ACF NATIONALS 2019

PACKET 7

Packet by

Florida A + MSU A

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Tossups

1. *Two answers required.* A theory about these two people was based on a translated chronicle that mentions "eating every day from the same table and from the same dish." After a battle between these two rulers, the loser "[drank] of the river" when a bridge collapsed under his retreating army, and the victor adopted the motto "God and My Right." One of these people sent the message "Look to yourself; the devil is loose" to warn an ally about the other. These two combatants at the Battle of Gisors began to feud after one of them broke off an engagement with the other's sister Alys at Messina. Roger of Hovedon stated that "at night" they "didn't let their beds separate them," which is the source for the theory that these two people had a homosexual relationship. Following the 1189 Siege of Acre, one of these kings broke an alliance with the other to return from the Third Crusade. For 10 points, name these warring kings of France and England from the Capetian and Plantagenet dynasties.
ANSWER: **Richard I** of England and **Philip II** of France [or **Richard Lionheart** and **Philip Augustus**; or **Richard Coeur de Lion** and **Philippe Auguste**; or equivalents; prompt on Richard and Philip]
<European History>

2. This director spent months filming shots of a cat eating at a dinner table for a film whose protagonist wells up with tears watching a wagon driver whip two buffaloes. The first title character of a film by this director loudly makes coffee for her friends upon showing up unannounced at 3 AM to the apartment of the second title character. In a 2012 film by this director, the actress Barbara Sukowa holds a lit cigarette as she stares at a black-and-white television screen broadcasting a trial. A journalist disputes the officially reported suicide of her sister, a revolutionary terrorist, in this director's film *Marianne and Juliane*. This former actress made her directorial debut with a 1975 adaptation of Heinrich Boll's *The Lost Honor of Katharina Blum*, which she co-directed with her husband, Volker Schlöndorff. For 10 points, name this director of the biopics *Hannah Arendt* and *Rosa Luxemburg*, a contemporary female German filmmaker.
ANSWER: Margarethe **von Trotta**
<Other Fine Arts>

3. In "A Fable for Critics," Apollo declares "I'm happy to meet" a "scholar" who carries "the soul of a gentleman" to this place. In a novel titled for this location, John scorns civilization for making men "weak, flabby creatures, with ruined eyes and dyspeptic stomachs" and calls the protagonist's profession the "machinery" that is ruining the country. In that novel titled for this place, the gold-digging protagonist chooses not to marry a woman whom he sees doing research in the "Valley of the Shadow of Books." Jonathan Swift wrote "Do you know that [this place] is dead and gone last week? No more ghosts or murders now for love or money" in a work protesting the 1712 Stamp Act. A play titled for this place was based on the earlier *Welsh Opera* and was written under the pseudonym Scriblerus Secundus by Henry Fielding. Edwin Reardon and Jasper Milvain appear in a George Gissing novel titled for a "new" this place. For 10 points, name this London street infamous for "hacks" who peddled low-quality writing.
ANSWER: **Grub Street** [accept *New Grub Street*]
<British Literature>

4. A pioneering example of these facilities uses a semi-aerobic design with a gas venting pipe whose end is always open and a perforated collection pipe to increase the ease of maintenance in the so-called Fukuoka method. In these facilities, anchor trenches are designed to prevent pullout of membrane liners called FMLs without causing tension failure. Methane is naturally produced in the "bioreactor" types of these facilities, which aids in reducing groundwater pollution by leachates. A 3:1 or 20 degree slope gradient is recommended for these facilities that use either push-down and push-up methods for spreading and compaction of a certain substance. In these facilities, synthetic plastic is used to "cap" the said substance, which is compactified, and wrapped in soil and tarps, and put over the layers within these facilities. For 10 points, name these facilities for solid waste disposal.
ANSWER: **landfill**s [or **garbage dump**s]
<Other Science>

5. An essay *about* this author claims the bourgeoisie desires "velvet and plush" covers to make up for the fact that "private life leaves no traces in the big city." That essay about this author theorizes a "commodity-soul" characterized by extreme empathy and calls this author a "secret agent — an agent of the secret discontent of his class with its own rule." This author described one figure as "a prince who is everywhere in possession of his incognito," whose knowledge of humanity is compared to Bacon's idols of the marketplace in a set of essays about this author "in the Era of High Capitalism" by Walter Benjamin. This author is said to have coined the term "modernity," and he examined Poe's "The Man of the Crowd" in an essay about "Monsieur G." For 10 points, name this author who wrote about the *flaneur* in "The Painter of Modern Life."
ANSWER: Charles **Baudelaire** (the leadin is Benjamin's analysis of "À une passante")
<Other Academic>

6. In the third movement of a seven-movement trio by this composer, the three instruments trade off ascending stepwise passages while the other two voices hold long suspensions, depicting its title figure stopping to rest by a fountain. This composer wrote a coda with a written-out trill between E and F-sharp to be "increased by imperceptible degrees" in a piece whose footnote recommends it being played by a flute solo instead of a keyboard instrument. One treatise by this composer includes rules such as trills should begin on the higher note and mordents, or *pincé doubles*, should begin on the main note, and which also provided fingering suggestions for some of his harpsichord pieces. This composer wrote the grand trio sonata *The Apotheosis of Corelli* and the gigue *The Nightingale in Love*. For 10 points, name this French Baroque composer who wrote *The Art of Playing the Harpsichord.*
ANSWER: François **Couperin**
<Music>

7. A man holding this position merged two electric companies into a national monopoly under the leadership of S.J Mahoney after the Light and Power Worker's Union threatened a "strike of blood and fire." Before that man held this position in the "Hundred Days' Government," he was part of a group of men known as "The Pentarchy," which ruled the country for five days. A leader elected to this position under the slogan of "water, roads, schools" enacted an infrastructure program that created the Central Highway and gave his country the most radio stations per capita in the world. A leader holding this position created the BRAC secret police, a group of former Nazi hunters whose activities were ordered through a golden telephone gifted to him by the Vatican. That leader ended his country's monoculture by building hotels and casinos in his capital with the help of Santo Trafficante and Meyer Lansky. For 10 points, identify this position held by such men as Ramon Grau, Gerardo Machado, and Fulgencio Batista.
ANSWER: **President** of **Cuba** [accept synonyms of President here such as **leader** or **dictator**; do not accept "Prime Minister of Cuba"]
<World History>

8. A play by this author combines quotes from a far-right politician's resignation speech with the *Oresteia*. The protagonist of a novel by this author imagines "creeping into" and "rock[ing] into the warm fluid of" her mother's womb, and is repeatedly told she "stinks" after vomiting during a bout of oral sex in which her partner is unable to stay erect. Gita Honegger is currently translating a 666-page novel by this author whose protagonists, including the skier Edgar and the philosophy student Gudrun, are zombies. This author no longer allows her home country to perform her plays, and has frequently criticized that country's Nazi past in works like *The Children of the Dead*. This author discussed her agoraphobia in a video message that played in lieu of an acceptance speech after she won the Nobel Prize. Her novel about the voyeuristic Erika Kohut was adapted into a film by Michael Haneke. For 10 points, name this Austrian author of *The Piano Teacher*.
ANSWER: Elfriede **Jelinek**
<European Literature>

9. In a religious text telling the stories of this many people, a woman requests that the skin be peeled off the face of a handsome man so that she can use it as a mirror. A phrase taken from Psalm 42 translating to "These I recall" titles the *Midrash Eleh Ezkerah*, which recounts the martyrdom of this many rabbis by the Emperor Hadrian. A child wraps and hides this many pieces of *chametz* on the night before Passover. Rabbis have attached significance to the particular word choice of the question "How long shall I bear with this evil congregation?", which God asks after a false report is brought by a group of this many spies. *Ein Sof* is expressed through this many *sephirot*, or emanations of the divine. This is the number of men required for a *minyan*, or quorum for prayer. The "northern" kingdom of Israel was formed by this many tribes, who after the Assyrian conquest were "lost" to history. For 10 points, name the number of commandments given to Moses on Mount Sinai.
ANSWER: **ten**
<Religion>

10. The presence of an electron withdrawing group opposite an electron donating group on one of these compounds lowers its rotational barrier; those highly polarized "push-pull" variants of these compounds have been treated as candidates for molecular logic gates. The Durham precursor is used to form a polymer whose repeating unit contains this functional group. The presence of multiple examples of this functional group defines an ergosterol-binding class of antifungal drugs which includes amphotericin B. The 2000 Nobel in Chemistry was awarded to Heeger, MacDiarmid, and Shirakawa for their work in studying a conductive polymer containing this functional group. Compounds with multiple examples of these functional groups commonly serve as chromophores whose absorbances can be modeled as a particle in a box due to the delocalization of electrons. For 10 points, long conjugated systems often contain many examples of what carbon-carbon double bond containing functional groups?
ANSWER: **alkene**s [accept **olefin**s; accept **polyene**s]
<Chemistry>

11. Kaiser Wilhelm II was gifted one of these objects made by the Bamum people in Cameroon, which incorporates figures carrying a drinking horn, a serving bowl, and European rifles. Following their owners' deaths, some of these objects are darkened with mixtures of cobwebs, eggs, and soot to create "black" varieties. Many of these objects from southeastern Congo that have been attributed to the "Master of Buli" are supported by caryatids. Kester, a member of a Mozambican art collective, used nonfunctional AK-47s to construct one of these objects "of Weapons." One of these objects, which is covered in bells and is typically placed on a blanket such that it never touches the ground, is said to have descended from the sky, landing at the feet of Osei Tutu I. For 10 points, a "golden" example of what object is the seat of power of the Ashanti people?
ANSWER: **stool**s [or **throne**s; or the Golden **Stool**; or black **stool**s; or Ashanti **stool**s; prompt on chairs; prompt on seats]
<Painting and Sculpture>

12. A historian from this country wrote portraits of Abelard and John of Salisbury and called for "morphological understanding … of the actual, specific course of civilizations" in the collection *Men and Ideas*. The motto *Luctor et emergo*, or "I struggle and emerge," in a region of this country exemplified its moral geography" according to one historian. A historian from here examined the 15th century culture of Burgundy "in the light of the setting sun." This country's culture is the subject of *The Embarrassment of Riches*, by British historian Simon Schama. A historian from this country who admired Jakob Burkhardt wrote *The Autumn of the Middle Ages*. Militia called "shooting guilds" in this country were frequent subjects of art. Cultural historian Johan Huizinga was from this home of the humanist who published the first edition of the Greek New Testament. For 10 points, name this country home to Desiderius Erasmus.
ANSWER: **Netherlands** [or **Dutch** Republic; **United Provinces**]
<European History>

13. Trefoil-factor 3 is a biomarker for these cells, as it is heavily expressed in their theca. Signet ring-like cells and cells resembling these cells appear in a carcinoid tumor that is unique to the appendix. Though functionally very similar, club or Clara cells exhibit slightly less extreme polarity than these cells, whose cytoplasm is heavily concentrated toward the apical end and is dotted with many secretory granules. The cytokines IL-4 and IL-13 stimulate MUC5AC production in these cells, driving their hyperplasia in asthma. Prolonged gastrointestinal reflux disease may result in a condition named for Barrett in which the stratified squamous epithelium of the esophagus is mostly replaced by these simple columnar epithelial cells, which normally line the intestinal and respiratory tracts. For 10 points, name these mucus-secreting cells that, when fixed, resemble a namesake type of drinking vessel.
ANSWER: **goblet** cells [accept **simple columnar** epithelial cells before "simple"]
<Biology>

14. A landmark 1985 paper published in the journal *Man* rejected the mainstream view of this system, arguing that it arose in specific situations characterized by immediateness and discontinuity; that paper, which is titled for this system and "disintegration," analyzed the "delayed" form of this process among the Lhomi people of Nepal and is by Caroline Humphrey. A chapter titled for the "myth" of this system documents how introductory textbooks ask students to "imagine" this sort of system and is the launching point for a discussion of gifts and informal credit in David Graeber's book *Debt*. Following the second through fourth chapters of Adam Smith's *The Wealth of Nations*, William Stanley Jevons developed the classical criticism of this system, under which it has a fatal dependence on a "double coincidence of wants." Economics has traditionally explained the emergence of money by pointing to inefficiencies in, for 10 points, what type of economic system in which goods are directly exchanged for goods?
ANSWER: **barter** system [or **truck** and barter system; accept answers mentioning **barter**, such as **barter**ing or **barter** economy; prompt on "quid-pro-quo <u>exchange</u> (system or economy)" or "direct <u>exchange</u> (system or economy)" or similar answers suggesting "good-for-good <u>exchange</u>" before "exchanged"]
<Social Science>

15. In this work, a queen instructs a group of nine witches to provoke the protagonist by stealing leaves from his garden, a plot that fails when he instead sends them away with bags full of vegetables. A septennial ceremony in which a sanctuary's roof is restored is accompanied by the reading of this work, which opens with its speaker listing his lineage and declaring his family to be "vessels of speech." The antagonist of this work resides in a seven-story tower, where he keeps a jar rimmed with decapitated heads inside a room lined with human skin. A character in this work composes the"Hymn to the Bow" immediately after a seven-year-old child pulls himself to his feet with an iron bar. The most widely-circulated version of this work was recorded by D.T. Niane from the version of Djeli Mamadou Kouyaté. In this epic, the son of the hunchbacked wise woman Sogolon defeats the sorcerer Soumaoro Kanté. For 10 points, name this epic handed down over the centuries by griots, which tells the story of a king of Mali.
ANSWER: *Epic of **Sundiata*** [or ***Sundiata**; an Epic of Old Mali*; or *The **Sundiata** Keita*; accept **Sunjata**, **Son-Jara**, **Sunja**, or **Soundiata** in place of "Sundiata"] (the building referenced in the second line is the Kamabolon Sanctuary)
<World Literature>

16. The conditions for inception of this phenomenon are found by solving for the critical value of a dimensionless number equal to a difference in pressure divided by quantity one-half times the density times the velocity squared. This phenomenon is studied at a test facility in Memphis named for William B. Morgan and run by the US Navy. This process creates regions whose sizes can be found by the Rayleigh-Plesset equation. In order to suppress this phenomenon, the net positive suction head available to a pump must exceed the net positive suction head required. The "super" form of this phenomenon creates a protective sheath which reduces drag, allowing torpedoes to move at high speed. The "non-inertial" type of this phenomenon is used in ultrasonic cleaning, while the "inertial" type creates pockets that damage hydraulic components when they implode. Occurring when the fluid pressure falls to the local vapor pressure, for 10 points, name this phenomenon in which bubbles form inside a liquid.
ANSWER: **cavitation** [prompt on <u>boiling</u>; prompt on formation of <u>bubbles</u> before mention]
<Physics>

17. Stewart Shapiro's "working" form of this view says practitioners should behave as if this view is true. An argument *against* this view claims it would make it impossible to explain why certain truths can be known reliably; that argument was made famous by Paul Benacerraf, whose structuralist view opposes this position. In the *Grundlagen*, Frege assumes the truth of certain simple identity statements involving singular terms to argue for this view. Another argument for this position says we should have ontological commitments to entities necessary for our best scientific theories; Quine and Putnam name that "indispensability" thesis arguing for this position. This position entails that the "truths" of a certain discipline are discovered, not invented. Formalism and psychologism are opposed by, for 10 points, what philosophical position that says the abstract entities of arithmetic actually exist?
ANSWER: **mathematical realism** [accept **mathematical platonism**; prompt on just <u>realism</u> or <u>platonism</u>] (technically these are distinct stances, but are frequently conflated/most of the clues are applicable to either)
<Philosophy>

18. A mayor with this surname told a reporter what he hated most about his job was "the shit I have to take from the media" and repeatedly called Ronald Reagan "President Pruneface." That mayor attacked the House Un-American Activities Committee as "Un-American" while appearing before it and coordinated the building of the Renaissance Center. A civil rights leader with this surname proposed a "Domestic Marshall Plan" that influenced Lyndon Johnson's Great Society as the longtime head of the Urban League. A diplomat with this surname played a key role in mediating an end to the Rhodesian Bush War and sparked controversy when he equated arrested civil rights protesters with imprisoned dissidents in the Soviet Union. For 10 points, give the surname of Coleman, Detroit's first black mayor, and Andrew, a mayor of Atlanta who became the first black UN Ambassador.
ANSWER: **Young** [accept Coleman **Young**, Whitney **Young**, or Andrew **Young**]
<American History>

19. A 2019 biography titled for an *Obsession* with these objects details how the Englishman Collingwood Ingram reintroduced a variety of them back to its native country. These objects are mentioned in the first line of a folk song that beholds them "as far as the eye can see," asking "Is it mist, or clouds?" The craft of *kabazaiku* relies on the material from which these objects spring and is said to have originated in Kakunodate, a town whose tourism made these things famous. The largest variety of radish in the world grows in the ash soil of an island named for these objects in Kagoshima Bay. Each day from mid-March to the start of May, meteorological forecasts announce the advance of a northward-moving "front" of these objects. These objects and *ume* are observed during viewing parties called *hanami*, which often take place at Osaka Castle and Ueno Park in Tokyo. For 10 points, name these pale pink flowers, also known as *sakura*, that are a national symbol of Japan.
ANSWER: **cherry** blossoms [or **cherry** trees; accept *<u>sakura</u>* before it is mentioned]
<Geography>

20. In a play by this author, a woman remembers putting on her "little-girl voice" to claim to be an alcoholic at an "alkie club" meeting. A character in a play by this author launches into a speech about the "millions of tiny little slicing operations" that will sterilize the "unfit" in a future of "test-tube-bred" humans after claiming his wife "eats chromosomes for breakfast." In a play by this author, a man yells "I don't want you here! I don't love you! But by God… you stay!" in an "aria" delivered to a pair of characters whom his wife had threatened with a gun the night before. A character in one of his plays pretends to relate the plot of a novel about "Blondie" marrying "Mousie" in order to humiliate a woman about her hysterical pregnancy. Harry and Edna take over one of Agnes and Tobias's rooms in a play by this author. In another, a man repeats "I think I understand this" as he realizes that a couple's son is fictional. For 10 points, name this author of *A Delicate Balance* and *Who's Afraid of Virginia Woolf*.
ANSWER: Edward **Albee**
<American Literature>

Bonuses

1. After one of these siblings went blind, the other provided him a diet of 100 oranges and some black bread every week, basing his medical advice on their 15,000 medical books. For 10 points each:
[10] Name these brothers who secluded themselves in a New York brownstone apartment for decades. One of them starved after his brother got stuck in one of his own booby traps.
ANSWER: **Collyer** brothers [accept Homer Lusk **Collyer** and Langley Wakeman **Collyer**]
[10] Orson Welles's film *F for Fake* mentions the forged "autobiography" of this reclusive film magnate, who was responsible for the growth of Trans World Airlines.
ANSWER: Howard (Robard) **Hughes** Jr.
[10] A reclusive mother and daughter of this last name were the subjects of the 1975 documentary *Grey Gardens*. Jackie Kennedy, the niece of the mother with this surname, helped pay for the removal of over 1,000 bags of garbage from their Manhattan home.
ANSWER: **Beale** [accept Edith Ewing Bouvier **Beale** or Edith Bouvier **Beale**]
<American History>

2. This book advises that "Every line should be the universe to you," in a section composed of notes taken by the author's pupil Margery Ryerson. For 10 points each:
[10] Name this highly aphoristic book that opens by declaring that "Art when really understood is the province of every being." It was compiled from the lectures and writings of painter Robert Henri.
ANSWER: The *Art Spirit*
[10] Alongside artists in his circle like John Sloan and William Glackens, Robert Henri led this realist movement in American painting.
ANSWER: **Ashcan** School [accept The **Eight**]
[10] Towards the end of *The Art Spirit*, Henri writes that the hands in this painting are unfinished because its artist "could not descend to common manufacture." The subject of this portrait, who is modeled on Joanna Hiffernan, holds a lily and stands on a wolf skin in front of a curtain matching her dress.
ANSWER: *Symphony in White*, No. 1: The *White Girl* (by James Whistler) [accept either underlined portion]
<Painting and Sculpture>

3. For 10 points each, name some figures and beliefs of the Lakota people.
[10] Iktomi is a trickster figure that is human and this type of animal. In West Africa, the trickster hero Anansi is one of these types of animal.
ANSWER: **spider** [or *Araneae*]
[10] This figure skeletized a scout who attempted to rape her, but then saw the good nature of his compatriot and gave him and his people knowledge of the seven sacred ceremonies and ceremonial pipe.
ANSWER: **White Buffalo** (Calf) **Woman** [or **Ptehehincalasanwin**; prompt on Buffalo Woman]
[10] This is the Lakota term for the divine life force and their collective deities. This term is sometimes translated as the "Great Mystery."
ANSWER: **Wakan Tanka**
<Mythology>

4. This book closes with the protagonist suffering a stroke while writing the word "indigo," an anagram for "god in I." For 10 points each:
[10] Name this novel about the painter Hurtle Duffield, who smears shit onto the canvas of his work showing the eye of god, whose image had haunted him since he grew up poor in Sydney.
ANSWER: The *Vivisector*
[10] *The Vivisector* is by this Australian Nobel laureate, who also wrote about the artist Alf Dubbo in *Riders in the Chariot*.
ANSWER: Patrick **White**
[10] This other Australian author included a detailed description of a painting of soil entitled *Decline and Fall of the Empire of Grass* in his novel *The Plains*. This perennial Nobel candidate's short fiction is collected in the volume *Stream System*.
ANSWER: Gerald **Murnane**
<World Literature>

5. Unlike their causal counterparts, these functions are analytic in the lower half of the complex plane. For 10 points each:
[10] Name these functions, which solve the inhomogeneous electromagnetic wave equation for a Dirac delta source term, but are nonphysical because they violate causality, despite satisfying Maxwell's equations.
ANSWER: time-**advanced Green**'s functions [prompt on partial answer]
[10] The Green's function method can be used to solve the wave equation for this quantity usually symbolized A. The curl of this field equals the magnetic B field.
ANSWER: magnetic **vector potential**
[10] In this gauge condition, the divergence of the vector potential is set to zero. Unfortunately, it is harder to solve for the vector potential in this gauge due to the more complicated form of the wave equation.
ANSWER: **Coulomb** gauge [or **transverse** gauge]
<Physics>

6. The *Ma'alim fi al-Tariq*, or *Milestone,* uses this word to refer to the "extinction" of mainstream Islam, claiming that all those beside a vanguard of a few self-proclaimed Muslims are actually nonbelievers . For 10 points each:
[10] Give this Arabic term that refers to the act of calling another Muslim an apostate. The book *Milestones* popularized using this word to refer to the emptiness of modern Islamist governments.
ANSWER: *takfir* [accept *takfir*ism]
[10] *Milestones* was written by this father of Islamic extremism and member of the Muslim Brotherhood. He is also known for his short essay "The America I Have Seen" and his thirty-volume work *In the Shade of the Qur'an*.
ANSWER: Sayyid **Qutb**
[10] Qutb's view that the entire Muslim world had fallen into *jahiliyyah* or disbelief is often used by extremist groups to justify the "greater" type of this process of struggling, which is often described as a holy war.
ANSWER: *jihad*
<Religion>

7. The victorious admiral at this battle had declared, "he who eats the chicken also has to eat the cockerel" after the death of his son at the Battle of Chaul the previous year. For 10 points each:
[10] Name this naval battle where an allied fleet under the Kurdish Mamluk Amir Hussain, using Venetian-built galleys that had been disassembled in Alexandria and reassembled at Suez, lost to a fleet that celebrated by firing executed prisoners' heads into coastal villages.
ANSWER: Battle of **Diu**
[10] This European empire won the 1509 battle of Diu, which allowed it to maintain a trading presence in India. This empire had sponsored Vasco da Gama's voyage to India ten years earlier.
ANSWER: **Portugal** [or the **Portuguese** Empire]
[10] In the two years after the Battle of Diu, this hugely successful naval commander took Malacca and Goa for the Portuguese Empire.
ANSWER: Afonso de **Albuquerque**
<European History>

8. This man ignited an intellectual firestorm in the 1970s with the publication of his book *The New Cartography*, which accused mapmakers of "cartographic imperialism." 10 points each:
[10] Identify this German historian and filmmaker who names a cylindrical world map projection that preserves the fidelity of area at the expense of shape, even though James Gall actually invented the projection over a century earlier.
ANSWER: Arno **Peters** [accept **Peters** World Map or Gall-**Peters** Projection or **Peters**-Gall Projection]
[10] In 2017, this city's public school system adopted the Gall-Peters projection for classroom instruction. In the 1970s and 1980s, this New England city's school system was in crisis over desegregation busing.
ANSWER: **Boston** [accept **Boston** Public Schools]
[10] This president's Chief of Staff, Josh Lyman, entertained a pitch from the Organization of Cartographers for Social Equality, who wanted to make the Peters World Map mandatory for classroom instruction. Publications such as the *Atlantic* and *Current Affairs* have blamed this president's administration for instilling a deluded version of liberalism in educated American voters.
ANSWER: Jed **Bartlet** [or Josiah Edward **Bartlet**; prompt on "Jed" or "Josiah"] (from *The West Wing*)
<Other Academic>

9. For a set of points x-n, this set is equal to all of the sums over n of alpha-n times x-n such that each alpha-n is non-negative and the alpha-n's sum to one. For 10 points each:
[10] Name this set whose boundary can be thought of as putting a rubber band around a set of points. It can be computed using Chan's algorithm or Graham's Scan.
ANSWER: **convex hull** [do not accept or prompt on partial answer]
[10] The convex hull is often used to define and illustrate the sum named for this Polish scientist, which is the set formed by adding all the vectors of one input set with all the vectors of the second input set. He also names a generalization of the Euclidean and Manhattan distances over a normed space.
ANSWER: Hermann **Minkowski** [accept **Minkowski** sum]
[10] Both the convex hull and the Minkowski sum are used to define shapes in this system, in which complex shapes are made by applying Boolean operations to simple shapes. This system is how data is stored and represented in AutoCAD and other computer assisted design programs.
ANSWER: **constructive solid geometry** [or **CSG**]
<Other Science>

10. This poem was originally titled "The Thirteenth Apostle" until the censors asked its author if he wanted to go to a forced-labor camp. For 10 points each:
[10] Identify this poem in which the speaker expresses his unrequited love for a woman named Maria. This poem claims "tender ones" put their love on violins, while the vulgar put their love on kettle drums.
ANSWER: "A **Cloud in Trousers**" [or "**Oblako v shtanakh**"]
[10] "A Cloud in Trousers" is by this author. He also wrote a play about Ivan Prisypkin, who is frozen on his wedding day and wakes up fifty years later in a communist "utopia."
ANSWER: Vladimir **Mayakovsky**
[10] Mayakovsky's *The Bathhouse* was criticized in the Soviet Press for not adhering to this state-approved style that, contrary to its name, was highly idealized. Its practitioners include Maxim Gorky.
ANSWER: **Socialist Realism** [accept **heroic realism**; prompt on realism]
<European Literature>

11. This leader of the Movement for the Survival of the Ogoni People satirized corrupt officials as head writer for *Basi and Company*, a wildly popular sitcom. For 10 points each:
[10] Name this activist who was arrested for involvement in the murder of four chiefs from the Ogoni tribe.
ANSWER: Ken **Saro-Wiwa** [or Kenule Beeson **Saro-Wiwa**]
[10] Ken Saro-Wiwa was executed in 1995 by Sani Abacha's government in this African country. Saro-Wiwa had protested the conduct of Royal Dutch Shell in this oil-rich country.
ANSWER: **Nigeria** [or the Federal Republic of **Nigeria**]
[10] The Wiwa family sued Royal Dutch Shell under this section of America's 1789 Judiciary Act. This statute was re-interpreted to allow citizens of foreign countries to sue over violations of human rights elsewhere in the world in a 1980 case concerning the murder of Joelito Filartiga by the Stroessner regime.
ANSWER: **Alien Tort** Statute [or **ATS**; or the **Alien Tort Claims Act**; or **ATCA**]
<World History>

12. A fictional biographer claims the beauty of reading this character is that "it leads one inescapably to the happy conviction that one is not, of all nincompoops, the greatest." For 10 points each:
[10] Name this character who creates the oxygen-extracting substance D.M.P. in *The Dalkey Archive*.
ANSWER: de **Selby**
[10] In this author's *The Third Policeman*, the narrator commits several crimes so he can pay to have his biography of de Selby published. This author also wrote *At-Swim-Two-Birds*.
ANSWER: Flann **O'Brien** [or Brian **O'Nolan**]
[10] In *The Third Policeman*, the narrator notes that the more he uses one of these objects, the more he becomes like it. The titular third policeman steals these things, which he claims are often "half-partaking of humanity."
ANSWER: **bicycles** [or **bikes**; prompt on cycles]
<British Literature>

13. Sources for this technique are typically the k alpha transitions from copper or molybdenum. For 10 points each:
[10] Name this technique that takes advantage of Bragg's law, which uses high energy radiation to probe crystal structure.
ANSWER: **x-ray crystallography** [or **x-ray diffraction**; accept **XRD**]
[10] Due to detectors only obtaining intensity of light and not this quantity, information is lost. Methods for calculating this quantity include SAD and molecular replacement.
ANSWER: **phase** [accept **phase** problem]
[10] This generically named class of techniques for solving the phase problem often use the Sayre equation. Typically they rely exclusively on structure factors and the measured amplitudes, and are not reliable for larger molecules.
ANSWER: **direct method**s
<Chemistry>

14. Although clapping in between movements of a piece of classical music is considered a newcomer faux pas, it is common for audiences to mistakenly clap after this piece's marchlike third movement scherzo. For 10 points each:
[10] Name this symphony, its composer's last. In this piece's real ending, instruments drop out until cellos and basses diminuendo to quadruple piano in the piece's home key of B minor.
ANSWER: Symphony No. **6** by Pyotr Ilyich Tchaikovsky [accept "**Pathétique**"]
[10] It's not the San Francisco Symphony, but while conducting this orchestra in a performance of Mahler's Ninth Symphony, Michael Tilson Thomas threw two handfuls of cough drops into the audience. This symphony's Orchestra Hall is on honorary Sir Georg Solti Place.
ANSWER: **Chicago** Symphony Orchestra [accept **CSO**]
[10] The worst concert faux pas of all would be a cell phone ringing. If you had a Nokia phone from the 1990s onwards, your ringtone might be from *Gran Vals*, a waltz by this nineteenth-century Spanish guitar composer of *Recuerdos de la Alhambra.*
ANSWER: Francisco **Tárrega**
<Music>

15. This historical figure is the namesake of a journal whose board of directors includes Nancy Tuana and Linda Alcoff. For 10 points each:
[10] Name this Alexandrian Neoplatonist who was murdered by a Christian mob. The "Journal of Feminist Philosophy" named for her received heavy criticism in 2017 for publishing an article about transracialism.
ANSWER: _Hypatia_
[10] _Hypatia_ was co-founded by this UC Boulder professor, who argued feminism should address impartiality in "Feminist Ethics: Some Issues for the Nineties." She also wrote "Love & Knowledge: Emotion in Feminist Epistemology."
ANSWER: Alison **Jaggar**
[10] Jaggar's essay discusses feminist critiques of impartiality, many of which instead center morality in this concept. Proponents for an "ethics of [this term]" include Annette Baier.
ANSWER: **care**
<Philosophy>

16. This researcher conceived of his best-known experiment while listening to a lecture given by R. D. Laing and thinking about how to test Laing's ideas. For 10 points each:
[10] Name this psychologist whose paper "On Being Sane in Insane Places" describes an experiment he oversaw in which people faked schizophrenia diagnoses to be admitted to mental hospitals.
ANSWER: David L. **Rosenhan** [accept **Rosenhan** experiment]
[10] This man, who joined the Stanford faculty in 1968, wrote that he was partly influenced by Rosenhan's work in conducting his own experiment in which participants were split into guards and prisoners.
ANSWER: Philip **Zimbardo** [or Philip George **Zimbardo**]
[10] This strident critic of the Rosenhan experiment chaired the American Psychiatric Association's _DSM-III_ task force, a position in which he advocated removing homosexuality as a mental disorder and greatly influenced the organization of of modern psychiatric diagnosis.
ANSWER: Robert **Spitzer**
<Social Science>

17. Anna Renzi, widely considered to be the first opera diva, created the role of Ottavia in this opera. For 10 points each:
[10] Name this opera by Monteverdi about the wives of the emperor Nero.
ANSWER: _L'**incoronazione di Poppea**_ [accept _The **Coronation of Poppea**_]
[10] Diva Maria Malibran performed Romeo in three different composers' adaptations of _Romeo and Juliet_, sometimes replacing music from one version with another. Give this term for operatic male roles played by women.
ANSWER: **pants** roles [accept **trousers** roles or **breeches** roles]
[10] After Adelina Patti's florid performance of this aria, its composer remarked, "Very nice, my dear, and who wrote the piece you have just performed?" He then notated his own ornamentation on the high G fermata in this aria, which a character sings after receiving a letter.
ANSWER: "Una **voce poco fa**" [accept "A **voice has just**…"] (from _The Barber of Seville_)
<Other Fine Arts>

18. Ann Stephens wrote the first novel in this genre, *Maleaska, the Indian Wife of the White Hunter*. For 10 points each,
[10] Name this genre of Ned Buntline's work, which is studied in Michael Denning's book *Mechanical Accents*. This precursor of pulp fiction often featured lurid adventure stories and is the American equivalent of the British "penny dreadfuls."
ANSWER: **dime** novels [or **dime** westerns]
[10] This author established the "city story" subgenre of dime novels with books like *Ragged Dick* and *Mark the Match Boy*, which featured poor boys becoming rich under the tutelage of older industrialists.
ANSWER: Horatio **Alger**
[10] This 1866 sensational novel is reminiscent of the dime novels its author wrote as "A.M. Barnard." Its devilish antagonist Phillip Tempest first appears after the protagonist exclaims "I'd gladly sell my soul to Satan for a year of freedom!"
ANSWER: A ***Long Fatal Love Chase*** (by Louisa May Alcott)
<American Literature>

19. This ethnic group was a subgroup of the Oirats before they emigrated from Dzungaria to their current homeland along the Volga River. For 10 points each:
[10] Name this ethnic group in the Russian Federation, which inhabits the only primarily Buddhist subnational unit in Europe.
ANSWER: **Kalmyk**s
[10] The longtime president of Kalmykia, Kirsan Ilyumzhinov, served as president of FIDE, the governing body for this activity. Other experts in this activity include the ardent Putin critic Garry Kasparov.
ANSWER: **chess**
[10] This part-Kalmyk member of the People's Will's "Second First of March" group pawned a gold medal he won for his research to buy nitric acid and build bombs for an assassination attempt on Alexander III.
ANSWER: Aleksandr Ilych **Ulyanov** [or Sasha **Ulyanov**; prompt on "Lenin's brother"]
<European History>

20. A 1978 *Science* paper by Joseph Connell examining the diversity of coral reefs and tropical rain forests posited that species richness is at its greatest when these events are intermediate in intensity and frequency. For 10 points each:
[10] Identify this catch-all term in ecology for all events, such as fires, floods, or insect outbreaks, that dramatically alter ecosystems.
ANSWER: **disturbance**s [Connell put forth the intermediate **disturbance** hypothesis]
[10] According to the intermediate disturbance hypothesis, diversity is low at low rates of disturbance due to the "exclusion" resulting from multiple species engaging in this interaction over limited resources.
ANSWER: **competition** [or **competitive** exclusion]
[10] According to a "triangle theory" developed by J. Philip Grime, plants can be classified as competitors, stress tolerators, or these species that are the first to colonize newly disturbed habitats.
ANSWER: **ruderal** species
<Biology>