

ACF Regionals 2019

Packet by OSU A, Rice A, and Yale B

Tossups

1. A narrative poem by this author ends with a woman perceiving that a man's soul is made of "jasper first," then sapphire, chalcedony ("cal-SED-uh-nee"), and finally amethyst. A poem by this author describes how a girl named Alice dies and is given a grave "shapen like a snowball." The speaker describes "bartering curl for curl" in a poem by this author beginning "The soul's Rialto has its merchandise." The speaker reminisces about "the name I used to run at, when a child" in a poem by this author that tells the addressee to "call me by my pet-name!" This author of "The Cry of the Children" and *Aurora Leigh* wrote about "the depth and breadth and height my soul can reach" in a poem that asks "How do I love thee? Let me count the ways." For 10 points, name this poet who wrote about her love for her husband Robert in *Sonnets from the Portuguese*.

ANSWER: Elizabeth Barrett Browning [prompt on Browning]

<British Literature>

2. Filmmaker Simon Bright directed a 2011 documentary about this leader's life whose title asks "What Happened?" Human rights activist Peter Tatchell has tried to perform a citizen's arrest of this leader twice, in 1999 and again in 2001. This leader blamed a 1981 bombing of his party's headquarters on agents of South Africa's apartheid government. This leader won the first elections held after the 1979 Lancaster House Agreement was signed. This man's North Korean-trained Fifth Brigade massacred Ndebele ("in-DEB-eh-lay") supporters of his rival Joshua Nkomo in what is called the *Gukurahundi*. This leader was opposed by Morgan Tsvangirai ("CHANG-ee-rye"), who led the MDC party in opposition to this leader's ZANU-PF party. A 2017 coup overthrew, for 10 points, what longtime president of Zimbabwe?

ANSWER: Robert Mugabe [or Robert Gabriel Mugabe]

<World History>

3. The head of these phenomena lies below the main scarp, and their crown is unmoved but often includes cracks. Gabion walls and timber cribs can be used to mitigate the effects of these phenomena. When these events include rotation, the surface of rupture is curved upwards. Removing material from the toe produced by these events can be destabilizing, causing a larger secondary example. One large type of these phenomena called lahars ("LAH-hars") are caused by volcanoes. These events, which result in material displacement through the zone of accumulation, are often caused by earthquakes or heavy rain and can be mitigated by soil stabilization. For 10 points, name these geological events in which rocks or earth move downhill, often with catastrophic results.

ANSWER: landslides [accept mass wasting, mudflows, mudslides, earthflows, or rockslides; prompt on descriptive answers including soil, earth, or rocks moving, flowing, or falling]

<Other Science (Earth Science)>

4. In one story, God punishes a pioneer of this concept by causing him to fart nonstop after he refuses to protect a calf from slaughter. A 16th-century book on this topic borrows chapter titles like "The Path of Life" and "The Stone of Help" from an earlier work with four divisions known as the *Tur* for short. Experts on this concept who were active during the reign of the Abbasids developed the field of *responsa* literature and were called *geonim* ("gay-oh-NEEM"). Works on this concept are particularly difficult to print due to the use of folio pages featuring several nested levels of text. A work whose name translates as the "Set Table" is considered to be the authoritative work on this topic. The original basis of this system is a set of 613 mitzvot ("meets-VOTE") drawn from the Torah. For 10 points, name this collection of written law whose primary sources include the Talmud.

ANSWER: **halakha** [or **halakhic** law; accept **Jewish law**; accept **Talmudic law** until “Talmud”; accept **rabbinic law**; accept “jurisprudence” in place of “law” in any of the previous answers; prompt on law or jurisprudence] (The works are *Arba‘ah Turim* and *Shulchan Aruch*.)

<Religion>

5. A musician with this surname may have been influenced by street preacher Madkin Butler, as seen in a song recorded with Willie B. Harris titled for the writer of a “Book of Seven Seals”; that song is “John the Revelator.” An alcoholic guitarist with this last name sang about drinking Sterno in “Canned Heat Blues.” A musician with this surname used a knife instead of a bottleneck in his slide guitar accompaniment to a gospel blues track that was included on the Voyager Golden Record, titled “Dark Was the Night”; that musician’s name was “Blind Willie.” Two unrelated musicians with this surname, one of whom was featured on the album *King of the Delta Blues Singers*, are said to have met a shady figure at a crossroads to gain their skills. For 10 points, give this surname of Tommy and Robert, both guitarists who allegedly sold their souls to the devil.

ANSWER: **Johnson** [accept Blind Willie **Johnson**, Tommy **Johnson**, or Robert **Johnson**]

<Other Arts>

6. This industry was built up in the Balkans by Durad Crnojević (“tser-NOY-uh-vitch”), the Lord of Zeta. James IV gave Walter Chepman and Androw Myllar a monopoly of this industry in Scotland. In Paris, mistreated apprentices in this industry rebelled against their poor living conditions by killing their masters’ cats in the so-called “Great Cat Massacre.” A pioneer of this industry in Venice mass-produced objects called enchiridia (“en-kai-RID-ee-uh”). Benedict Anderson combined the name of this industry with “capitalism” in his book *Imagined Communities*. This industry was introduced to England by William Caxton. This industry’s “Revolution” started after a goldsmith from Mainz (“MINE-ts”) started using movable type. For 10 points, Johannes Gutenberg was a pioneer of what industry that mass-produces books?

ANSWER: **printing** industry [or **publishing** industry; accept **printing** press capitalism; accept **book**making industry until “books”]

<European History>

7. A character on this show encounters a naval officer who was imprisoned for killing a special fish while rescuing his family from a sentient fog 170 years ago. An eccentric billionaire on this show constantly orders other characters, including his assistant who he eventually marries, to “do the thing.” The protagonist of this show is poisoned with mercury by a villain who achieves the power of flight after watching the death of his lover P’li. The protagonist of this show pacifies Unalaq (“OO-nuh-lock”) and merges with Raava during the Harmonic Convergence. Its villains include the anarchist Zaheer of the Red Lotus and Kuvira, leader of the Earth Empire, and it ends with the protagonist beginning a romantic relationship with the non-bender Asami Sato. For 10 points, name this Nickelodeon cartoon whose title character is Aang’s successor as Avatar.

ANSWER: *The **Legend of Korra*** [prompt on *Korra*; accept *Avatar: The **Legend of Korra***; do not accept or prompt on “Avatar” or “The Last Airbender”]

<Trash>

8. The action of TAA1 on tryptophan begins the biosynthesis pathway of these compounds, which also contains a flavin monooxygenase-like enzyme coded by the YUCCA gene that catalyzes the hydroxylation of tryptamine. ABCB proteins or PGP proteins act as evenly-distributed efflux carriers for the anionic form of these compounds. These compounds act by de-repressing ARFs via activation of the receptor TIR1. PIN proteins acting as efflux carriers of these molecules maintain asymmetrical plasma membrane localization, in a process called polar transport. They play a role in the acid growth hypothesis via their activation of proton pumps. These compounds are responsible for the suppression of ethylene production, which inhibits lateral growth. For 10 points, name these plant hormones that play important roles in apical dominance, phototropism, and gravitropism.

ANSWER: **auxins**

<Biology>

9. Cyril Connolly edited a literary journal of this name that published an issue containing the entirety of Evelyn Waugh's ("EEV-lin WAW's") *The Loved One*. At the end of *Their Eyes Were Watching God*, Janie pulls this thing in "like a great fish net," echoing the mention of this thing in the novel's opening paragraph. The frame narrative of a novel named after this thing involves a neurologist telling the story to a novelist named Rutherford. That novel named after this thing is about Hugh Conway, who meets a Manchu woman named Lo-Tsen at a lamasery in the Kuen-Lun Mountains whose inhabitants live for an extremely long time. This thing titles a 1933 novel set in the utopian valley of Shangri-La. For 10 points, a James Hilton novel is named for a "lost" version of what thing, which is the line where the sky and the Earth seem to meet?

ANSWER: the **horizon** [accept *Lost Horizon*]

<Other Literature>

10. This composer's *Stabat Mater*, a motet scored for unaccompanied Double Chorus, may have been written for Pope Gregory XIV. One treatise on counterpoint is presented as a dialogue between Aloysius, who represents this composer, and the student Josephus; that textbook, which promoted this composer's compositional style, is the *Gradus ad Parnassum* by Johann Joseph Fux ("fooks"). This composer wrote a cycle of 29 motets based on excerpts from the Song of Solomon. In an opera [emphasize] *about* this composer, he initially refuses to take a commission from Cardinal Borromeo, who then imprisons him. This composer's most famous piece is a *missa sin nomine* ("MEE-sah seen NOH-mee-nay") that, according to legend, convinced the Council of Trent not to ban polyphony from worship. For 10 points, name this Italian Renaissance composer of the *Pope Marcellus Mass*.

ANSWER: Giovanni Pierluigi da **Palestrina**

<Music>

11. An assassination attempt on this leader injured several astronauts riding in a limousine with him. War with China nearly broke out under this man's leadership in the Zhenbao Island border dispute. This leader's best-selling trilogy of memoirs, beginning with *The Minor Land* and *Rebirth*, was likely ghostwritten, since his health was rapidly declining when they were published. This leader kissed Erich Honecker in a "fraternal embrace" that was depicted on the graffiti painting *My God, Help Me Survive This Deadly Love*. This leader's premier Alexei Kosygin spearheaded a series of economic reforms that promoted limited decentralization. This man's namesake doctrine permitted the Soviet Union to intervene to prop up Communist regimes, justifying the invasion of Afghanistan and the invasion of Czechoslovakia in 1968. For 10 points, name this Soviet premier who succeeded Nikita Khrushchev.

ANSWER: Leonid **Brezhnev** [or Leonid Ilyich **Brezhnev**]

<European History>

12. One type of these materials has symmetry-protected helical edge states, and has been realized by sandwiching mercury telluride between two layers of cadmium telluride. Another class of these materials is predicted by a theory with a hopping term between lattice sites and an on-site interaction in its Hamiltonian. The Hubbard model describes a class of these materials with an odd number of electrons per unit cell, which only exist at low temperature and deviate from the predictions of band theory. That Mott type of these materials is contrasted with ordinary examples with a filled valence band. At high voltages, these materials experience a "breakdown," losing their characteristic property. These materials have a large bandgap over 9 eV ("E-V"). Plastics and rubbers are good examples of these materials. For 10 points, name these materials that resist the flow of electric current.

ANSWER: **insulators** [accept quantum spin Hall **insulators**, (2D) topological **insulators**, or Mott **insulators**]

<Physics>

13. Jamie Wyeth (“WHY-eth”) was inspired by a set of works by Paul Cadmus to create a series of paintings titled for these things in which, unusually, all of the subjects are seagulls. A figure wearing a Hitler mask sits atop a crawling old woman in a painting titled for these things by Otto Dix. The best-known painting titled for these things shows two couples inside of a pink tent being entertained by two clowns, as well as a woman with her back to the viewer looking at her reflection in a mirror held by a demon. That painting illustrates these things using a series of scenes that move around the outside of a large circle, which itself is surrounded by smaller circles depicting death, heaven, hell, and the Last Judgment, or the “Four Last Things.” A tabletop painting by Hieronymus Bosch (“bosh”) depicts, for 10 points, what set of Christian vices that includes gluttony and sloth?

ANSWER: the **seven deadly sins** [accept the **cardinal sins** and *The **Seven Deadly Sins** and the Four Last Things*; prompt on sins; anti-prompt on any of the specific sins: pride, greed, lust, envy, gluttony, wrath, and sloth]
<Painting>

14. A mocking prayer printed on white cardboard and addressed to this character asks his soul, body, blood, and tears to respectively “glorify,” “nourish,” “intoxicate” and “wash me.” This character is instructed to teach his audience to pray “Give us this day our daily stone” in a chapter titled for him “and the Dead Pan.” After singing an obscene version of “Mary Had a Little Lamb” with Steve and Jud, he kills a lamb with a stone in a dream sequence following the description of an ivory Christ that he pulled off its crucifix and nailed to the wall. In the last chapter, he “Has a Religious Experience” ended by a gun hidden in a newspaper, carried by a cripple he tries to heal. This man, who is killed by Peter Doyle for sleeping with his wife, also sleeps with the wife of his irreligious editor Shrike. For 10 points, name this columnist for the *Post-Dispatch* with a feminine moniker who titles a Nathanael West novel.

ANSWER: **Miss Lonelyhearts**
<American Literature>

15. *Note to moderator: Read the answerline carefully.* W. Arthur Lewis proposed a namesake “turning point” after which a certain form of this phenomenon temporarily occurs in developing countries. This phenomenon often results from the ways in which certain managers work with “soft budget constraints,” according to a work by János Kornai (“YAH-nos KOR-nye”) titled for the “economics” of this phenomenon which argues that it is a permanent feature of socialist economies. A large-scale form of this phenomenon [emphasize] *was not* the root cause of a 1943 event in Bengal that killed three million people, according to a book by Amartya (“ah-MAR-chia”) Sen that instead blames it on panic buying and an unaffordable rise in the cost of rice. This phenomenon often encourages the spread of black markets for the goods it affects. For 10 points, name this economic phenomenon in which the demand for a good exceeds its available supply.

ANSWER: **shortage** [accept specific types, such as labor or food **shortages**; accept **scarcity** and *The Economics of **Shortage***; accept **famines** until “soft budget constraints” is read, then prompt after; accept **excess demand** until “demand for a good exceeds” is read] (The Sen book is *Poverty and Famines*.)
<Social Science>

16. This book’s ideas provide the basis for a recent work of feminist philosophy by Charlotte Witt that argues in favor of “gender uniessentialism” (“yoo-nee-essentialism”). This work notes the superfluous nature of the phrase “footed two-footed animal” to argue that chains of “differentia” can be replaced by the last “differentia.” This work uses the example of a person with their eyes closed to illustrate the state of *dunamis*, or “potentiality,” which can transition to one of “actuality.” A thing’s “substance” is proposed to be “the primary cause of its being” in the final part of this work’s best-known section, Book Zeta. The name of this work, which opens with the phrase “All men by nature desire to know,” is often seen as an indication that its later compilers intended it to be read after its author’s works on natural science. For 10 points, name this work on “first philosophy” by Aristotle.

ANSWER: **Metaphysics** [or **Metaphysica**]
<Philosophy>

17. Samples in this technique are commonly stored in “pucks,” which can be loaded using robots like ACTOR. Hauptman and Karle developed “direct methods” for this technique by solving the Sayre equation. The ARP/wARP suite in CCP4 is used for automated refinement in this technique. One value computed in this technique is also computed on a subset of the data to obtain its “free” form; that is the R-factor. In this technique, multiple isomorphous replacement or anomalous dispersion methods can help solve the phase problem. Incident radiation in this technique has a similar wavelength to atomic spacings, which allows the use of Bragg’s law. This technique was used to produce photo 51 by Rosalind Franklin, who determined the structure of DNA with it. For 10 points, name this technique that uses high-energy radiation to solve the structure of macromolecules.

ANSWER: **X-ray crystallography** [or **X-ray diffraction**; or **XRD**; prompt on crystallography or diffraction]
<Chemistry>

18. A poem about the “Lovers” of a character from this work appears in the third part of *The Earthly Paradise* by William Morris, who first translated this work into English. In this work, a boy is killed after failing a test by crying in pain after his cuffs were sewn into his skin. While on a fishing trip, three figures in this work kill another character in the form of an otter, then stuff his body with gold to pay a ransom. A figure in this work is born after a six-year pregnancy caused by the eating of a magic apple. That figure plants a tree in the center of his palace from which a sword would later be pulled. A sorceress in this work brews a potion that causes its central figure to forget his wife and marry Gudrun instead. The main hero of this work rescues Brynhildr from a ring of fire after killing the dragon Fafnir. For 10 points, name this saga about members of the title clan, including the hero Sigurd.

ANSWER: **Volsunga Saga** [or *Saga of the Volsungs*; prompt on the *Poetic Edda* as it is a source for large amounts of the saga]
<Mythology>

19. In the months after the atomic bombing of Japan, this author created a darker version of one of his plays in collaboration with the actor Charles Laughton. In that play by this author, the title character’s daughter Virginia dies of dysentery (“DISS-en-TAIR-ee”) in a convent after being unable to find a husband. This author explained an acting technique that he called the *gestus* in his essay “A Short Organum for the Theater.” A play by this author ends with a copy of the *Discorsi* being smuggled out of Florence by Andrea Sarti. This dramatist popularized the “alienation effect,” exemplified by the stark scenery of a play in which Anna Fierling loses her children during the Thirty Years’ War. For 10 points, name this German author of *Life of Galileo* and *Mother Courage and Her Children* who was the main proponent of “epic theater.”

ANSWER: Bertolt **Brecht** [or Eugen Berthold Friedrich **Brecht**]
<European Literature>

20. Soldiers had to drag their boats through heavy mud to get to this battle because their commander insisted on traveling by ship instead of taking Chef Menteur Road. Ignace Martin de Lino’s plantation home was burned during this battle, supposedly causing him to die of a broken heart three weeks later. Lieutenant Colonel Thomas Mullins forgot to bring ladders to scale the defenders’ fortifications during this battle. This battle was preceded by a naval battle on Lake Borgne. Pirate Jean Lafitte assisted the victors of this battle, who only suffered a few dozen casualties while inflicting over two thousand on invading British forces. The Treaty of Ghent was signed two weeks before, for 10 points, what final War of 1812 battle that turned Andrew Jackson into a national hero?

ANSWER: Battle of **New Orleans**
<American History>

21. One of this author’s characters is called “astonishingly like Uncle Joe Stalin” in a book which says that this author’s magnum opus is “not good in spite of but especially because of its moral confusions.” Christopher Ricks wrote a book about this author’s “grand style.” A book-length “preface” to one of this author’s works was written by

C. S. Lewis. A reader-response analysis of this author's magnum opus has a title which plays on C. S. Lewis's *Surprised by Joy*; that book by Stanley Fish is called *Surprised by Sin*. A William Empson book investigates whether this author succeeded in "justifying the ways of God to man." For 10 points, name this author who William Blake claimed was "of the Devil's party without knowing it" in reference to his *Paradise Lost*.

ANSWER: John **Milton**

<British Literature>

Bonuses

1. Answer the following about the history of the philosophical tradition known as ‘Ilm al-Kalam, for 10 points each.

[10] The Mu‘tazila school of kalam often feuded with this other school of kalam named for a scholar called the “Champion of Islam.” This school’s occasionalist theory of causation was defended by al-Ghazali.

ANSWER: **Ashari** school [or **Asharites**] (named for al-Ashari)

[10] A saint of this tradition named Khwajah Abdullah Ansari criticized kalam theology in his *Dhamm al-Kalam*. Thinkers in this mystic Islamic tradition often write about centers of spiritual perception called the “six subtleties.”

ANSWER: **Sufism** [or **Tasawwuf**]

[10] A critique of certain branches of kalam closes this book written in the 1190s by a Jewish philosopher, which argues that God can only be properly described through negative conceptions.

ANSWER: ***Guide for the Perplexed*** [or ***Moreh Nevukhim***; or ***Dalalat al-ha’irin***; or ***Guide of the Perplexed***; or ***Guide to the Perplexed***]

<Philosophy>

2. Crystals that exhibit this effect can be used for ultrasonic transducers. For 10 points each:

[10] Name this effect, discovered by Pierre and Jacques Curie, in which stress is converted to voltage and vice-versa.

ANSWER: **piezoelectric** (“pee-AY-zo-electric”) effect [or **piezoelectricity**]

[10] In this experimental technique, piezoelectric elements control a scanning sample stage. This technique measures the deflection of a cantilever connected to a tip.

ANSWER: **atomic force** microscopy [or **AFM**; prompt on **scanning probe** microscopy]

[10] The widely used piezoelectric material PZT is a crystal composed of this metal, zirconate, and titanate. This soft heavy metal is also commonly used in solder (“SODD-er”) alloyed with tin, though many modern products use different alloys due to health risks.

ANSWER: **lead** [accept **lead** zirconate titanate]

<Physics>

3. Before one battle, this ruler reportedly blew into a piece of sandstone, which legendarily signaled victory for anyone who could generate a sound from it. For 10 points each:

[10] Name this king from Wessex who is the only English king to be known as “the Great.” He signed the Treaty of Wedmore after defeating the Vikings.

ANSWER: **Alfred** the Great

[10] Alfred was joined in many of his conquests by a son with this name. A later king with this name was the only English king to be canonized.

ANSWER: **Edward** [accept **Edward** the Elder; accept **Edward** the Confessor]

[10] Edward led the allied Wessex and Mercian forces at this 910 battle. After this battle, no Danish armies raided English territory again. All Viking commanders involved in this battle were killed.

ANSWER: Battle of **Tettenhall** [or Battle of **Wednesfield**; or Battle of **Wodnesfeld**]

<British History>

4. Two gay sailors and a woman in a red dress study this sculpture in the painting *Distinguished Air* by Charles Demuth (“DEE-mith” or “de-MOOTH”). For 10 points each:

[10] Name this bronze sculpture that attracted controversy due to its extremely phallic shape. Its artist intended it to be an abstract depiction of the vain Marie Bonaparte.

ANSWER: ***Princess X***

[10] *Princess X* was created by this Romanian sculptor whose other works include *The Endless Column* and *Bird in Space*.

ANSWER: Constantin **Brâncuși** (“bran-KOOSH”)

[10] Brâncuși’s *Bird in Space* series was based on this earlier sculptural series that emphasizes the massive puffed chest of its namesake golden-plumed bird from Romanian folklore.

ANSWER: **Măiastra** (“muh-YAHSS-trah”)

<Other Arts>

5. The epigraph to the screenplay for *American Gigolo* is a quote about this character, and *American Gigolo*’s protagonist is named after him. For 10 points each:

[10] Name this character who courts Madame de Fervaques (“fair-VAHK”) in an attempt to make Mathilde (“mah-TEELD”) de la Mole jealous, and is later executed after attempting to murder Madame de Renal.

ANSWER: **Julien Sorel** [accept either underlined portion]

[10] Julien Sorel is the protagonist of this author’s novel *The Red and the Black*.

ANSWER: **Stendhal** [or Marie-Henri **Beyle**]

[10] At the end of the novel, Mathilde kisses Julien’s decapitated head, reenacting a story about this queen. This queen’s nickname comes from a novel by Alexandre Dumas, père (“doo-MAH pair”).

ANSWER: Queen **Margot** [or La Reine **Margot**; or **Margaret** of Valois; or **Marguerite** de Valois]

<European Literature>

6. Knocking out Beclin1, a protein that regulates this process in mice, leads to increased tumor growth, which can be assayed using a cationic amphiphilic tracer by the Cyto-ID detection kit. For 10 points each:

[10] Name this process in which a cell breaks down and recycles its own organelles. Yoshinori Ohsumi (“OH-sue-mee”) won a Nobel for characterizing it.

ANSWER: **autophagy**

[10] The autophagosome fuses with this organelle, which contains hydrolytic enzymes used to break down waste products. Mannose-6-phosphate is used to tag proteins for transport to this organelle.

ANSWER: **lysosome**

[10] A complex between beclin1 and this protein regulates exercise-induced autophagy. This protein is an anti-apoptotic factor that is upregulated in follicular lymphoma and is the prototypical member of a family that includes bax, bak, and bid.

ANSWER: **bcl-2** [or **B-cell lymphoma 2**]

<Biology>

7. The chief formulator of this paradigm believes that it should be refined by adding a Liberty/Oppression axis. For 10 points each:

[10] Identify this theory from social psychology, co-developed by Jesse Graham and Craig Joseph, which relies on axes like Care/Harm, Loyalty/Betrayal, and Purity/Degradation to explain outcomes such as political ideology.

ANSWER: **moral foundations** theory [or **MFT**]

[10] MFT was popularized by this NYU psychologist whose recent activities include criticizing “safe spaces” on college campuses along with his co-author Greg Lukianoff in their 2018 book *The Coddling of the American Mind*.

ANSWER: Jonathan **Haidt** (“height”) [or Jonathan David **Haidt**]

[10] Haidt claims that adherents of this political ideology are sensitive to all five moral foundations, while their counterparts are focused only on Care/Harm and Fairness/Cheating. Edmund Burke is considered a founder of the modern form of this ideology.

ANSWER: **conservatism** [accept word forms, such as **conservative**]

<Social Science>

8. Answer the following about the role of heaven in Chinese religion, for 10 points each.

[10] In ancient inscriptions, the Chinese character for *tian* (“t’YEN”), or heaven, resembles this concept with a line added above it, while the modern form of *tian* overlaps two 2-stroke characters for this concept and the number two.

ANSWER: humanity [or man; or human being; or any answer indicating that the character looks like a person]

[10] The Mandate of Heaven, by which the Emperor of China had a divine right to rule, was advocated by this religious philosopher, whose teachings were compiled in the *Analects*.

ANSWER: Confucius [or Kong Fuzi or Master Kong]

[10] Some Chinese Buddhists believe that this female bodhisattva of compassion, a manifestation of Avalokiteshvara (“UH-vuh-loh-kih-TAYSH-ver-uh”), sends departed souls to the heavenly Pure Land after death.

ANSWER: Guanyin [prompt on the Goddess of Mercy]

<Religion>

9. This document was the first of a series of three similar announcements, and it included a pledge that neither party would “seek hegemony” in the Pacific region. For 10 points each:

[10] Identify this landmark diplomatic communiqué issued in 1972 from the namesake city that began the process of normalizing US–Chinese relations.

ANSWER: the Shanghai Communiqué [or the Joint Communiqué of the United States of America and the People’s Republic of China]

[10] The Shanghai Communiqué was issued during this president’s historic diplomatic trip to China, during which he met with Mao and shook hands with Zhou Enlai (“joe un-lye”).

ANSWER: Richard Nixon [or Richard Milhous Nixon]

[10] The wording of the Shanghai Communiqué is an example of this two-word term coined by Henry Kissinger. It refers to using non-specific language to avoid forcing parties to confront disagreements about sensitive issues.

ANSWER: constructive ambiguity

<American History>

10. After the performance of this play in Gikuyu at an open-air theater in 1977, its authors were imprisoned. For 10 points each:

[10] Name this play in which Kiguunda’s daughter Gathoni sings the title refrain.

ANSWER: *I Will Marry When I Want* [or *Ngaahika Ndeenda*]

[10] One of the authors of *I Will Marry When I Want*, Ngũgĩ wa Thiong’o (“en-GO-gay wah thee-ON-go”), argued for the use of Gikuyu instead of English in an essay named for performing this process on the mind.

ANSWER: decolonizing [or decolonization; accept “Decolonising the Mind”]

[10] Ngũgĩ renounced this English first name, which he was given at birth. This is the first name of Ian Fleming’s most enduring character.

ANSWER: James

<World Literature>

11. Answer the following about everyone’s favorite horse-throwing deity, Susanoo, for 10 points each.

[10] While Susanoo’s siblings were born from Izanagi’s eyes, he was born when Izanagi cleaned this other part of his face. Tengu are Japanese demons with particularly long examples of this body part.

ANSWER: nose [or hana]

[10] After being banished from Heaven, Susanoo meets a couple who have sacrificed seven of their daughters to this eight-headed dragon, which Susanoo inebriates with sake (“SAH-kay”) and kills.

ANSWER: Yamata no Orochi

[10] This eighth daughter is saved from Orochi when Susanoo transforms her into a comb. This *kami* of rice later becomes Susanoo’s wife.

ANSWER: Kushinadahime [accept Inagamihime]

<Mythology>

12. When performing a Z-transform, the result reduces to one of these summations on the unit circle. For 10 points each:

[10] Name these summations used to decompose periodic functions into terms that each oscillate at a single frequency.

ANSWER: **Fourier** series [accept **Fourier** expansion or **Fourier** decomposition; do not accept or prompt on “Fourier transform”]

[10] Fourier series are typically defined as an offset plus an infinite sum over terms with different periods. Each term contains these two trigonometric functions multiplied by separate coefficients. Complex exponentials are equal to one of these oscillating functions plus i times the other.

ANSWER: **sine** AND **cosine** [or **sin** AND **cos**]

[10] Fourier series can be generalized to use other functions instead of sine and cosine. One example, sometimes called Schlömilch’s series, uses these functions that arise in the solutions to cylindrical PDEs. These functions are symbolized J -sub- n , while related functions “of the second kind” are symbolized Y -sub- n .

ANSWER: **Bessel** functions (of the first kind) [prompt on cylinder functions or cylindrical harmonics]

<Other Science (Math)>

13. This composer and violin virtuoso played Bach’s Double Violin Concerto with his student Yehudi Menuhin (“yeh-HOO-dee MEN-yoo-in”) and the New York Philharmonic at a 1950 concert that turned out to be his last. For 10 points each:

[10] Name this composer of a String Octet in C major. His two rhapsodies, based on the music of his homeland’s *taraf* ensembles, quote folk songs like “I have a coin, and I want a drink” and “Aiee, I’m being devoured by a wolf!”

ANSWER: George **Enescu** [or George **Enesco**] (Those are his *Romanian Rhapsodies*.)

[10] Enamored with Enescu, this cellist called him “the greatest musical phenomenon since Mozart.” This Catalan cellist made a set of recordings from 1936 to 1939 that repopularized Bach’s cello suites.

ANSWER: Pablo **Casals** [or Pau **Casals** i Defilló]

[10] Iancu (“YAHN-koo”) Dumitrescu, among other Romanian composers, adopted the spectral technique developed at this city’s IRCAM (“eer-cam”). Enescu studied at this city’s conservatory with Jules Massenet (“zhool mass-NAY”) and Gabriel Fauré (“for-AY”).

ANSWER: **Paris**

<Music>

14. This poem begins with the lines “Just as my fingers on these keys make music, so the self-same sounds on my spirit make a music too.” For 10 points each:

[10] Name this poem that makes various allusions to the biblical story of Susanna and the Elders. It notes that “the body dies; the body’s beauty lives.”

ANSWER: “**Peter Quince at the Clavier**”

[10] “Peter Quince at the Clavier” was first published in this poet’s collection *Harmonium*, which also contains “Sunday Morning” and “The Emperor of Ice-Cream.”

ANSWER: Wallace **Stevens**

[10] Another poem in *Harmonium* is named for one of these people “as the letter C,” and recounts a voyage undertaken by Crispin.

ANSWER: **comedians** [accept “The **Comedian** as the Letter C”]

<American Literature>

15. Answer the following about the last days of the “Hermit Kingdom,” for 10 points each.

[10] This country, ruled by the Joseon (“JO-sun”) Dynasty, was often called the “Hermit Kingdom.” It was annexed by Japan in 1910.

ANSWER: **Korea**

[10] This 1876 treaty forcibly opened Korean ports to Japanese trade and ended Korea's status as a tributary state under the Qing ("ching") Dynasty. It was signed on an island that was earlier attacked by American ships in 1871.

ANSWER: Treaty of **Ganghwa** Island

[10] The Treaty of Ganghwa is an example of this type of asymmetrical treaty signed between Western and Asian powers in the 19th century. Treaties denoted by this term, such as the treaty of Nanking, usually granted rights such as extraterritoriality.

ANSWER: **unequal** treaties

<World History>

16. A tandem form of this technique, combined with electrospray ionization, is used to determine the order of amino acids in a protein. For 10 points each:

[10] Name this technique in which a sample is broken up into ionized fragments, and then the m-over-z value of each fragment is measured and plotted

ANSWER: **mass spectrometry** [or **mass spectroscopy**; or **MS**]

[10] In this version of mass spectrometry, each ion of the same charge has the same kinetic energy, so the velocity of the ion through a drift region determines its mass. It's commonly combined with MALDI when analyzing proteins.

ANSWER: **TOF** [or **time-of-flight**]

[10] In mass spec readouts, this is the name given to the peak usually marked M-plus, corresponding to the complete molecule. It's usually the peak with the highest mass-to-charge ratio.

ANSWER: **molecular ion** peak

<Chemistry>

17. This person wore a Zara jacket emblazoned with the phrase "I really don't care, do u" during a visit to a migrant detention center on the US-Mexico border. For 10 points each:

[10] Name this woman who promotes the "Be Best" campaign, which vaguely opposes cyberbullying and opioid use, in her role as First Lady.

ANSWER: **Melania** Trump [accept Melanija **Knavs** or Melania **Knauss**; prompt on **Trump**]

[10] In November 2018, Melania Trump issued an unusual public statement urging the firing of this Deputy National Security Advisor, who had previously feuded with James Mattis while on Trump's presidential transition team.

ANSWER: Mira **Ricardel** [or Mira Radielovic **Ricardel**; or Mira **Baratta**]

[10] Melania Trump and Kellyanne Conway were both nominated for Worst Supporting Actress Razzies for their appearances in this Michael Moore documentary about the 2016 presidential election.

ANSWER: **Fahrenheit 11/9** [do not accept or prompt on "*Fahrenheit 9/11*"]

<Current Events>

18. The Laurel and Hardy film *Our Relations* is based on a story in which this author's recurring characters Ginger Dick and Peter Russet pawn a set of clothes only to discover that all their money was hidden inside them. For 10 points each:

[10] Name this author of "The Money Box." He wrote a story in which the Whites use the monkey's paw against the advice of its previous owner Sergeant-Major Morris, leading to the death of their son Herbert.

ANSWER: W. W. **Jacobs** [or William Wymark **Jacobs**]

[10] Several of Jacobs's lighter stories were published in *The Idler*, which was co-edited by Robert Barr and this Irish author of the humorous travelogue *Three Men in a Boat*.

ANSWER: Jerome K. **Jerome** [or Jerome Klapka **Jerome**]

[10] Ginger Dick and Peter Russet share this profession with a Coleridge character who is made to wear an albatross around his neck after shooting it with a crossbow.

ANSWER: **sailor** [or **mariner**]

<British Literature>

19. Answer the following about Roman imperial dynasties, for 10 points each.

[10] The first dynasty of imperial Rome ended with the death of this emperor, who reputedly “fiddled while Rome burned.”

ANSWER: **Nero**

[10] Vespasian founded this dynasty after the chaos caused by the death of Nero. Vespasian’s sons, Titus and Domitian, were also part of this dynasty.

ANSWER: **Flavian** Dynasty

[10] During the Crisis of the Third Century, emperors who seized power through the military are commonly known as this kind of emperor. Gordian, Pupienus, and Maximinus Thrax were examples of this kind of emperor.

ANSWER: **barracks** emperors

<Ancient History>

20. In 1789, this artist produced an alternate version of a painting of herself with her daughter in which she wears a Greek dress, potentially a reference to a notorious Greece-themed dinner party she had hosted the previous year. For 10 points each:

[10] Name this artist of *Maternal Tenderness*, who also produced a well-known portrait of her good friend, the artist Hubert Robert (“oo-BAIR ro-BAIR”).

ANSWER: Élisabeth Vigée **Le Brun** (“vee-JAY luh BRUN”) [or Élisabeth Louise **Vigée**]

[10] Vigée Le Brun painted more than thirty portraits of this French queen and her family, including a controversial one in which she appears in a simple white muslin (“MUZZ-lin”) dress. Jacques-Louis David (“dah-VEED”) produced an ink drawing of this queen on her way to the guillotine in 1793.

ANSWER: **Marie Antoinette** [prompt on partial answer]

[10] In a scene from Vigée Le Brun’s memoirs, Marie Antoinette reaches down to retrieve the pregnant artist’s paintbrushes, echoing a story in which Emperor Charles V picked up this Renaissance artist’s brush while sitting for one of this Italian artist’s many portraits of him.

ANSWER: **Titian** [or **Tiziano** Vecelli]

<Painting>

21. The Patriot War was an unsuccessful attempt to seize this territory in 1812. For 10 points each:

[10] Name this state that was ceded to the United States from Spain after the signing of the Adams–Onís (“oh-NEESE”) Treaty of 1819. This state was home to the Seminole people.

ANSWER: **Florida**

[10] This 1832 treaty called for the Seminoles to move west out of Florida. The Seminoles’ refusal to relocate after this treaty was signed led to the Second Seminole War.

ANSWER: Treaty of **Payne’s Landing** [accept Treaty of **Fort Gibson**]

[10] The Treaty of Payne’s Landing sparked this Seminole leader’s resistance. This leader was captured in 1837 by Thomas Jesup, under a white flag of truce.

ANSWER: **Osceola** (“OSS-ee-OH-luh”) [accept Billy **Powell**]

<American History>