**ACF Regionals 2018**

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Tossups

1. The genotype of this compound’s receptor significantly correlates with disease subtype in leprosy patients. Several failed anticancer clinical trials used a macrophage-activating factor derived from gc-globulin, to which the majority of this compound is bound in the bloodstream. It’s not an estrogen, but this compound is the most prominent “seco,” or broken-ringed, steroid in the body. A precursor to this compound is formed by a six-electron conrotatory ring-opening of 7-dehydrocholesterol. This compound is hydroxylated at the 25 and 1-alpha positions in the liver and kidney, respectively, to yield its biologically active form, calcitriol. A rare X-linked dominant form of rickets is resistant to this vitamin. For 10 points, name this vitamin that regulates calcium homeostasis, and is produced in the skin upon ultraviolet exposure from sunlight.

ANSWER: Vitamin **D** [or Vitamin **D1**; or Vitamin **D2**; or Vitamin **D3**; or Vitamin **D4**; or Vitamin **D5**; or **ergocalciferol**; or **lumisterol**; or **ergosterol**; or **cholecalciferol**; or **22-dihydroergocalciferol**; or **sitocalciferol**; accept **calcitriol** until it is read]

<Biology>

2. The cover of Sherry Turkle’s book *Reclaiming Conversation* is a reference to an anecdote in this other book, in which the narrator writes that he and his friend “gradually shoved our chairs farther apart till they touched the wall in opposite corners.” This book’s use of “heroic writing” was analyzed in a book by Stanley Cavell titled for its “senses.” This work discusses the “fire and smoke” emitted by the “nostrils” of the “iron horse” while describing the railroad in its chapter “Sounds.” The anonymous “Poet” frequently referenced in this book is generally thought to be its author’s friend Ellery Channing. This book opens with a chapter titled “Economy,” which describes its author’s decision to live for two years on land owned by Ralph Waldo Emerson near the title body of water. For 10 points, name this transcendentalist memoir by Henry David Thoreau.

ANSWER: ***Walden****; or Life in the Woods* [accept *Senses of* ***Walden***]

<Miscellaneous Lit>

3. A son of this deity, who threw himself down a well after being driven insane by Dionysus as punishment for violating the Maenad Coronis, was named Boutes (“BYOO-teez”). Confusingly, Romans typically referred to this Greek deity as Aquilo, who is listed as one of his counterparts in other sources. Three priests of Apollo ruled the land beyond this deity’s realm, where the sun always shone. This deity disguised himself as a horse to mate with the mares of Erichthonius. Said to live on Mount Haemus, he carried away the daughter of Erechtheus and Praxithea, Oreithyia (“or-uh-THIGH-uh”), to obtain a wife. Phineus was able to eat because the Harpies were chased away by this deity’s sons Zetes and Calaïs. For 10 points, name this member of the Anemoi, a brother of Notus, Eurus, and Zephyrus who personified the North wind.

ANSWER: **Boreas** [accept **Aquilo** until read]

<Mythology>

4. *Specific name required.* A series of biographies of minor figures in this conflict, such as deserter Tim Doolan, are collected in a book titled for it by Peter Hopkirk. One side in this conflict invalidated the other side’s pretext for annexing Khiva by convincing the city’s ruler to release European slaves. Tensions in this conflict peaked after an assault on the border fort Ak-Tepe known as the Panjdeh Incident. This conflict, which led to the creation of the Wakhan Corridor, had its name coined by Arthur Conolly, who was beheaded for spying in Bukhara. It didn’t include the US, but a political cartoon about this conflict with the caption “Save me from my friends!” depicts its participating powers as a bear and a lion on either side of Sher Ali Khan, a ruler of Afghanistan. For 10 points, give this term for the political conflict between Russia and Britain for influence in Central Asia.

ANSWER: The **Great Game** [prompt on answers that mention Russia invading Afghanistan, saying “Specific name required - can you name the broader conflict that was part of?” do not accept or prompt on “Soviet invasion of Afghanistan” or “British invasion of Afghanistan”]

<British/CW History>

5. *Sikuri* music is usually played with an instrument from this family called the *siku*. A Canadian musician often called “Dragon” [this instrument], Ron Korb, plays many instruments from this family from around the world, such as the Chinese *xiao* (“shyow”). A South Indian instrument from this family called the *venu* has a North Indian equivalent called the *bansuri*, which features in the origin story of the *rasa lila* dance. “End-blown” examples of this instrument include one used for thousands of years in the Middle East called the *ney*. Examples of the “vessel” type of this family of instruments include the ocarina (“oh-kuh-REE-nuh”). The syrinx is sometimes called the “pan” variety of, for 10 points, what family of high woodwind instruments that includes the half-sized piccolo?

ANSWER: **flute**s [accept end-blown **flute**s or pan **flute**s or vessel **flute**s; accept any mentioned flute variety before it is read, such as the **ney** or **xiao**; accept **pan pipe**s; prompt on woodwinds or wind instruments]

<Other Art (Other Music)>

6. After one victory, this man’s troops apocryphally started singing the hymn “Now Thank We All Our God,” leading it to be called that battle’s namesake “chorale.” Pyotr Saltykov used the terrain of the Reppen Forest and reserves under Ernst Gideon von Laudon to counter one of this man’s oft-used battle plans, which he had previously used to rapidly concentrate his forces on Charles of Lorraine’s left flank to win the Battle of Leuthen. This ruler granted the Bayreuth (“BYE-royt”) Dragoons a special march after their defeat of a numerically superior force at Hohenfriedberg. This ruler, who frequently employed the oblique order of battle, attempted to seize the province of Silesia (“sigh-LEE-zhuh”) from a southern neighbor after a Pragmatic Sanction gave its throne to Maria Theresa. For 10 points, name this king who led Prussia through the War of Austrian Succession and the Seven Years’ War.

ANSWER: **Frederick the Great** [or **Frederick II** von Hohenzollern]

<European History post-600>

7. A social scientist with this surname found that relative community sizes are key to explaining why the Chewa and Tumbuka ethnic groups have better relations in Zambia than in Malawi. Another thinker with this surname co-wrote a book with Jack Goldsmith that used game theory to analyze the title “limits of international law.” A third thinker with this surname analogized sexual behavior to ice cream flavor preferences in his book *Sex and Reason* and spent many years as a colleague of Frank Easterbrook, in which capacity he and Robert Bork shaped US antitrust law. That thinker with this surname, who founded the “law and economics” movement and co-ran a policy blog with Gary Becker, retired from the Seventh Circuit Court of Appeals in 2017. For 10 points, give this surname of Richard, generally considered to be the most influential American judge not on the Supreme Court.

ANSWER: **Posner** [accept Daniel **Posner**, Eric **Posner**, or Richard **Posner**]

<Social Science>

8. The world’s longest railway platform is found in this country. In this country, numerous z-reverses and the Agony Point loop are used to help flatten the effective gradient of the line taken by the steam-powered “Toy Train” up to Ghoom Station. Frederick William Stevens designed an ornate Gothic Revival railway station in this country that was formerly called Victoria Terminus. The ongoing Diamond Quadrilateral high-speed rail project in this country parallels the Golden Quadrilateral that connects four of its major cities. A circular suburban railway line in this country has stations that serve the old Dum Dum Arsenal as well as the Eden Gardens cricket stadium. This country’s DHR railway passes by the southern face of the world’s third-tallest mountain, Kanchenjunga. For 10 points, name this country where you could take an extremely crowded train from Delhi to Mumbai.

ANSWER: **India** [or Republic of **India**; or **Bharat** Ganarajya]

<Geography>

9. They aren’t determined by chemical composition, but the energy cost to adiabatically destroy one of these regions is measured by the Schmidt stability index. Sonar reflects off these regions due to the negative sound speed gradient caused by their sudden density changes. They’re not found on the surface, but these regions can support standing waves called seiches (“SAY-shiz”). In the oceans, these regions are nonexistent at polar latitudes, while they are found within the mesopelagic zone in the tropics. These regions separate the epilimnion from the hypolimnion, and they often coincide with the pycnocline (“PICK-no-clyne”). The autumnal breakdown of these regions in stratified lakes leads to upwelling of nutrient-rich water from the cold depths that mixes with the warmer surface layer. For 10 points, name these regions over which water temperature changes rapidly with depth.

ANSWER: **thermocline**s [or **metalimnion**s; accept **pycnocline** until “density changes,” and prompt on pycnocline afterward; prompt on thermal layers or density layers or clines]

<Other Science (Earth Science)>

10. A 2012 Scribner edition of a novel includes the “Fitzgerald” and “Live-Baby” varieties of these things compiled by its author’s grandson Seán. A pocket watch is turned back fifteen minutes between two of these things in a 1969 novel. A man says “we are friends” to a woman who replies “And will continue friends apart” before they hold hands in the original version of one of these scenes that was revised at the behest of Edward Bulwer-Lytton. Ernest Hemingway vacillated between 47 of them before settling on the sentence “After a while I went out and left the hospital and walked back to the hotel in the rain” for the scene of this type in *A Farewell to Arms*. A specific type of them gets its name from a scene in Thomas Hardy’s *A Pair of Blue Eyes*, in which Henry Knight slips and hangs off the edge of a cliff. O. Henry specialized in the “twist” form of, for 10 points, what narrative features?

ANSWER: **ending**s [accept synonyms such as **finale**s, **conclusion**s, and **final scene**s; accept **last sentence**s; accept **last line**s anti-prompt (ask “can you be less specific?”) on cliffhangers until “hangs” is read; none of them really apply, but prompt on plot twists until “twist” is read] (The first, second, and third sentences refer to *A Farewell to Arms*, *The French Lieutenant’s Woman*, and *Great Expectations*, respectively.)

<Long Fiction>

11. A work by this thinker describes the trust in one’s legal advocate, the trust of a child in their mother, and the trust of a corpse in its washer as the three stages of trust in God. This thinker ended another work by analyzing the positions that the world is pre-eternal, that God does not know particulars, and that there is no bodily resurrection as examples of “unbelief.” This thinker’s major work targets writers who used logical sciences as “evidentiary proof for the truth of their metaphysical sciences,” and therefore fail the Ash‘arite standard of being able to prove that God exists. That work by this author of the *Revival of the Religious Sciences* prompted a cheekily-titled refutation by Averroes (“ah-ver-ROE-us”). For 10 points, name this thinker who attacked Aristotelian aspects of the *falsafa* tradition in *The Incoherence of the Philosophers*.

ANSWER: al-**Ghazali** [or Abū Ḥāmid Muḥammad ibn Muḥammad al-**Ghazālī**; accept **Algazel**us]

<Philosophy>

12. The first recorded immigrant of this ethnicity to the US was a man who introduced the cultivation of silkworms to Jamestown named Martin. Members of this ethnicity sponsored a monument consisting of eight arches in Montebello. An election in which a politician of this ethnicity defeated Tom Bradley to become governor led to the coining of the term “Bradley effect.” After witnessing attacks on people of this ethnicity, Henry Morgenthau Sr. raised funds to help them. A plurality of residents of Glendale, California, are of this ethnicity, as was the lawyer who read a supposed suicide note from Nicole Simpson to the press during the O. J. Simpson trial. Immigration by this group surged after the Iranian revolution, as they comprise the largest Christian group in Iran. For 10 points, name this ethnic group whose immigration also increased after a genocide in the Ottoman Empire.

ANSWER: **Armenian**s [or **Armenian** Americans] (The third sentence refers to George Deukmejian.)

<US History>

13. In molecular dynamics, repeated rescaling of this parameter while temperature is held constant may produce an artifact called the “flying ice cube effect.” In the coarse-grained description, this is the only variable that specifies the microstate of a lattice gas. In TOF mass spectrometry, ions with different values of this quantity are separated in the magnetic, but not the electric, sector. The mobility of an ion can be calculated by dividing the magnitude of the electric field by the ion’s “drift” variety of this variable. The “most probable” value of this variable can be found at the peak of the Maxwell–Boltzmann distribution, whereas the value of its “root mean squared” variety is proportional to the inverse square root of the molar mass. The kinetic theory describes gas particles with high values of, for 10 points, what quantity that is squared in the formula for kinetic energy?

ANSWER: **velocity** [or **speed**; accept **kinetic energy** until “drift” is read; prompt on energy until “drift” is read]

<Chemistry>

14. In the second section of a work titled for this event, the cello re-introduces a fugue subject while the saxophone plays a glissando, which it also plays during the overture over a steady drumbeat. Gottfried van Swieten (“SVEE-tin”) translated English works for the libretto of a choral work titled for this event, which is divided into three sections, the last of which is set in a garden and opens with the singing of “In rosy mantle appears.” A work titled for this event suddenly transitions from a quiet C minor overture on a loud C major chord accompanying the word *licht*, or “light,” and opens with a “Representation of Chaos.” African mythology was the source of inspiration of a jazz-influenced ballet titled for this event by Darius Milhaud (“dar-YOOS mee-YO”). Writings by John Milton were set to music in a Joseph Haydn oratorio titled after, for 10 points, what Biblical event?

ANSWER: the **creation** of the world [accept *The* ***Creation*** or *La* ***Création*** *du monde* or *Die* ***Schöpfung***; do not accept or prompt on “Genesis” as none of these works are titled for Genesis]

<Music>

15. This author’s attempts to efface the “realistic sources” of his works represent an “intent of undoing,” according to Stanley Gontarski. This author analyzed the “total objects” created by Pierre Tal-Coat in a set of correspondences with Georges Duthuit (“doo-TWEE”) published as *Three Dialogues*. A character created by this man describes how a “gravedigger puts on the forceps” before claiming that “habit is the great deadener.” After her parasol catches on fire, a character created by this author opens a music-box that plays a waltz from *The Merry Widow*. That character created by this author talks to her husband Willie while buried in a mound of earth. In his best-known work, two characters discuss whether to hang themselves from a lone tree that appears onstage. For 10 points, name this author of *Happy Days*, an Irishman who created the characters of Vladimir and Estragon in his play *Waiting for Godot*.

ANSWER: Samuel **Beckett**

<Drama>

16. This poet included an oft-anthologized lyric about the sleeping Boaz in a visionary collection that traces human history from Eve, through the upcoming twentieth century, to the trumpets at the day of judgment. This author wrote that “when I arrive, I shall place on your grave / A sprig of green holly, and heather in flower” at the end of his poem “Tomorrow, at Dawn,” one of several that he addressed to his daughter Leopoldine after she drowned in a boating accident. Though in his lifetime he was best known for his poetry collections *La Légende des siècles* (“la lay-JOND day see-EK-luh”) and *Les Contemplations*, he is better known today for a novel whose protagonist absconds with two silver candlesticks belonging to Bishop Myriel, who shelters him after he serves his prison sentence for stealing bread. For 10 points, name this French author who wrote about Jean Valjean in *Les Misérables*.

ANSWER: Victor (Marie) **Hugo**

<Non-Epic Poetry>

17. Peter Dillon watched this country’s natives enthusiastically devour Charles Savage, who had spent a decade starting wars among its natives so he could shoot them for sport. This country was the major non-Caribbean destination of migrant workers called “Girmityas” (“geer-MEET-yus”). The Burebasaga Confederacy is one of three members of its House of Chiefs. The modern founding father of this country, Kamisese Mara, held the presidency until George Speight took a number of officials hostage for two months in 2000, including Mahendra Chaudhry, its first ethnically Hindu prime minister. For 10 points, name this island country in Melanesia currently led by Frank Bainimarama (“bye-nee-mah-rah-mah”), home to a bunch of sugar production and lots of coups in its capital, Suva.

ANSWER: Republic of **Fiji**

<Other History>

18. A modern form of this religious tradition argues that creation should be perceived through three principles of “evolution,” “enclothement,” and “omniscience.” A mysterious “son of the reed” is credited with writing an early book in this tradition called the *Bahir*. “Revisionary ratios” employed by thinkers from this tradition are analyzed in a book by Harold Bloom. Safed, or Tsfat (“tsuh-FOT”), is a modern center for this movement, according to which the void required for creation was made available by “contracting” infinite light in a process called *tzimtzum* (“tseem-TSOOM”). Its members often explain divine infinitude by using a tree-like diagram. The acronym Ari refers to Isaac Luria, who founded this movement’s modern incarnation. Its major text is the Zohar, which explains the relationships between emanations called *sefirot* (“sfee-ROTE”) and the Ein Sof. For 10 points, name this system of Jewish mysticism.

ANSWER: **Kabbalah** [accept ***Kabbalah and Criticism***]

<Religion>

19. One of these artworks includes the figure of Truth resting her foot on a globe, obscuring England from the viewer. A lit canopy tops another of these artworks in the Florence Baptistry on which Michelozzo and Donatello collaborated. While working as an apprentice, Raffaello da Montelupo contributed statues of Rachel and Leah to lower-level niches in one of these artworks. Late in life, Gianlorenzo Bernini completed one of these artworks for Alexander VII. The church of San Pietro in Vincoli contains one of these artworks, whose centerpiece was portrayed in a way that aligned with the Vulgate’s use of the mistranslated word “cornuta.” A horned depiction of Moses sits at the center of one of these artworks, which was intended to include the *Dying Slave* and *Rebellious Slave*. For 10 points, what kind of monument did Michelangelo build for Pope Julius II?

ANSWER: **tomb**s [accept **papal tomb**s; accept **tomb**s of **pope**s or **antipope**s; accept synonyms, such as **mausoleum**s or **funerary** monuments]

<Painting/Sculpture>

20. The oscillation frequency of a piezoelectric crystal changes linearly with a change in this quantity according to the Sauerbrey equation, which is superseded by the Z-match method when the change in this quantity is large. A device invented by Brian Kibble whose name suggests that it measures this quantity calculates it from the current and voltage in a wire, obtaining in the process a very accurate value for Planck’s constant. An apparent change in this quantity is used to measure magnetic susceptibility in a device named for Louis Georges Gouy (“lwee george gooey”). The weak equivalence principle posits the indistinguishability of the inertial and gravitational types of this quantity, whose SI unit is defined by a platinum-iridium cylinder stored in a vault in Saint-Cloud (“san-KLOO”), France. For 10 points, name this quantity that is defined with respect to the International Prototype Kilogram.

ANSWER: **mass**

<Physics>

Bonuses

1. These events typically occur when an order parameter gains or loses a symmetry, such as a paramagnet choosing a direction of magnetization below the Curie point. For 10 points each:

[10] Name these processes in which a substance changes its state of matter, whose more familiar examples include sublimation, melting, and boiling.

ANSWER: **phase transition**s [or **phase change**s]

[10] Phases described by this word are identified not by their symmetry, but rather by some global property that is unaffected by local perturbations. The 2D XY model exhibits phases of this type, as do quantum Hall materials.

ANSWER: **topological** phases [or **topological** order]

[10] The topological phases of the 2D XY model were discovered by J. Michael Kosterlitz and this man, who shared the 2016 Nobel Prize in Physics with Kosterlitz and Duncan Haldane for their work on topological phase transitions.

ANSWER: David James **Thouless**

<Physics>

2. In an attempt to delay the financial downfall of his empire, a man who ruled from this city sold the Crown of Thorns and handed his son to Venetian merchants. For 10 points each:

[10] Name this city that was reconquered by less than a thousand men led by Alexios Strategopoulos, ending the Latin Empire that was established after this city’s 1204 sack during the Fourth Crusade.

ANSWER: **Constantinople** [accept **Istanbul** or **Byzantium**]

[10] The first and last rulers of the Latin Empire shared this name; the former was a Count of Flanders whose reign was cut short by his capture at the 1205 Battle of Adrianople.

ANSWER: **Baldwin** [accept **Baldwin I** or **Baldwin II**; accept **Baldwin of Flanders**]

[10] After pawning the Crown of Thorns to Venetian merchants, Baldwin II sold it to this contemporary in order to finance his collapsing empire. In a disputation in this ruler’s court, Nicholas Donin defended the Talmud from several Christian theologians.

ANSWER: **Louis IX** [or **Saint Louis**]

<European History post-600>

3. Some examples of these objects are kept by Iðunn (“EE-thun”) and are responsible for the Norse gods being immortal. For 10 points each:

[10] Identify this kind of object, an example of which is stolen from the king by the mythological Firebird. Three of them were used by Melanion to win a race.

ANSWER: **golden apple**s [or any answer indicating **apple**s of **gold**; prompt on apples]

[10] A golden apple marked “To the fairest” thrown by Eris was claimed by each of Hera, Aphrodite, and Athena; this man had to choose who was fairest among them, and chose Aphrodite.

ANSWER: **Paris**

[10] Irish narratives called *echtra* (“EKH-trah”) and *immram*, such as ones about Mael Dúin, Bran, and Oisín (“oh-SHEEN”), often narrate journeys to this Irish Otherworld said to be full of golden apples.

ANSWER: **Tír na nÓg**

<Mythology>

4. It is unknown whether any of these numbers are odd. For 10 points each:

[10] Name this class of integers that are equal to the sum of their proper divisors. The three smallest ones are 6, 28, and 496.

ANSWER: **perfect** numbers

[10] According to the Euclid–Euler theorem, every even perfect number equals “*q* times *q*-plus-1, all over 2,” where *q* is one of these numbers. These numbers are searched for by the GIMPS project, which found a 50th one of them in January 2018.

ANSWER: **Mersenne prime**s [prompt on Mersenne numbers; prompt on prime numbers]

[10] Each term in this sequence is computed by adding up the proper divisors of the previous term. This sequence repeats with period 1 for perfect numbers, while numbers that repeat with period 2 are called amicable numbers.

ANSWER: **aliquot** sequence

<Other Science (Math)>

5. Members of this faction relied for political support on disbursements from the Collector of the Port of New York, who organized employees to back its candidates. For 10 points each:

[10] Name this faction of the Republican Party led by Roscoe Conkling whose members opposed civil service reform and favored traditional machine politics.

ANSWER: **Stalwart**s

[10] A man who described himself as “The Stalwart of the Stalwarts,” Charles Guiteau, shot this President, who was succeeded by Chester Arthur after his death.

ANSWER: James A. **Garfield**

[10] Charles Guiteau attempted to become an inhabitant of this place, but was rejected multiple times; he then published a theological treatise mostly plagiarized from its founder, who advocated “complex marriage” and a form of communism.

ANSWER: **Oneida** Community

<US History>

6. This author began his poem “Account” by declaring that “The history of my stupidity would fill many volumes.” For 10 points each:

[10] Name this author who described his “former lives… departing, / like ships, together with their sorrow” in his poem “Late Ripeness,” which was translated into English with the help of his Berkeley colleague Robert Hass.

ANSWER: Czesław **Miłosz** (“CHESS-waff MEE-woash”)

[10] Miłosz wrote a poem declaring that these works should be written “rarely and reluctantly, / under unbearable duress.” A similarly-titled poem by Archibald MacLeish states that these writings “should not mean / But be.”

ANSWER: **poem**s (Both poems are titled “Ars Poetica.”)

[10] Miłosz reports that a “drunkard grows sleepy at the edge of a lawn” in a poetic “Song on” this event, which a different poem predicts will happen “Not with a bang but with a whimper.”

ANSWER: the **end of the world** [or descriptive equivalents]

<Non-Epic Poetry>

7. This character was given the gift of immunity from fire, but she was destroyed when she walked into a fire with the boy Prahlad, who was loyal to Vishnu. For 10 points each:

[10] Identify this demoness whose death is celebrated in a *dahan*, or great pyre, that opens a Hindu festival of colors.

ANSWER: **Holika** [do not accept or prompt on “Holi”]

[10] The *holika dahan* may be considered evidence of the power of this concept, referring to devotion to a particular deity. The form of *yoga* named for this concept logically involves an *ishta-devata*, or favorite divinity.

ANSWER: **bhakti** [or **bhakta**; accept **bhakti yoga**]

[10] This god’s incineration by the third eye of Shiva is also sometimes commemorated on Holi. The namesake “sutra” of this god of love describes a number of sex positions.

ANSWER: **Kama** [accept ***Kama Sutra***]

<Religion>

8. Michael Tippett’s piece in this genre is modeled on Beethoven’s fourth one, which is in G and has a first movement that dwarfs its second and third movements in size. For 10 points each:

[10] Name this genre of piece for orchestra and soloist. Examples of it include Beethoven’s “Emperor.”

ANSWER: **piano concerto** [prompt on concerto]

[10] This composer’s Piano Concerto in G begins with a single note played by the whip. His Piano Concerto in D for the Left Hand was commissioned by Paul Wittgenstein.

ANSWER: Maurice **Ravel**

[10] Different sections of the orchestra play in starkly different keys in the third movement of this piano concerto, which begins with the bassoon and *pizzicato* strings playing in A minor. Its first movement begins with a theme played in C by the clarinet, which is joined by the whole orchestra.

ANSWER: Piano Concerto No. **3** by Sergei **Prokofiev** [accept equivalent answers indicating the **third** piano concerto by Sergei **Prokofiev**]

<Music>

9. At the end of this novel, its protagonist experiences the title sensation when he inserts a zinc milk dipper into a set of train tracks in an attempt to see God, and is knocked out by the ensuing shock. For 10 points each:

[10] Name this novel about the upbringing of David Schearl, a Galician Jewish immigrant in New York.

ANSWER: ***Call It Sleep***

[10] Irving Howe, the critic whose 1964 review of *Call It Sleep* spurred its reprinting, once savagely remarked that “the cruelest thing anyone can do with” this other novel “is to read it twice.” Its protagonist refers to his lover with such nicknames as “The Pumpkin,” “The Pilgrim,” and “The Monkey.”

ANSWER: ***Portnoy’s Complaint***

[10] The author of *Call It Sleep* shares this surname with a different Jewish author who fictionalized him as the writer E. I. Lonoff in *Exit Ghost*, and also wrote *American Pastoral* and *Portnoy’s Complaint*.

ANSWER: **Roth** [accept Henry **Roth** or Philip **Roth**]

<Long Fiction>

10. This phrase follows “Victory” in the title of a diamond-shaped painting that was left unfinished at its artist’s 1944 death. For 10 points each:

[10] Give this phrase that ends the title of a painting dominated by yellow lines that represent city streets, which are interrupted by red, white, and blue squares.

ANSWER: **boogie-woogie** [accept ***Victory Boogie Woogie*** or ***Broadway Boogie Woogie***; prompt on partial answer]

[10] This painter of *Broadway Boogie Woogie* called his other diamond-shaped works “lozenges.” This foremost artist of De Stijl (“style”) limited himself to using primary colors and black and white.

ANSWER: Piet **Mondrian** [or Pieter Cornelis **Mondriaan**]

[10] In the 1980s, this other painter used parallelograms instead of squares in her colorful “lozenge” paintings. Her earlier works, such as *Movement in Squares*, use black and white patterns that produce optical illusions.

ANSWER: Bridget **Riley** [or Bridget Louise **Riley**]

<Painting/Sculpture>

11. Practitioners of this literary form include the “honey-tongued” Claudius Aelianus. For 10 points each:

[10] Name this literary form. Works of this type were delivered aloud in public by speakers like Cicero.

ANSWER: **oration** [or **oratory** literature or **rhetoric**; prompt on speeches or oral literature]

[10] A 1st-century BCE rhetorical movement that favored the plainer language of the Classical period was named for this city. Alexandrians compiled a canon of its ten best speakers, including Antiphon and Lysias.

ANSWER: **Athens** [accept **Attic**ism]

[10] This South African author constantly defended her idiosyncratic negative portrayals of the orator Demosthenes in notes attached to her novels. She wrote homoerotic historical novels like *Funeral Games* and *The Persian Boy*.

ANSWER: Mary **Renault**

<Miscellaneous Lit>

12. The Tjeker, Denyen, and Lukka are listed among this group, as are the Peleset, believed to be the Biblical Philistines. For 10 points each:

[10] Name this group whose great defeat at the Battle of the Delta is recorded on temple inscriptions at Medinet Habu, the mortuary temple of Ramses III. They’re often blamed for the “Bronze Age Collapse.”

ANSWER: **Sea People**s

[10] A climatological account for the origin of the “Sea Peoples” might concur with the account of this “father of history,” who claimed that the Tyrrhenians originated in a migration from Lydia in *The Histories*.

ANSWER: **Herodotus**

[10] Ancient records tend to imply that the Sea Peoples were not that successful when fighting on sea, such as when a king of this name sailed to Cyprus and smote them in three battles. The first king of this name, a great conqueror, referred to Akhenaten as “my brother” in several of the Amarna letters.

ANSWER: **Suppiluliuma** [or **Suppiluliumas**]

<Old Euro/NE History>

13. Translator Matthew Ward set the precedent for preserving one of the words in this line in its original language. For 10 points each:

[10] Identify this strikingly impassive sentence that opens a novel whose protagonist shoots an Arab on the beach.

ANSWER: “**Maman died today**” [or “**Mother died today**” or “**Today, mother died**” or “**Today, mother is dead**” or “**Aujourd’hui, Maman est morte**”]

[10] The sentence “Maman died today” signals Meursault’s (“mur-SOH’s”) indifference in this novel by Albert Camus.

ANSWER: *The* ***Stranger*** [or *The* ***Outsider***; or *L’****étranger***]

[10] The line “I was not sorry when my brother died” opens this novel about Tambu’s desire to attend missionary school. It was written by Zimbabwean author Tsitsi Dangarembga.

ANSWER: ***Nervous Conditions***

<Long Fiction>

14. This compound catalyzes a cross-coupling cascade in the Catellani reaction. For 10 points each:

[10] Identify this extremely strained compound consisting of a cyclohexene ring with a methylene bridge connecting carbons 3 and 6.

ANSWER: **norbornene**

[10] The ring strain of norbornene is commonly relieved through the ring-opening olefin metathesis form of this general type of reaction, which combines monomer groups together to form chains.

ANSWER: **polymerization** [or **polymerism**]

[10] A derivative of norbornene was the subject of a fierce debate as to whether it is one of these electron-deficient species, which are transiently generated in SN1 reactions.

ANSWER: **carbocation**s

<Chemistry>

15. This concept’s role in creating “digital divides” and automating research are two of “six provocations” about it proposed by Kate Crawford and danah boyd. For 10 points each:

[10] Give this two-word phrase that describes the collection and analysis of large quantities of information.

ANSWER: **Big Data**

[10] The rise of Big Data “increases inequality and threatens democracy,” according to the subtitle of this author’s 2016 book *Weapons of Math Destruction*. This thinker maintains the blog Mathbabe.org.

ANSWER: Cathy **O’Neil**

[10] A 2016 ProPublica study analyzed the disparate racial outcomes of Northpointe’s COMPAS algorithm for predicting this action, which uses a survey that asks respondents to agree or disagree with statements like “A hungry person has a right to steal.”

ANSWER: **recidivism** risk [or **recidivist** behavior; accept descriptive answers, such as “the odds of a prisoner **committing another crime** after released”; prompt on crime or criminal behavior]

<Other Academic>

16. This conflict was precipitated by a major *agave* boom in which Miguel Barbachano’s order to evacuate Mérida (“MEH-ree-dah”) was ignored because nobody could find any paper to print it on. For 10 points each:

[10] Name this colonial conflict that was sustained for 50 years by Britain’s recognition of Chan Santa Cruz.

ANSWER: **Caste War**s [do not reveal this answer, but accept **Maya Caste War**]

[10] The Caste Wars was a clash between European-descended Yucatecos and indigenous populations of this ethnicity. This people built pre-Columbian cities like Copán and Chichén Itzá.

ANSWER: **Maya**n people

[10] The Yucatec Maya are distinct from this other group of Maya found to the south, primarily in Guatemala. Its members include an activist who won the Nobel Peace Prize in 1992, Rigoberta Menchú.

ANSWER: **K’iche’** Maya [or **Quiché** Maya]

<Other History>

17. Answer the following about the use of the comparative method in historical linguistics, for 10 points each.

[10] The comparative method draws genetic links between languages by establishing sound correspondences, allowing the reconstruction of languages like this proposed ancestor of English, Greek, and Sanskrit.

ANSWER: **Proto-Indo-European** [or **PIE**; prompt on Indo-European]

[10] The comparative method is based on the idea that sound changes are regular and apply without exception, a hypothesis named for this group of 19th-century German linguists, which included Osthoff and Brugmann.

ANSWER: **Neogrammarian**s [accept the **Neogrammarian** Hypothesis; also accept the **Young Grammarians** or **Junggrammatiker**]

[10] Critics of the Neogrammarians include this “father of sociolinguistics” who argued that a variety of social factors affect the diffusion of lexical innovations in his *Principles of Linguistic Change*. He analyzed “ebonics” in his book *Language in the Inner City*.

ANSWER: William **Labov**

<Social Science>

18. According to the “ambush hypothesis,” “hidden” examples of these sequences that are frameshifted by one are positively selected. For 10 points each:

[10] Identify these sequences, which are nicknamed “amber,” “opal,” and “umber.” Nonsense mutations introduce them prematurely.

ANSWER: **stop codon**s [or **termination codon**s; or **UAA**; or **UGA**; or **UAG**; or **TAA**; or **TGA**; or **TAG**]

[10] Stop codons signal the termination of this process, in which proteins are synthesized from mRNA.

ANSWER: **translation**

[10] In certain methanogenic archaea, the amber codon UAG does not terminate translation, but instead codes for this unusual amino acid that contains a ring attached to an amine group at the end of its side chain.

ANSWER: **pyrrolysine** [or **Pyl**; or **O**; do not accept or prompt on “lysine”]

<Biology>

19. In a notable disagreement with Friedrich Engels’s *The Origin of the Family*, this thinker argued that male-dominated family structures have a biological basis. For 10 points each:

[10] Name this radical feminist author of *The Dialectic of Sex*.

ANSWER: Shulamith **Firestone**

[10] Firestone founded the New York Radical Feminists group with Anne Koedt (“coat”), who is best-known for an essay on the “Myth of the Vaginal” form of this sexual response, which she claims arose due to Freud’s framing of the clitoral method of achieving this response as “juvenile.”

ANSWER: **orgasm** [or “The Myth of the Vaginal **Orgasm**”]

[10] Firestone’s notion of “sex class” is comparable to this earlier thinker’s notion of the “social sex economy,” outlined in his book *The Invasion of Compulsory Sex-Morality*. This German psychoanalyst tried to harness a universal life force called “orgone” (“or-GOH-nay”) energy by having people sit in small, enclosed spaces.

ANSWER: Wilhelm **Reich**

<Philosophy>

20. Stanley Donen skirted censors by using this technique in the film *Indiscreet* to shoot a scene showing Cary Grant and Ingrid Bergman in bed together. For 10 points each:

[10] Name this filmmaking technique in which separately photographed images are placed together in the same frame, often to allow the same actor to appear multiple times at once.

ANSWER: **split screen**

[10] Split screen is something of a signature technique of Brian de Palma, who used it to depict the telekinetic powers of the title girl in this horror film based on a Stephen King novel.

ANSWER: ***Carrie***

[10] The French director Abel Gance used three separate screens and projectors to create a “triptych"-like effect in several frames of his 1927 film depicting the youthful career of this historical figure.

ANSWER: **Napoléon** **Bonaparte** [either answer is fine]

<Other Art (Film)>