

ACADEMIC COMPETITION FEDERATION

ACF NATIONALS 2018

ROUND 11 PLAYOFFS 3

packet by THE EDITORS (3)

Editors: Jordan Brownstein, Andrew Hart, Stephen Liu, Aaron Rosenberg, Andrew Wang, Ryan Westbrook

Tossups

1. The catalyst Fe(PDP) assists in targeting these structures for oxidation with extremely predictable selectivity based on sterics and electronics. The "oxygen rebound mechanism" explains the insertion of an oxygen atom between one of these entities. The use of a donor atom or an end-on template allows the targeting of one of these entities at the meta position. Because d^o ("d zero") centers such as scandium III or lutetium III cannot be oxidized, they instead undergo a concerted process that breaks and forms a metal-ligand bond as well as one of these bonds. These bonds are oxidized by the platinum chloride-catalyzed Shilov system. These bonds can coordinate to a metal through an agostic interaction. Guided and innate mechanisms can be used to affect the selectivity of these bonds for activation or functionalization, which monooxygenases target and replace with hydroxyl groups. For 10 points, name these unreactive bonds that, like carbon-carbon bonds, are found in alkanes.

ANSWER: <u>carbon-hydrogen</u> bonds [accept <u>C-H bond</u>s; accept in either order; prompt on "sigma bonds"; prompt on "single bonds"]

2. A chapel on this island contains a pillar whose design shows vines winding around its column and stone dragons gnawing at its base, reminiscent of the Norse world tree. Legend holds that an apprentice mason sculpted that pillar on this island while his master was away researching its design, leading the master to kill the apprentice out of jealousy. Over 100 mysterious carvings of a pagan figure known as the "Green Man" decorate the aforementioned chapel on this island. This island developed a timber roof truss known as the "hammerbeam" during the Middle Ages, exemplified by a royal hall built by Henry Yevele and Hugh Herland. A branch of Gothic architecture native to this island featured fan vaults, so-named for the cone-like shape of their ribs. The heavy use of long and narrow windows called lancets in one region of this island can be seen in a double-transept cathedral that was painted several times by John Constable. For 10 points, name this island that contains Rosslyn Chapel, Salisbury Cathedral, and Westminster Hall.

ANSWER: Great Britain [accept Britain; do not accept or prompt on "England" or "United Kingdom" or "U.K."]

3. *Two answers required.* Clement of Alexandria was said to have introduced the convention of naming of these two groups separately for the purpose of "scolding them conjointly" in an 1888 treatise by Thomas Wentworth Higginson titled for them. These groups "perpetually pass into one another," like "fluid" that "hardens to solid" and "solid" that "rushes to fluid," in a passage stating that they represent "two sides of the great radical dualism." The claim that there is no "mind" distinctive to one of these groups, just as there is no such "liver," is found in an 1898 study of the "economic relation" between these groups "as a factor in social evolution." A long essay originally serialized in the *Dial* under a title describing a "great lawsuit" involving these two groups is titled for one of them "in the 19th century." Margaret Fuller and Charlotte Perkins Gilman wrote essays about relations between, for 10 points, what two groups, which were "created equal" according to the Declaration of Sentiments written at the Seneca Falls Convention?

ANSWER: <u>women</u> and <u>men</u> [accept the <u>sexes</u> or the <u>genders</u> or other answers indicating <u>male</u> and <u>female</u> (in either order); accept <u>Women and Men</u>, do not accept or prompt on partial answers]

4. Historian Thomas Fiehrer chronicled the timeline of this event in his work "Political Violence in the Periphery," which uses eyewitness accounts like the secretary of state report of Franklin Atwood. Despite the death toll to his people, one country's leader issued an order prohibiting the church from holding masses for those killed in this event and concealed the discovery of corpses found scattered on the rocks of the Artibonite River. An international inquiry into this event was later demanded by that leader, Sténio Vincent, but he quickly settled for a \$750,000 indemnity. This event was followed the next year by a campaign called "el desalojo," or "the eviction," which forced thousands to flee from the Cibao region. The central bloody five-day period of this event is often dubbed "el corte," or "the Cutting." For 10 points, name this 1937 incident carried out by the army of Rafael Trujillo, during which the Dominican state massacred people for failing to correctly pronounce the word for a namesake plant.

ANSWER: <u>Parsley</u> Massacre [or El <u>Corte</u> before mentioned; or <u>Kout-kouto-a</u>; accept <u>Haitian Massacre of 1937</u> or other answers mentioning the massacre of <u>Haitians</u> in <u>1937</u>; prompt on "<u>Haitian Massacre</u>" or similar answers]

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5. This event "might be described as a remote but inevitable result of the art of printing" according to a writer who declared that he "started in life with" this event and "lived, alas! to see the end of it" in the essay "On the Feeling of Immortality in Youth." An officer explains the purpose of this event by pointing to a "hunger-bitten" girl leading a heifer in a section of a poem that recalls the enthusiasts of this event seeing it as a "pleasant exercise of hope and joy." The Solitary voices its author's view by expressing "disappointment and disgust" over this event in the poem *The Excursion*, whose author had an affair with Annette Vallon during it. *An Enquiry concerning Political Justice* was written in response to this event by William Godwin, whose wife, Mary Wollstonecraft, responded to a document from it in her *Vindication*. For 10 points, Romantic authors such as Hazlitt and Wordsworth were influenced by what upheaval that occasioned some "Reflections" by Edmund Burke?

ANSWER: <u>French Revolution</u> [anti-prompt, i.e. ask "can you be less specific?", on more specific answers such as "<u>Reign of</u> <u>Terror</u>" or "<u>Thermidorian</u> Reaction" or "<u>Fall</u> of the <u>Bastille</u>" and so on]

6. These compounds are reacted with o-phthal·di·aldehyde before quantification via HPLC. A complex formed from molybdate and pyrogallol red can be used to detect these compounds. A method for quantifying these compounds is the most common use of a reagent originally meant for quantifying phenolic compounds such as gallic acid. Many assays for the concentration of these compounds rely on the fact that, like biuret (bye-oo-ret), they complex with copper (II) ions to form a colored complex. In one technique, bands containing these compounds are visualized using the red Ponceau (PON-soh) S stain. Coomassie blue stains these compounds in a test named for Marion Bradford. BGG and BSA serve as common standards when measuring these compounds. A simple method of measuring the concentration of these compounds relies on their UV 280 absorptions when they contain aromatic side chains. For 10 points, name these biomolecules that are detected in a western blot.

ANSWER: proteins [accept amino acids; accept polypeptides; prompt on amides]

7. The ineffective use of this type of vehicle was revealed in the Butt Report, which led to the development of systems such as Gee and Oboe. Analysis primarily concerning these vehicles that took survivorship bias into account was central to Abraham Wald's pioneering work in operational research. Henry Tizard argued for a cut in funding of these vehicles in a dispute with Lord Cherwell, whose "dehousing" paper advocated their heavy use. These vehicles were subject to the Casablanca directive, which superseded a directive that called for their use over broad areas. These types of vehicles were equipped with a "bouncing" device invented by Barnes Wallis during Operation Chastise in the Ruhr Valley. Patrick Blackett was the primary inventor of the Mark XIV ("14"), a vector "sight" used by these vehicles. The de Havilland Mosquito and Avro Lancaster were examples of, for 10 points, what kind of aircraft that dropped ordnance on Nazis? ANSWER: Royal Air Force **bomber**s [accept answers indicating (British) air**plane**s that drop **bomb**s such as **bomber** planes; accept more specific answers such as dive **bomber**s or light **bomber**s or torpedo **bomber**s or ground attack **bomber**s or night **bomber**s or other specific types of military planes]

8. The use of the phrase "looking at her bitch-kitty face" in the opening lines of this poem is a celebrated example of Mary Jo Bang's stylized 2012 translation. Tennyson's claim in "Locksley Hall" that "a sorrow's crown of sorrow is remembering happier things" refers to a line from this poem's fifth section. In that section of this poem, a woman describes a love that "can quickly seize the gentle heart" and "releases no beloved from loving." By borrowing this poem's line "and over our heads the hollow seas closed up," the narrator underscores his failure to explain this poem's passage about Ulysses to Pikolo in Primo Levi's *If This Is a Man*. Henry Wadsworth Longfellow translated this poem's final line as "thence we came forth to rebehold the stars." This poem's narrator encounters a lion, a she-wolf, and a leopard in its opening section, which begins in a "dark forest" midway through "life's journey." The line "abandon all hope, ye who enter here" comes from, for 10 points, what first part of Dante's *Divine Comedy*?

ANSWER: Inferno [prompt on "Divine Comedy" or "Divina Commedia"]

9. America's leading industrial producer of this element has developed an ultrastrong alloy of it called Micromill. Peralkaline rocks are oversaturated with sodium and potassium oxides with respect to the oxide of this element. The "saturation index" of this element is one of three parameters commonly used to classify granite. Alloying with this element is a common method to stabilize the alpha phase of titanium because this element raises the beta transus temperature. On many three-component triangular phase diagrams of igneous rocks, the corner corresponding to 100 percent of this element includes the minerals kyanite, and sillimanite. The presence of this element along with silicon and oxygen is one of the defining features of feldspar. Rubies and sapphires are comprised of corundum, which is the trioxide of, for 10 points, what metal that is primarily sourced from bauxite?

ANSWER: aluminum [or aluminium; or Al]

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10. Composer and type of piece required. In one of these pieces, the second movement in G-sharp minor begins with a first violin solo played fortissimo and entirely on the G string for twelve bars. The last of these pieces has all six movements in E-flat minor, all played without breaks between them, and all played *adagio* or *adagio molto*. These pieces are the subject of the book *Music for Silenced Voices* by Wendy Lesser. The thirteenth of these pieces, in B-flat minor, is the only one in a single movement and requires the players to strike their instruments at certain points. Another of these pieces, in C minor, quotes the "Jewish theme" from the composer's second piano trio in its second movement and from his first cello concerto, in E flat, in the waltz-like third movement. The most popular of these compositions is the eighth, which is dedicated to the "Victims of Fascism and War" and revolves around the composer's signature "D – E flat – C – B," or "DSCH," motif. For 10 points, name these chamber compositions by the composer of the *Leningrad Symphony*.

ANSWER: <u>string quartet</u>s of Dmitri <u>Shostakovich</u> [accept any answer mentioning <u>string quartet</u>s and Dmitri Dmitriyevich <u>Shostakovich</u>; prompt on "<u>quartets by Shostakovich</u>" or similar answers that mention "quartets" but not "string quartets"]

11. This model can be extended by the "extreme independent particle model" to approximate deformation from a hard sphere. A crude harmonic oscillator potential in this model can be refined with a rounded well potential proportional to the inverse of quantity one plus a decaying exponential, and that refinement is named for Woods and Saxon. This model assumes that the spin-orbit coupling is always analogous to jj coupling such that the individual particle *I* and *s* numbers add vectorially. The strongest success of this model is its explanation of the high neutron cross section and natural abundance of isotopes and isotones with 28, 50, or other "magic numbers" of nucleons, thus improving on the older liquid-drop model. Eugene Wigner, J. Hans Jensen, and Maria Goeppert Mayer developed, for 10 points, what model of the nucleus, which proposes that nucleons fill up energy states similarly to electrons in atomic orbitals? ANSWER: nuclear **shell** model

12. In the passage that introduces this situation, the author discusses how things can have either market price or fancy price, while that which is above price has "dignity." An essay in a 1996 book examines how holding one another responsible and entering "relations of reciprocity" such as friendship perform the title act of "creating" this situation. A statement that makes use of this thought experiment is the fourth of four "formulas," following the formula of humanity and the formula of autonomy. This thought experiment, which titles a book by Christine Korsgaard, defines a "systematic union of different rational beings under common laws." We should construct our maxims as if we are legislators in this state according to one formulation of the categorical imperative. For 10 points, name this hypothetical polity discussed in Immanuel Kant's *Groundwork*, in which people do not treat one another as means.

ANSWER: kingdom of ends [or reich der zwecke; accept Creating the Kingdom of Ends]

13. After two characters in this novel insultingly call each other "Elvis" and "Refugee Stick Insect," they are repeatedly referred to as Their Excellencies Ambassador E. Pelvis and Ambassador S. Insect. The contrasting class backgrounds of two characters in this novel are illustrated by the objects they get stuck up their noses as children, a glass bead and green gram. While two characters in this novel are running away from home because their mother called them "millstones" around her neck, their boat is capsized by a floating log and their passenger drowns. A Rhodes Scholar in this novel returns home to work in his family's Paradise Pickles and Preserves Factory. In a pivotal scene of this novel, a child who can't stop singing at a musical performance is taken out to the lobby, where he is molested. This novel is mainly set in the city of Ayemenem and chronicles the lives of egg twins Rahel and Estha. For 10 points, name this debut novel by Arundhati Roy. ANSWER: *The God of Small Things*

14. Carl Bridenbaugh theorized that a prince of this group was identical to the mysterious Don Luis de Velasco who accompanied founders of the Ajacan Mission. Two men had to lean on the shoulders of a ruler of this group to place a crown on his head during a farcical "coronation" set up to turn him into a vassal. A warning given by a boy to Richard Pace helped one town escape a massacre that warriors from this group began by walking into homes pretending to sell provisions and then grabbing available weapons. Leaders of this group called werowance were subordinated to a ruler based in their capital of Werowocomoco. This group was decimated by reprisals after Opechancanough (OH-peh-CHAN-kan-uff) led it in attacks on settlements such as Henricus. For 10 points, name this group of Algonquian American Indian tribes in Virginia organized into a "confederacy" under chiefs such as Pocahontas's father.

ANSWER: <u>Powhatan</u> Confederacy [or <u>Powhatan</u>s; or <u>Tsenacommacah</u>; or <u>Tsenacomoco</u>; or <u>Tenakomakah</u>; or <u>Attanoughkomouck</u>; or <u>Attan-Akamik</u>; accept <u>Virginia Algonquian</u>s before "Algonquian"; prompt on "<u>Algonquian</u> peoples" or "<u>Algonquian</u>s" before "Algonquian"]

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15. A philological scandal that arose in Britain after the 1970 publication of a book titled for a "sacred" one of these things "and the cross" ruined the academic career of John Marco Allegro. The man who pioneered the ethnological study of these things, R. Gordon Wasson, wrote a 1968 monograph examining his theory that the Vedic *soma* was made from a type of them. The "blasted landscapes" preferred by one of these things stand in for the possibility of life in the "cracks of the global political economy" in a 2015 anthropological study written by one of the leading scholars of the "anthropocene." That examination of "the possibility of life in capitalist ruins" is titled for one of these things "at the end of the world" and contains Anna Tsing's writings on a species of them known as the *matsutake*, which was the first living thing to grow in the wake of the Hiroshima and Nagasaki atomic bombings. For 10 points, name these organisms whose connection to culture is studied by ethnomycologists.

ANSWER: <u>mushroom</u>s [accept The <u>Sacred Mushroom and the Cross</u> or <u>Soma: Divine Mushroom of Immortality</u> or The <u>Mushroom at the End of the World</u>: On the Possibility of Life in Capitalist Ruins; prompt on "<u>fungus</u>" or "<u>fungi</u>" or similar answers]

16. Research by Michael Worobey et al. in 2004 conclusively debunked a theory of the creation of this entity that had previously been discredited by the Wistar committee. In the 1999 book *The River*, Edward Hooper expounded on a theory about the creation of this entity first published in a 1992 *Rolling Stone* article written by Tom Curtis. The scientist who developed a "rule" that attempted to explain altruism, W. D. Hamilton, died from an ulcer after contracting malaria while investigating the theory that this entity had been accidentally created by a team led by Hilary Koprowski. A KGB propaganda campaign, which was channeled through a report written by Jakob Segal, held that this entity was created in the 1970s at Fort Detrick in Maryland. Another debunked theory claims that it was accidentally created during work on the oral polio vaccine in the Congo. The "bushmeat theory" is still considered a plausible origin theory of, for 10 points, what virus that causes AIDS?

ANSWER: <u>HIV</u> [or <u>human immunodeficiency</u> virus; accept <u>AIDS</u> virus or <u>AIDS</u> or <u>acquired immune deficiency syndrome</u> or <u>acquired immunodeficiency syndrome</u> before "AIDS"]

17. According to the most fulsome source on this man's life, he made a conquest by presenting a young boy as a rightful heir to ambush two men who were "not princes nor even of princely stock." A legend claims that he was prophesied to die by his horse, causing him to have his horse killed, but when he visited the horse's grave, he was bitten by a snake that slithered from the horse's skull. This man, who killed Askold and Dir to acquire territory, reportedly turned his fleet of longships into horse-drawn tanks and forced Leo VI the Wise to sign a treaty with him in his attack on Constantinople. The Schechter letter's reference to "HLGW," which some scholars interpret to mean this man, calls into question the chronology of the *Primary Chronicle*, according to which this Varangian died in 912, 33 years after his deathbed appointment as the successor to Rurik. Prince Igor succeeded, for 10 points, what founder and first ruler of the Kievan Rus, who was known as "of Novgorod"?

ANSWER: <u>Oleg</u> of Novgorod [or <u>Örvar</u>; accept Prince <u>Oleg</u> or <u>Oleg</u> the Seer or <u>Oleg</u> Veshchy or <u>Oleg</u> the Prophet; accept <u>Helgi</u> before "HLGW"; prompt on "<u>Helgi</u>" after "HLGW"]

18. In a novel by this author, the protagonist's husband has a separate bedroom, wants to move to Brazil, and wants his son Junior to learn that sex is a "grand joke," all of which are suggestive of his homosexuality. After taking refuge from a storm in a church, the protagonist of a novel by this author meets her future husband, the preacher Pleasant Green. In a novel by this author, a woman shatters her husband's heirloom cup after suspecting him of an affair with a woman whom she had encountered at a rooftop cafe in Chicago in the novel's first part, "Encounter." This author's friend Carl Van Vechten inspired the writer Hugh Wentworth in a novel whose ambiguous ending suggests that the protagonist may have caused a woman's fatal fall from a window. This creator of the half-Danish Helga Crane wrote a novel in which Irene Redfield encounters her light-skinned childhood friend Clare Kendry, who has married a racist white man. *Quicksand* and *Passing* are by, for 10 points, what female writer of the Harlem Renaissance?

ANSWER: Nella Larsen [or Nellallitea Larsen]

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19. Two of Luca della Robbia's sons joined a group led by this man, whom they depicted on several bronze medallions. The most recognizable portrait of this man, which shows him in profile above a Latin inscription, was painted by an artist born Baccio della Porta. Like Dante, this man both appears in Raphael's *La Disputa* and is the namesake of a style of X-shaped folding chair made of interlocking pieces of curved wood. Fra Angelico's fresco version of the *Annunciation* is found a few yards from the rooms that are preserved as this man's private chambers. This man, who led a group known as the "weepers," inspired the destruction of nudes painted by his portraitist, Fra Bartolomeo, who was a fellow resident of San Marco. *The Mystical Nativity* is thought to have been inspired by one of this man's sermons. Vasari records that Sandro Botticelli gave up painting based on the teachings of, for 10 points, what Dominican friar who presided over Florentine bonfires of the vanities?

ANSWER: Girolamo Savonarola

20. In one text, a sea god prophesies the life of Mongán after claiming that, to a man of this name, the ocean is a flowery plain. The proverb "he who will be chief, let him be a bridge" comes from a tale about a king of this name who, taking advantage of his massive size, allowed his army to cross a river by marching over his body. According to the *Trioedd Ynys Prydain* (TREE-oth in-ISS prih-DYNE), Arthur excavated an object that once belonged to a king with this name, breaking a protective spell and exposing Britain to invasion. A son of Febail with this name sought out the Otherworld after encountering a silver branch with white blossoms. In a text titled for his "voyage," that man of this name leads a crew to an Island of Women that is untouched by time. A king of this name gave Matholwch (mah-THOH-look) a magical cauldron that revived the bodies of the dead, only for Matholwch to use the cauldron against the king's invasion of Ireland, which that king of this name launched to defend his sister's honor. For 10 points, give this name of the Welsh king in the *Mabinogion* who is referred to as "the Blessed."

ANSWER: Bran [accept Bran mac Febail or Bran the Blessed or Bendigeidfran or The Voyage of Bran]

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Bonuses

1. In addition to demarcating colonies and zones of influence in greater Syria, this agreement granted France control over a large swath of what is now Turkey. For 10 points each:

[10] Name this secret agreement between the French and British governments that demarcated the eastern boundary of the state of Lebanon.

ANSWER: <u>Sykes-Picot</u> agreement [or <u>Asia Minor</u> Agreement]

[10] Following the Sykes-Picot agreement, the UK and France partitioned former Ottoman territories into these types of territories supervised by the League of Nations, including ones for Syria, Iraq, and Palestine.

ANSWER: League of Nations mandates

[10] In 1937, a Syrian district named for this city seceded from Syria and became Turkey's Hatay province.

ANSWER: Alexandretta [or İskenderun or al-Iskandarūna]

2. The protagonist of a novel invents a story about his family to get a ferryman to investigate a wrecked steamboat named for this author. For 10 points each:

[10] Name this author whom Mark Twain claimed set "the world in love with dreams and phantoms" and "had so large a hand in making Southern character . . . that he is in great measure responsible for the [Civil War]."

ANSWER: Walter Scott

[10] The wreck of the *Walter Scott* is a set piece in this Mark Twain novel, whose narrator travels on a raft with the escaped slave Jim.

ANSWER: The Adventures of Huckleberry Finn [accept Huck Finn]

[10] Twain's assault on Romanticism continues in the next section of the novel, in which Huck looks at crayon pictures with titles like "And Art Thou Gone Yes Thou Art Gone Alas" by this unseen character. A description is acceptable.

ANSWER: <u>Enmeline</u> <u>Grangerford</u> [or <u>Emmeline</u>; accept answers mentioning or describing the deceased <u>daughter</u> of the <u>Grangerford</u> family; prompt on "<u>Grangerford</u>"; prompt on answers involving or describing a "<u>daughter</u> of one of the feuding <u>families</u>" by asking for the family name]

3. This text uses the term "symbolic universe" to describe the set of traditions that make up the symbolic totality of the institutional order. For 10 points each:

[10] The argument that knowledge is based on linguistic representations of patterns arising from the roles that people take on within society is central to what 1966 book on the "sociology of knowledge"?

ANSWER: The Social Construction of Reality: A Treatise in the Sociology of Knowledge

[10] Peter Berger and Thomas Luckmann's *The Social Construction of Reality* claims that the growth of specialized knowledge outpaces the growth of general knowledge because of this process that Émile Durkheim examined "in society" and Adam Smith illustrated with the example of a pin factory.

ANSWER: division of labor [accept The Division of Labor in Society or De la division du travail social]

[10] Part I of *The Social Construction of Reality* focuses on the "foundations of knowledge" within this conceptual framework, which is the subject of a book on its "practice" by Michel de Certeau and a "critique" by Henri Lefebvre. ANSWER: <u>everyday life</u> [accept <u>routine life</u> or <u>vie quotidienne</u> or *The <u>Practice of Everyday Life</u>* or *The <u>Critique of Everyday Life</u>*]

4. The main theme of this piece was likely borrowed from *Messe du Deuxième ton* (DUH-zee-em ton) by André Raison. For 10 points each:

[10] Name this piece that consists of a ground bass theme plus 20 variations and a final contrapuntal section. Its ground bass theme is first stated in the pedals and begins "C - G - E-flat - F."

ANSWER: Passacaglia and Fugue in C minor, BWV 582 [or Passacaglia and Thema Fugatum in C minor]

[10] The ground bass in J. S. Bach's *Passacaglia and Fugue* is an example of this musical device, a motif that repeats incessantly throughout a piece. Its name comes from the Italian for "stubborn."

ANSWER: ostinato [accept basso ostinato]

[10] The organ music of Bach and many others was heavily popularized in the United States by this British-born organist, who performed weekly radio programs from Harvard's Busch-Reisinger Museum in the 40s and 50s.

ANSWER: E. Power **Biggs** [or Edward George Power **Biggs**]

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5. A simple consequence of this theorem is that if the Lagrangian does not depend on a position coordinate, then the conjugate momentum in that direction is constant. For 10 points each:

[10] Give this theorem, named for a female German mathematician, which states that every global continuous symmetry of the system generates a conserved quantity.

ANSWER: Noether's theorem

[10] For any classical mechanical Lagrangian, the equations of motion will also remain unchanged when an extra term is added that can be expressed as *this operator* applied to some function *f*.

ANSWER: <u>total time derivative</u> [accept word forms; prompt on "time <u>derivative</u>"; do not accept or prompt on "partial time derivative" or "ordinary time derivative"]

[10] In contrast to its Hamiltonian counterpart, Lagrangian mechanics is carried out in this vector space, which is defined by the generalized coordinates only, rather than by both the coordinates and the velocities.

ANSWER: configuration space

6. Postmodern philosophy's use of this word's adjectival form is prefigured by Walter Benjamin's reference to this sort of "messianic power." For 10 points each:

[10] Identify this attribute that names a type of theology introduced by John Caputo that focused on God's instability and a type of "thought" advocated by Gianni Vattimo that avoids the claims to certainty made in metaphysics.

ANSWER: <u>weak</u>ness [or <u>weak</u>; accept <u>weak</u> messianic power or <u>weak</u> theology or <u>weak</u> thought]

[10] Caputo wrote about this thinker's "religion without religion" in a book titled for his "prayers and tears." Caputo's book about postmodernism and the church, *What Would Jesus Deconstruct?*, is titled for a method this French thinker advanced in *Of Grammatology*.

ANSWER: Jacques Derrida [or Jackie Élie Derrida]

[10] The phrase "weak messianic power" appears in this Benjamin essay, which compares materialist perspectives on the title subject to the mechanical Turk and imagines an angel with his "face turned towards the past."

ANSWER: "Theses on the Philosophy of History" [or "On the Concept of History"; or "Über den Begriff der Geschichte"]

7. Because it is seemingly about everything, this novel is often discussed in relation to its author's goal to write a "book about nothing" held together by style alone. For 10 points each:

[10] Name this unfinished novel that an author worked on obsessively for the last ten years of his life, in the process accumulating notes from over 1,500 books on topics such as horticulture and astronomy and collecting eight volumes of quotations that he planned to release as its second volume.

ANSWER: Bouvard et Pecuchet [or Bouvard and Pecuchet]

[10] This author satirized bourgeois clichés in the *Dictionary of Received Ideas*, which he appended to *Bouvard and Pecuchet*. He visited Carthage to write his novel *Salammbô*.

ANSWER: Gustave Flaubert

[10] Flaubert's process for the novel is discussed in the chapter on "Multiplicity" from this author's *Six Memos for the Next Millennium*. This author proposed 14 definitions of the title books in *Why Read the Classics*? ANSWER: Italo <u>Calvino</u>

8. The founder of this dynasty was the last ruler of the Year of the Five Emperors, and this dynasty's fall from power was followed by the Crisis of the Third Century. For 10 points each:

[10] Name this Roman dynasty whose emperors included Caracalla and Elagabalus.

ANSWER: <u>Severan</u> dynasty [accept the <u>Severan</u>s]

[10] The reign of the Severan dynasty was interrupted by this Berber, who arranged the assassination of Caracalla and succeeded him as emperor.

ANSWER: Macrinus [or Marcus Opellius Severus Macrinus Augustus]

[10] Macrinus was the first emperor to have ascended from this position, whose holder was nominally in charge of the force protecting the emperor. During the reign of Tiberius, Sejanus essentially ruled Rome from this position.

ANSWER: <u>prefect</u> of the <u>Praetorian</u> Guard [or <u>Praetorian</u> Guard <u>prefect</u>; accept any answer mentioning <u>Praetorian</u> and <u>prefect</u>; prompt on "<u>prefect</u>"]

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9. This computer scientist illustrated the importance of consensus for distributed systems in his paper "The Byzantine Generals Problem." For 10 points each:

[10] Name this 2013 Turing Award laureate. His work provides the theoretical foundation of the Paxos consensus-solving protocol.

ANSWER: Leslie B. Lamport

[10] Lamport developed an algorithm for partially ordering computational events based on this variable. Clock synchronization algorithms are used to keep this variable consistent between nodes of a distributed system. ANSWER: time

[10] An algorithm named for this institution can be used to synchronize system clocks. This institution's "sockets" are an API for interprocess communication that originated in UNIX.

ANSWER: University of California, <u>Berkeley</u> [or UC-<u>Berkeley</u>; accept <u>Berkeley</u> algorithm or <u>Berkeley</u> sockets; prompt on "University of <u>California</u>" or "<u>Cal</u>"]

10. Charles Simic's claim that "somewhere in the city of New York there are four or five still-unknown objects that belong together" describes the method of this artist, who was profiled in Simic's *Dime-Store Alchemy*. For 10 points each: [10] Name this American artist best known for creating shadow boxes filled with found items.

ANSWER: Joseph Cornell

[10] Cornell's boxes were influenced by the ready-mades of this French Dada artist, which included *In Advance of a Broken Arm*.

ANSWER: Marcel Duchamp [or Henri-Robert-Marcel Duchamp]

[10] Cornell's boxes were also a response to this European artist's collages and assemblages, which this man called "merz (mairtz) pictures."

ANSWER: Kurt Schwitters [or Kurt Hermann Eduard Karl Julius Schwitters]

11. This man articulated the "preferential option for the poor" in a 1971 book. For 10 points each:

[10] Name this Peruvian religious philosopher who teaches at Notre Dame. His 1971 book coined a term for a progressive Catholic movement.

ANSWER: Gustavo <u>Gutiérrez</u> [or Gustavo <u>Gutiérrez</u> Merino]

[10] Gutiérrez was one of the founders of this Catholic "theology," which originated in Latin America and held that social justice was a crucial part of church doctrine.

ANSWER: <u>liberation</u> theology [or teología de la <u>liberación</u>; accept *The <u>Theology of Liberation</u>* or *La <u>Teología de la</u> <u>liberación</u>]*

[10] Liberation theology was opposed by this conservative "congregation" in the Vatican, which was led by Joseph Ratzinger, the future Benedict XVI ["the 16th"]. It descended from the Roman Inquisition.

ANSWER: Congregation for the **Doctrine of the Faith** [or Congregatio pro **Doctrina Fidei**; accept **CDF** or **Holy Office** or Supreme Sacred Congregation of the **Holy Office**]

12. The axes of these diagrams represent reaction coordinates, while the top left and bottom right represent the reactants and products. For 10 points each:

[10] Name these diagrams that effectively serve as projections of potential energy surfaces. A transition state is represented on these diagrams as moving along or perpendicular to a diagonal.

ANSWER: More O'Ferrall-Jencks plots

[10] The rules for a transition state's movement along a More O'Ferrall-Jencks plot are "effects" named for this statement. ANSWER: <u>Hammond</u>'s postulate [or <u>Hammond</u>-Leffler postulate]

[10] More O'Ferrall-Jencks plots were developed to discuss the mechanisms of this class of reactions that come in E1 and E2 varieties.

ANSWER: elimination reactions

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13. One of these texts created by Charles Cotton eclipsed an earlier one that likely inspired the wording of Edmund's forged letter in *King Lear*. For 10 points each:

[10] Name this sort of text published by John Florio in 1603, from which Shakespeare lifted a speech in which Gonzalo imagines a "commonwealth" where "no kind of traffic" and "no name of magistrate" would be allowed.

ANSWER: English <u>translation</u>s of Michel <u>Montaigne</u>'s *Essays* [or English <u>translation</u>s of Michel Montaigne's <u>*Essays*</u>, prompt on less-specific answers mentioning "<u>Montaigne</u>" or "<u>*Essays*</u>"]

[10] Montaigne's "Of Cannibals" inspired that utopian speech by Gonzalo in this Shakespeare play, in which it is followed by the spirit Ariel lulling the stranded lords to sleep.

ANSWER: The Tempest

[10] This critic edited an edition of Florio's translation that was published under the title *Shakespeare's Montaigne* in 2014. This theorizer of Renaissance "self-fashioning" applied his method of New Historicism in the Shakespeare biography *Will in the World*.

ANSWER: Stephen Greenblatt [or Stephen Jay Greenblatt]

14. The Belgian entrepreneur Georges Nagelmackers founded a company named after these things after seeing them in use on a trip to America, where they had been invented by Theodore Tuttle Woodruff. For 10 points each:

[10] Name these things that, in Europe, were called wagon-lits.

ANSWER: <u>sleeping car</u>s [or <u>sleeper</u> cars; or <u>sleeper</u>s]

[10] In 1883, Nagelmackers's Compagnie Internationale des Wagon-Lits opened this luxury train line that connected Paris to Istanbul.

ANSWER: Orient Express

[10] This Munich-based luxury line operator was founded in 1916 and rose to become the CIWL's biggest competitor in the interwar period. Its livery was dark red, in contrast to the CIWL's dark blue, and its logo displayed a stylized red M above a six-spoked wheel on an oval crest.

ANSWER: Mitropa

15. This dish originated as a meat, typically pork, that was marinated in wine and garlic for consumption by sailors. For 10 points each:

[10] Name this spicy dish whose name derives from a phrase meaning "wine with garlic." A version of this dish that arose in Britain typically contains potatoes, which the original version usually does not despite its name containing a word meaning "potato."

ANSWER: <u>vindaloo</u> ["Aloo" means "potato" in Hindi.]

[10] Vindaloo arose in this small, rich, formerly Portuguese-controlled state of modern-day India that was annexed along with Daman and Diu in 1961's Operation Vijay.

ANSWER: <u>Goa</u>

[10] The British-Bangladeshi version of vindaloo was invented in the curry shops along this street in London. It is home to many Bangladeshis, especially from the region of Sylhet.

ANSWER: Brick Lane [or Brika Lena]

16. The *sura* al-Ma'ida, or "The Table," which forbids eating animals killed by blunt force, is the source of a dispute over whether stunned animals then slaughtered by this method can be eaten. For 10 points each:

[10] Name this method of slaughter that begins with the animal's throat being cut swiftly with a sharp blade, severing the trachea and both sets of jugular veins and carotid arteries while avoiding the spinal cord.

ANSWER: <u>dhabihah</u> [or <u>zabihah</u>]

[10] *Dhabihah* slaughter comports with Islamic dietary law, which is described by this Arabic word that means "permissible" and is contrasted with *haram*.

ANSWER: <u>halal</u>

[10] Foods that are neither *halal* nor *haram* are placed in this third category of "doubtful" or "suspect" foods. ANSWER: <u>mushbooh</u> [or <u>mashbooh</u>; or <u>mushtabih</u>]

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17. Mutations in one these proteins may cause SCA35 or acral peeling skin syndrome. For 10 points each:

[10] Name this type of enzyme that is inhibited by monodansyl cadaverine. When activated by retinoic acid, one of these enzymes performs a modification that causes RhoA to activate as a G-protein.

ANSWER: transglutaminases [or tissue transglutaminases]

[10] Autoantibodies against tissue transglutaminase are a marker of this "disease" that results in gluten intolerance and blunted villi in the small intestine.

ANSWER: <u>celiac</u> disease

[10] TGM2 is found in these cells that primarily make up the stratum basale. The HaCaT cell line is derived from these cells.

ANSWER: keratinocytes

18. One of this man's plays calls for the playing of a medley of sounds, including wind, waves, galloping horses, and a train whistle, as the stage revolves following the protagonist's firing. For 10 points each:

[10] Name this American playwright whose only expressionistic play features a bookkeeper named Mr. Zero, who ends up in the Elysian Fields after being executed for killing his boss.

ANSWER: Elmer <u>Rice</u> [or Elmer Leopold <u>Reizenstein</u>]

[10] Rice's *The Adding Machine* draws on *From Morn to Midnight*, a play about an unnamed clerk by this country's author Georg Kaiser (GAY-org KYE-zer). In the aftermath of World War I, Eugene O'Neill claimed to not be influenced by this country's expressionist movement.

ANSWER: <u>Germany</u> [or Federal Republic of <u>Germany</u>; or Bundesrepublik <u>Deutschland</u>; accept <u>Weimar</u> Republic or <u>Weimar</u> er Republik]

[10] Like *The Adding Machine*, this 1928 expressionist play by Sophie Treadwell centers on an unnamed clerical worker, in this case a Young Woman who is sent to the electric chair after killing her boss-turned-husband George. ANSWER: <u>Machinal</u>

19. Alumni of this school include Doris Humphrey and Charles Weidman, who broke away to found their own company. For 10 points each:

[10] Name this dance school in Los Angeles whose name is a portmanteau of its two founders. It launched the careers of many of the star choreographers of the second generation of American modern dance.

ANSWER: Denishawn School [The founders are Ruth St. Denis and Ted Shawn.]

[10] This Denishawn alumna further pushed modern dance by emphasizing contraction and release of the muscles and stylized breathing. She choreographed Aaron Copland's *Appalachian Spring*.

ANSWER: Martha Graham

[10] Graham emphasized and popularized dancing in this manner to gain better stability. Isadora Duncan had originally pioneered dancing this way, delivering a shock to audiences of her time.

ANSWER: dancing **barefoot** [or with **bare feet** or **without shoes**; accept equivalents indicating **lack of footwear**]

20. A case arising from this incident held that the Fourteenth Amendment applies to actions of governments but not those of citizens. For 10 points each:

[10] Name this 1873 event that led to a series of convictions under the Enforcement Act ruled unconstitutional by the Supreme Court case *United States v. Cruikshank*.

ANSWER: <u>Colfax</u> massacre [or <u>Colfax</u> riot]

[10] In this set of 1873 decisions arising from New Orleans, the Supreme Court essentially gutted the "privileges or immunities" clause of the Fourteenth Amendment.

ANSWER: <u>Slaughter-House</u> Cases

[10] In this 1896 Fourteenth Amendment decision, the Supreme Court upheld the "separate but equal" doctrine as it applied to Louisiana's train system.

ANSWER: <u>Plessy</u> v. <u>Ferguson</u> [accept either underlined portion]