known for conducting several unethical experiments at Harvard in which this mathematics prodigy was the most noteworthy participant.

ANSWER: Ted **Kaczynski** [or Theodore John **Kaczynski**; or the **Unabomber**]

[10] In *The Sins of the Fathers*, Frederick Crews wrote that this author’s work was valuable only when read with a Freudian gaze. It’s unclear whether one needs to be a Freudian to appreciate this man’s campaign biography, *The Life of Franklin Pierce*.

ANSWER: Nathaniel **Hawthorne** [or Nathaniel **Hathorne**]

<Other Academic>