**ACF Regionals 2018**

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Tossups

1. A painting showing this person was one of two that its artist withheld from auction after the 2016 exhibition *Waiting for the Barbarians* in Berlin. A revelation about this person made by a then 72-year-old woman is included in a 2017 book about him by Timothy Tyson. This person’s cousin Simeon Wright, who died in 2017, witnessed J. W. Milam and another man barge into his room. A photograph of this person in *Jet* magazine inspired a painting by Dana Schutz that Hannah Black and other artists demanded be removed from the 2017 Whitney Biennial. Oft-vandalized memorials to this person in the town of Money describe the accusations that were made against him by white shopkeeper Carolyn Bryant. For 10 points, name this black teenager who was displayed in an open casket to showcase the brutality of his murder at the hands of two men in Mississippi in 1955.

ANSWER: Emmett Louis **Till**

<Other Academic>

2. A woman mails this character the cigarette case that he had left at her house, accompanied by a letter reading: “If only you had forgotten your heart! I should never have let you have that back.” The narrator of the novel worships the pink hawthorn blossoms lining the path to this man’s house. At his desk, this character keeps a photograph of Botticelli’s fresco depicting Zipporah, because she resembles his lover. This character forms a powerful mental association between his beloved and the crescendos of Vinteuil’s (“van-TUH-ee’s”) violin sonata, which he regularly hears as a guest at the salon of the Verdurins. The narrator of the novel *In The Shadow of Young Girls in Flower* falls in love with this man’s daughter Gilberte (“zheel-BAIRT”). For 10 points, Odette de Crécy is the wife of what man, whose “Way” titles the first novel of Marcel Proust’s *In Search of Lost Time*?

ANSWER: **Charles** **Swann** [either name is acceptable]

<Long Fiction>

3. A collaboration with Jean Cocteau created a work in this art form that reproduced the classic optical illusion of a vase of roses between two kissing faces. A 1965 collection of six works in this art form uses thick black lines to replicate the style of Piet Mondrian. Ossie Clark, one of the subjects of a portrait by David Hockney, specialized in this art form. A work in this non-sculpture art form shows a lobster on a field of white, was produced with input from Salvador Dalí, and was debuted by Wallis Simpson. The nickname “Chanel’s Ford” described a “little black” product of this art form, which inspired a Givenchy (“zhee-von-SHEE”) work that was showcased in *Breakfast at Tiffany’s*. For 10 points, name this art form in which Elsa Schiaparelli (“skee-ah-parelli”) and Yves (“EEV”) Saint-Laurent specialized.

ANSWER: **fashion** design [accept **dress**es, **coat**s, or any type of **clothing**; accept **haute couture**]

<Other Art (Other Visual)>

4. These cells express *H1FOO* (“H-one-F-O-O"), an unusual intron-containing gene encoding a linker histone. These cells store their ribosomes inside a network of cross-linked filaments known as cytoplasmic lattices. mRNAs remain untranslated in these cells during their prolonged dictyate (“DICK-tee-ate") resting phase. Inside these cells, phospholipase C-zeta triggers oscillations of calcium that mediates the release of cortical granules into the surrounding perivitelline (“PAIR-ee-VIT-uh-leen") space. These cells are protected by a layer of cumulus cells, which themselves surround the zona pellucida. A polar body is generated during each round of division of these cells, the first of which stops at prophase I before birth. Once the follicle ruptures, these cells travel through the Fallopian tube. Oogenesis (“oh-oh-genesis”) is the maturation of, for 10 points, what gametes that are fertilized by sperm?

ANSWER: **egg** cells [or **ovum**; or **ova**; or **oocyte**s; or **ovocyte**s; or **oocyte**s; or **ootid**s; or **oogonium**; or **oogonia**]

<Biology>

5. A leader who fought [emphasize] *against* this country spoke at the first Tricontinental Conference to emphasize the importance of the so-called “Weapon of Theory.” OAS officer Yves Guérin-Sérac (“EEV gay-RAN-say-RACK”) was recruited by this country to found a group of mercenaries that influenced terrorist bombings in Italy and disguised itself with the name “Aginter Press.” An April 25 holiday celebrates a coup in this country led by the Armed Forces Movement, or MFA. This country used the term “pluricontinentalism” to justify its foreign holdings, which Amilcar Cabral revolted against. This country deployed a special wing of its PIDE secret police to compromise independence movements like FRELIMO and the MPLA. Its colonies gained independence after the 1974 Carnation Revolution. For 10 points, name this country ruled by the dictator Antonio Salazar from Lisbon.

ANSWER: **Portugal** [or the **Portuguese Republic**; or **República Portuguesa**]

<European History post-600>

6. An arrangement of music from this work ends with a coda in which stepwise descending string passages are to be played “like a prayer.” In that arrangement of this work’s music, the instruction *vigoroso* is given for the A major string arpeggios that open the second section. This piece begins with strings and woodwinds building up an A major triad and an E major triad stacked on top of each other in a tempo marked “Very slowly.” This ballet’s music was originally composed for a thirteen-member chamber orchestra, but is typically performed by full orchestra as an eight-movement suite, including a movement depicting a “revivalist and his flock.” On a whim, a line from Hart Crane’s “The Bridge” was chosen to title this ballet, whose score includes music for “The Bride’s Dance” and five variations on “Simple Gifts.” For 10 points, name this ballet with music by Aaron Copland.

ANSWER: ***Appalachian Spring***

<Music>

7. An Italian prisoner in this novel paces his cell floor on his knees, licking the feet of a brass figurine of Christ. Sobered by this novel’s events, a woman gives her grandson Russell a dime in its final scene so that he can buy ice cream. The protagonist flees the wreckage of a car that had barreled into a pile of lumber after running over a little girl at the end of this novel’s first book, which focuses primarily on his relationship with a shopgirl whom he buys a fur coat in exchange for sexual favors. A woman in this novel drowns in the Big Moose Lake after her lover accidentally clocks her in the face with a camera, capsizing their boat. The protagonist of this novel almost marries Sondra Finchley, but he is tried and convicted for the murder of Roberta Alden. For 10 points, name this novel that features the execution of Clyde Griffiths, by Theodore Dreiser.

ANSWER: *An* ***American Tragedy***

<Long Fiction>

8. The emphasis on “change,” rather than “existence” in one of these statements was criticized in a 1979 book by Richard Swinburne. Frederick Copleston divided these statements into *in fieri* and *in esse* classes. The analogy of locating a “worm lower down” and a “dog higher” is used in one of these statements. The originator of these statements justified their necessity by referencing “The Philosopher’s” claim that “no one can mentally admit the opposite of what is self-evident” to respond to an objection stemming from John 4:16. The first of these statements claims that something must cause change without itself changing, called the concept of the “unmoved mover.” They notably [emphasize] *do not* include the ontological argument. For 10 points, identify these statements alternately called the *quinque viae* (“KWIN-kway VEE-eye”), five arguments that appear in an author’s *Summa Theologica*.

ANSWER: Thomas **Aquinas**’s five **proofs** of the existence of God [accept **Aquinas**’s five **ways** or Aquinas’s ***quinque viae*** until read; prompt on partial answers]

<Philosophy>

9. Like other researchers of this organization’s legacy, Alexander Hinton describes a culture-bound syndrome called “wind attacks” or *khyal*. Though it’s not composed of Koreans, most of this organization’s leaders came out of a student organization called the KSA. Its troops killed infants by smashing them against *chankiri* trees. This government, which refused to import malaria medicine due to a policy of self-reliance, had its rise aided by Operation Menu and sent troops to attack the *SS Mayaguez*. It divided citizens into “New People” from urban areas and “Old People” from rural areas and converted a high school into the S-21 extermination center. “Killing fields” were created in Southeast Asia by, for 10 points, what murderous regime led by Pol Pot?

ANSWER: **Khmer Rouge** [or **Democratic Kampuchea** or **Communist Party of Cambodia** or **Kâmpŭchéa Prâcheathippadey**; prompt on Kampuchea or Cambodia; do not accept or prompt on “Khmer” alone]

<Other History>

10. The subgroup of these objects that is connected to the identity is doubly covered by the group SL(2,C) (“S-L-2-comma-C”). That subgroup of these objects is called “proper orthochronous” (“or-THOK-ruh-nuss”). Applying two of these non-commutative objects in succession generates a Wigner rotation, and doing so continuously generates Thomas precession. Combining these objects with the set of translations yields the Poincaré (“pwann-kah-RAY”) group, and on their own they form the group SO(3,1) (“S-O-3-comma-1”). When these objects implement a boost, their (0,0) (“zero-comma-zero”) component equals one over the square root of one minus *v*-squared over *c*-squared, a namesake “factor” that is symbolized gamma. For 10 points, name these matrices that transform between relativistic reference frames in Minkowski space, which are named for a Dutch physicist.

ANSWER: **Lorentz transformation**s [or **Lorentz transform**s; or **Lorentz matrices**; prompt on Lorentz; anti-prompt (ask “can you be less specific?”) on Lorentz boosts until “boost” is read]

<Physics>

11. John Crowe Ransom analogized the tension between poetry and prose in this poem to a duel between Mr. A and Mr. B that devolves into stone-throwing, in his essay “A Poem Nearly Anonymous.” This poem laments that “the blind Fury with the abhorred shears… slits the thin-spun life,” prompting Phoebus to touch its speaker’s “trembling / ears” and declare that “Fame is no plant that grows on mortal soil.” Critics remain puzzled about this poem’s image of a “two-handed engine at the door” that “Stands ready to smite once, and smite no / more.” In its first stanza, the speaker tells “ye laurels” and “ye myrtles brown” that “I come to pluck your berries harsh and crude,” then asks: “Who would not sing for” this poem’s title character. The subject of this poem is reborn as “the Genius of the shore” after drowning in a shipwreck. For 10 points, name this pastoral elegy for Edward King, written by John Milton.

ANSWER: “**Lycidas**”

<Non-Epic Poetry>

12. Nowell Myres’s archaeological investigations of this kingdom’s origins concluded that it was settled from the north, using Nennius’s accounts to establish a rough date range. The evangelist Birinus settled in this kingdom. A two-legged golden dragon was the battle standard of this kingdom, whose greatest ruler re-organized the *fyrd* system around thirty-three fortified towns. Charles the Bald married off his daughter Judith to the son of this kingdom’s ruler Ecgbert (“EDGE-bert”), a son named Æthelwulf. Its legal code was compiled into the *Doom Book*. Cerdic founded this kingdom, whose best-known ruler brokered a peace with Guthrum that established a region of Viking control known as the Danelaw. For 10 points, name this Anglo-Saxon kingdom ruled by Alfred the Great.

ANSWER: Kingdom of **Wessex** [accept Kingdom of **West Sax**ons until “Saxon” is read]

<British/CW History>

13. The ownership of a painting by this artist is disputed between Sotheby’s and the descendants of Sir Henry Blake, the colonial governor who commissioned that painting, *Children Under a Palm*. That painting was among the many small watercolors that this artist created during a stay in Nassau. The composition and expressions of four former slaves in one of this artist’s paintingsare lifted from his earlier painting of gray-uniformed soldiers staring defiantly at their captor. This artist’s paintings *Eight Bells* and *The Fog Warning* depict the working life in the area surrounding Prouts Neck, Maine, where he established his studio. “A Fair Wind” was the original title of one of this artist’s paintings, which is thematically similar to his other painting of a black man watching the sharks around his boat. For 10 points, name this painter whose seascapes include *Breezing Up* and *The Gulf Stream*.

ANSWER: Winslow **Homer**

<Painting/Sculpture>

14. Some of these devices feature glass fibers that are woven together into an absorbent mat to protect a component that nowadays is often made by mixing sulfuric acid and fumed silica. Peukert’s law can be written to calculate the true time of operation of these devices, if the rated time is known. By measuring the specific gravity of one of these devices, one can consult a lookup table to determine its SoC or its inverse measure, the DoD. In one of these devices, an ion is intercalated into a layer of graphite. Metal hydride examples of these devices may lose efficiency over many cycles of usage, due to the memory effect. Nickel oxide and cadmium are used in a popular “secondary” example of these devices, whose “primary” varieties include the lithium-ion type. For 10 points, “rechargeable” examples of what electrochemical cells can both store and supply power?

ANSWER: **battery** [or **batteries**; prompt on electrochemical cells until read]

<Chemistry>

15. In a chapter named for one of these places, God grants two vineyards to a rich man, but takes them away after he becomes boastful. That chapter named for one of these places describes the apocalyptic figure of “two horns” or Dhul Qarnayn (“THOOL kar-NAIN”). A set of verses spoken in one of these places asserts that God has “taught by the pen” and created man from a clot of blood, and begins with the command “Iqra!” (“ee-KRAH”) or “Recite!” A group of young men supposedly entered one of these locations and emerged two hundred years later after fleeing from persecution. One of these places called Hira is where Muhammad received the first revelations from Gabriel. For 10 points, identify this type of location, one of which supposedly housed the “seven sleepers” of Ephesus.

ANSWER: **cave** [accept al-**Kahf** or **Cave** of Hira; prompt on mount or mountain]

<Religion>

16. An essay by Rebecca West argues that people cannot be dissuaded from this practice when it seems to their advantage unless they have been brought up with “common worship” and “folk songs.” The narrator of another essay claims that he can produce a certificate as “big as a breakfast tablecloth” to prove that he does not engage in this practice, after explaining how “grouping, light, shade, poetry” and “sentiment” are now essential to it. Another essay argues that the “great period” of this practice was between 1850 and 1925, before criticizing an example of it involving Elizabeth Jones and Karl Hulten for lacking “depth of feeling.” Thomas De Quincey wrote an essay on this practice “considered as one of the fine arts.” For 10 points, name this type of crime analyzed by George Orwell in an essay on the “decline” of its “English” variety that cites examples such as Jack the Ripper.

ANSWER: **murder** [accept **English murder**; accept synonyms; prompt on crime]

<Miscellaneous Lit>

17. An alternate story in which this object’s protector eats a man, then disgorges him, is sourced from two 5th-century Attic ceramics. The limbs of that guardian of this object are likened to the Nile and Po rivers, in a simile describing this object’s theft written by Valerius Flaccus. It’s not a ship, but a story centering on this object opens with an invocation to Phoebus that discusses the “mouth of Pontus.” This object’s origins are connected to the origin of the name “Hellespont,” as Helle fell into the sea while being taken away from Boeotia (“bee-OH-shuh”) with her brother Phrixus, after which this object was created through a sacrifice. Pelias told a character to obtain this object, which was kept in a sacred grove of Ares by King Aeetes in Colchis. Apollonius of Rhodes wrote an epic about the quest to obtain, for 10 points, what object sought by the Argonauts?

ANSWER: **Golden Fleece** [or **Chrysomallus** or **Chrysómallon** déras]

<Mythology>

18. Thomas Espenshade described the use of the “repeated trials model” in this area, which was analyzed as an example of how “low intensity conflict” doctrine “comes home” in a book on it by Timothy Dunn. Chris Simcox commonly used “hydraulic tropes” in his speeches about this area, according to Massey, Durand, and Malone’s book *Beyond Smoke and Mirrors*. In a book titled for this area’s “Games,” Peter Andreas claims that the impact of IRCA on this area caused a change from a circular flow of workers to a settled population of families. This area appears in the title of a book by Gloria Andalzuá (“ahn-dal-zoo-AH”) that calls for the emergence of a “new mestiza.” Goods often cross this area to and from factories called *maquiladoras*. For 10 points, name this border that runs between Juárez and El Paso.

ANSWER: **U**nited **S**tates–**Mexico Border** [accept **US**–**Mexico** after “border” is read; accept equivalents; prompt on incomplete answers, such as Mexico, Texas, the border, borderlands, or la frontera]

<Social Science>

19. Andrew Gelman and Don Rubin are advocates of the “multistart” technique for using these objects, which contrasts with the “one long run” approach. Algorithms that use Gibbs sampling store samples in one of these objects, from which they may discard data collected during the “burn-in” period. When applied to these objects, the Chapman–Kolmogorov equation reduces to an identity equivalent to matrix multiplication. One of these objects traverses a complicated probability distribution with the aid of an acceptance criterion in the Metropolis–Hastings algorithm. The selection of a future state depends only on the current state in these objects, which consist of a set of states and a list of fixed transition probabilities. For 10 points, identify these memoryless stochastic constructs used in namesake “Monte Carlo” algorithms, which are named for a Russian mathematician.

ANSWER: **Markov chain**s [or **Markov process**es; accept **Markov chain** Monte Carlo algorithms; prompt on Markov or Markov models; prompt on MC or MCMC or MCMCMC]

<Other Science (Math)>

20. A suffragist with this married surname was known as the “Dearest Old Lady in America” and founded the Association for the Advancement of Women in 1873. An author with this surname won the 2008 Pulitzer in History for his examination of American democracy from 1815 to 1848, titled *What Hath God Wrought*. A general of this surname replaced Thomas Gage in command of British forces following a battle fought at Breed’s Hill. A poem by a woman with this married surname contains the lines “He hath loosed the fateful lightning / Of his terrible swift sword,” which was combined with the tune of “John Brown’s Body” in a popular Union Army song. For 10 points, give this surname of a British commander during the American Revolution named William, and the author of the “Battle Hymn of the Republic” named Julia.

ANSWER: **Howe** [accept Daniel Walker **Howe**, William **Howe**, or Julia Ward **Howe**]

<US History>

Bonuses

1. This poem personifies the “darker, older America” as a woman whose “voice had the gutturals of machine guns / across khaki deserts where the cactus flower / detonates like grenades.” For 10 points each:

[10] Name this title poem of a 1979 collection by Derek Walcott that describes the “scorching wind of a scream” produced by the oppressed peoples of the Caribbean, which is dotted with the title ubiquitous trees.

ANSWER: “The **Star-Apple Kingdom**”

[10] Derek Walcott wrote this epic poem, a loose reinterpretation of the *Iliad* starring the fishermen Achille and Hector.

ANSWER: ***Omeros***

[10] In his poem titled for “A Far Cry from” this continent, Walcott articulated his dilemma as a multiracial poet from the Caribbean by asking how he can choose between this continent “and the English tongue I love?”

ANSWER: **Africa**

<Non-Epic Poetry>

2. The squirrel Ratatosk relays insults between this character and an eagle at the top of Yggdrasil. For 10 points each:

[10] Identify this character from Norse myth who is released from Niflheim at the beginning of Ragnarok.

ANSWER: **Nidhogg** [or **Nidhöggr**]

[10] Nidhogg is an example of this kind of creature. Vikings would carve heads of this mythical creature on the prows of their longships, possibly to scare enemies.

ANSWER: **dragon** [or **drakkar**; or **draco**; or **serpent**]

[10] Frotho, who replenished his kingdom’s war-drained treasury by killing a dragon and taking its gold, is among the many legendary Danish rulers described in this text by Saxo Grammaticus.

ANSWER: ***Gesta Danorum***

<Mythology>

3. The Kjeldahl (“KELL-dal”) method uses this analytic technique to determine the amount of nitrogen in a sample. For 10 points each:

[10] Name this technique in which a compound with unknown concentration is added drop by drop into a flask containing a compound with known volume and concentration.

ANSWER: **titration** [or **titrimetry**; or **volumetric analysis**]

[10] The Kjeldahl method uses this specific form of titration, in which a known amount of excess reagent is allowed to react with a sample of unknown concentration, and then the remainder of the excess is titrated.

ANSWER: **back** titration

[10] Simple acid–base titrations allow one to calculate the mass of potassium hydroxide that is needed for this reaction, which cleaves the ester bonds of fatty acids.

ANSWER: **saponification**

<Chemistry>

4. The images in this series represent a journey along the Via Dolorosa. For 10 points each:

[10] Identify this series that usually consists of an ordering of 14 devotional images for meditation. Lyrics from the hymn *Stabat Mater* are usually sung while worshippers travel between them.

ANSWER: **Stations of the Cross** [or **Way of the Cross**; or **Way of Sorrows**; or **Via Crucis**]

[10] This pope approved a different form of the Stations of the Cross that begins with Jesus’ agony in Gethsemane (“geth-SEH-muh-nee”). He was born in Germany with the name Joseph Ratzinger and resigned.

ANSWER: Pope **Benedict XVI** [prompt on Benedict]

[10] The eighth of Benedict XVI’s new stations, and the fifth of the traditional stations, depicts this man. He helped Jesus carry his cross to Calvary.

ANSWER: **Simon** of **Cyrene** [prompt on Simon; do not accept or prompt on “Simon Peter”]

<Religion>

5. An Englishman with this occupation adopted the name Giovanni Acuto and won the Battle of Castagnaro. For 10 points each:

[10] Give this Italian term for members of professional mercenary companies, such as Sir John Hawkwood and Niccolò da Tolentino.

ANSWER: **condottieri** [or **condottiero**]

[10] A condottiero named Francesco began this dynasty after Filippo Maria Visconti produced no heir. Leonardo da Vinci was employed by Ludovico, a member of this ruling dynasty of Milan.

ANSWER: House of **Sforza**

[10] John Hawkwood led a mercenary company known by this adjective. After a split following the Battle of Campaldino, this adjective described Guelphs who opposed the papacy and were forced out of Florence as a consequence.

ANSWER: **white** [or **bianco**; or **bianca**]

<European History post-600>

6. This artist satirized the infidelity of a local bishop in his sculptures *Père Paillard* (“pair pye-YARR”) and *Thérèse* (“tay-REZ”). For 10 points each:

[10] Name this artist whose ceramic sculpture of a naked goddess, *Oviri*, may have been a partial inspiration for Picasso’s *Demoiselles d’Avignon*.

ANSWER: Paul **Gauguin**

[10] Gauguin’s sculptures, much like his paintings, included elements based on the indigenous culture of this Polynesian island, where he painted *Where Do We Come From? What Are We? Where Are We Going?*

ANSWER: **Tahiti**

[10] Alfred Jarry and other observers compared Gauguin’s painting *Spirit of the Dead Watching* to this earlier painting. Paul Cézanne painted a suited man looking upward at the title character in a “modern” version of it.

ANSWER: ***Olympia*** (by Édouard Manet)

<Painting/Sculpture>

7. In a play by this author, a family whose members constantly compare themselves to the string of a “broken necklace” suddenly move in to the apartment of a bachelor. For 10 points each:

[10] Name the author of that play, *Friends*, who wrote the screenplay for Hiroshi Teshigahara’s adaptation of his novel *The Woman in the Dunes*.

ANSWER: Kobo **Abe**

[10] This writer imagined Mary McCarthy and Lillian Hellman reuniting in hell in her first stage play, *Imaginary Friends*. This author of the screenplays for *When Harry Met Sally…* and *Sleepless in Seattle* died before the premiere of her play *Lucky Guy*.

ANSWER: Nora **Ephron**

[10] This English playwright wrote about a recently widowed man’s role in breaking up his social group in his play *Absent Friends*. This “master of farce” is better known for plays like *Absurd Person Singular*.

ANSWER: Alan **Ayckbourn**

<Drama>

8. An error-correcting code allows messages to be sent and understood over a noisy channel. For 10 points each:

[10] Error-correction theory uses this term for the minimum number of bit changes between acceptable code words. In other contexts, the Manhattan and Euclidean metrics compute this measure of physical separation between points.

ANSWER: **distance** [accept Hamming **distance** or Manhattan **distance** or Euclidean **distance**]

[10] This linear code invented at Bell Labs achieves the greatest possible code rate for a distance of three. Its seven-four variant includes three error-detecting bits at positions one, two, and four of a seven-bit code word.

ANSWER: **Hamming** code

[10] The error-detecting bits in the Hamming code track this property of the binary code word. The simplest possible code uses one bit to track this property, and can thus detect, but not correct, a single bit-flip error.

ANSWER: **parity** [accept **parity** bit or **check bit**; accept “whether the total **number of 1s is even or odd**”; prompt on check or evenness or oddness]

<Other Science (Computer Science)>

9. Military officials who ranked above centurions and commanded portions of a legion were designated by this word. For 10 points each:

[10] Give this term that also designates the sacrosanct designated representatives of the plebeians in Republican Rome.

ANSWER: **tribune** [or **tribunus**]

[10] This man took the unprecedented step of forfeiting his patrician heritage to run as tribune of the plebs in 58 BC, and won by promising a free grain dole. Cicero defended this demagogue’s murderer in *Pro Milone*.

ANSWER: **Clodius** Pulcher

[10] Clodius managed to arrange for the escape of a prince of this name whom Pompey had captured eight years earlier. The prince then rebelled against his father of the same name, an ally of Mithridates VI who brought the kingdom of the Artaxiad house to its greatest extent.

ANSWER: **Tigranes** [or **Tigran**]

<Old Euro/NE History>

10. When its music was performed as a concert piece in 1929, this opera provoked an outcry from the Association of Proletarian Musicians, and was thus not put on again in Russia for 44 years. For 10 points each:

[10] Name this opera whose second act contains a ballad with lyrics from *The Brothers Karamazov* accompanied by music from the balalaika and flexatone.

ANSWER: *The* ***Nose*** [or ***Nos***]

[10] *The Nose* is by this Soviet composer of *Lady Macbeth of the Mtsensk District*. He composed fifteen symphonies including “Leningrad.”

ANSWER: Dmitri **Shostakovich**

[10] Shostakovich vehemently denied that this opera, then extremely popular among the Petersburg audience, influenced his composition. The song “Poor folk like us!” is sung by the title soldier of this Alban Berg opera based on a play by Georg Büchner (“GAY-org BYOOK-ner”).

ANSWER: ***Wozzeck*** (“VOT-sek”) [be lenient with pronunciation]

<Other Art (Opera)>

11. The protagonist of this story learns the English method of washing wool golf socks without shrinking them, and eventually opens an empire of laundry shops across the Midwest. For 10 points each:

[10] Name this story in which Dexter Green becomes infatuated with Judy Jones while working as a caddy at the Sherry Island Golf Club.

ANSWER: “**Winter Dreams**”

[10] “Winter Dreams” appears in the collection *All the Sad Young Men* by this author of *The Great Gatsby*.

ANSWER: F. Scott **Fitzgerald**

[10] Charlie Wales travels from Prague to Paris in an attempt to regain custody of his daughter Honoria in a Fitzgerald story titled for this city “Revisited.” John travels to the Place of the Gods in a post-apocalyptic story titled for this city.

ANSWER: **Babylon** [accept “**Babylon Revisited**”;accept “By the Waters of **Babylon**” by Stephen Vincent Benet]

<Short Fiction>

12. This ruler did what two hundred years of divided Sunni kings couldn’t do and crushed the Assassins, possibly suspecting that they had tried to kill him and his brother Möngke. For 10 points each:

[10] Name this Mongol leader who carried out the 1258 sack of Baghdad and carved a path of destruction west as he laid the foundation for the Ilkhanate.

ANSWER: **Hulagu** Khan [accept variants such as **Hülegü** Khan]

[10] Hulagu’s expansion was halted at the Battle of Ain Jalut, where he was opposed by Baibars armies of slave soldiers known by this term. Baibars also inaugurated a sultanate led by these soldiers in Egypt.

ANSWER: **mamluk**s [accept **Mamluk Sultanate**]

[10] Mamluks were encouraged to practice *furusiyyah* (“foo-roo-SEE-yeh”), a discipline that may have mutually influenced this similar contemporary European concept. Geoffroi de Charny (“zhuh-fwah de shar-NEE”) wrote a medieval treatise on this concept.

ANSWER: **chivalry** [accept word forms such as **chivalric** conduct]

<Other History>

13. Identify the following about things in physics that are dubbed “anomalous,” for 10 points each.

[10] In anomalous dispersion, a material’s index of refraction decreases with an increase in this quantity, which is multiplied by wavelength to give the speed of a wave.

ANSWER: **frequency**

[10] The Konishi anomaly leads to the non-conservation of certain Noether (“NUR-tuh”) currents in fundamental theories of this type, which posit the existence of particles like squarks and photinos.

ANSWER: **supersymmetric** theories [or **supersymmetry**]

[10] The anomalous magnetic dipole moment describes how elementary particles deviate from the predictions of the Dirac equation. What is the expression for the anomalous magnetic moment in terms of a particle’s *g*-factor?

ANSWER: **(*g* minus 2)** all **over 2** [or **(*g* minus 2) divided by 2**]

<Physics>

14. A radical form of this philosophical position has recently been advanced by the Italian philosopher Riccardo Manzotti in his book *The Spread Mind*. For 10 points each:

[10] Name this term applied to a range of philosophical arguments that tie mental states to one’s surrounding environment, rather than neural activity alone.

ANSWER: **externalism** [accept phenomenal **externalism**]

[10] This philosopher wrote the phrase “meanings just ain’t in the head” to summarize his position of semantic externalism, developed most notably in his “Twin Earth” thought experiment.

ANSWER: Hilary **Putnam**

[10] Putnam was heavily influenced by this earlier American pragmatist, who argued in favor of externalism in books like *Experience and Nature*. He also wrote *Democracy and Education*.

ANSWER: John **Dewey**

<Philosophy>

15. Early in the Civil War, Abraham Lincoln fired this man for insubordination when he issued a declaration emancipating all slaves in Missouri. For 10 points each:

[10] Name this man, who was arrested by Stephen Kearney for refusing to give up a military governorship. Earlier, he led a battalion comprising the men who started the Bear Flag Revolt.

ANSWER: John C. **Fremont**

[10] Fremont hired this man as a guide during his expeditions along the Oregon Trail. This man, who ordered a forced march of the Mescalero Apaches, lends his name to the capital of Nevada.

ANSWER: “Kit” **Carson** [or Christopher Houston **Carson**; accept **Carson City**]

[10] The explorations of Jim Bridger helped open up this path, which connected the Oregon Trail to new settlements in Wyoming and Montana. It was closed down in the aftermath of Red Cloud’s War.

ANSWER: **Bozeman** Trail

<US History>

16. In a novel by this author, Wistan slays Querig, a dragon whose breath suppresses memories, which enables the elderly couple Beatrice and Axl to remember their dead son. For 10 points each:

[10] Name this winner of the 2017 Nobel Prize in Literature who explored Arthurian mythology in *The Buried Giant*, which is wildly different from his other novels, such as *The Remains of the Day*.

ANSWER: Kazuo **Ishiguro**

[10] In Mark Twain’s *A Connecticut Yankee in King Arthur’s Court*, Hank Morgan goes back in time and is almost immediately captured and sentenced to burn at the stake, but he saves his own life by predicting one of these events.

ANSWER: solar **eclipse**

[10] While searching for his lost wife Dame Lisa, the title pawnbroker of this James Branch Cabell novel has an affair with Queen Guinevere as she is awaiting her marriage to King Arthur.

ANSWER: ***Jurgen****, A Comedy of Justice*

<Long Fiction>

17. Mutations in the *Drosophila* *Shaker* gene, which encodes a channel for this ion, causes the fly’s leg to twitch. For 10 points each:

[10] Identify this ion, whose efflux drives the hyperpolarization of neurons to near their resting potential of negative-70 millivolts.

ANSWER: **potassium** [or **K**+]

[10] Two potassium ions are imported, and three sodium ions are exported, by an enzymatic “pump” fuelled by this molecule that carries energy in cells.

ANSWER: **ATP** [or **adenosine triphosphate**]

[10] The resting membrane potentials of neurons are maintained by this type of potassium channel, which allows the ions to passively move down their gradients to a lower concentration.

ANSWER: **leak** channels [or **two-pore-domain** potassium channel]

<Biology>

18. Answer the following about things on the border of Italy and Switzerland, for 10 points each.

[10] This nearly pyramidal mountain straddles the Italian–Swiss border. Its reputation as the last major unclimbed Alpine peak inspired a Disneyland ride based on it.

ANSWER: **Matterhorn** [or **Cervino**; or Mont **Cervin**]

[10] The small exclave of Campione d’Italia on Lake Lugano takes advantage of its tax-exempt status by operating one of these establishments. Another of them that holds the Montreux Jazz Festival was rebuilt after a 1971 fire.

ANSWER: **casino**s [accept **gambling house**s]

[10] An elaborate 2016 ceremony marked the opening of this tunnel that runs beneath the Alps, which is now the world’s longest railway tunnel, at over 94 miles long.

ANSWER: **Gotthard** Base Tunnel [or **GBT**]

<Geography>

19. Answer the following about Asian language isolates, for 10 points each.

[10] The Hokkaido variant became the only surviving member of the Ainu languages after the last speaker of the variant named after this large Russian island died in 1994.

ANSWER: **Sakhalin** Island [or **Sakhalin** Ainu]

[10] This most commonly spoken language isolate in the world makes use of seven “speech levels” divided into *jondaenmal* (“chohn-den-mahl”) and *banmal* (“pahn-mahl”). It is written using the Hangul alphabet.

ANSWER: **Korean**

[10] Starting in the 1920s, some linguists began to group Korean into this Eurasian language family that also includes the Turkic and Mongolic language groups, though this classification is still disputed.

ANSWER: **Altaic** languages

<Social Science>

20. An Australian player of this instrument, John Williams, frequently uses non-standard designs created by Greg Smallman. For 10 points each:

[10] Joaquín Rodrigo’s *Concierto de Aranjuez* (“kon-see-AIR-toh de AH-rahn-wezz”) is the most well-known concerto for what instrument prominent in Spanish classical music?

ANSWER: **guitar**

[10] This composer’s twelve etudes for guitar are dedicated to classical guitarist Andrés Segovia. He wrote five preludes for guitar, as well as a number of *Chôros* (“SHOW-roos”).

ANSWER: Heitor **Villa-Lobos** (“VEE-lah-LOH-boos”)

[10] This Barcelona-born guitar virtuoso transcribed Isaac Albéniz’s piano pieces and a number of Catalan folk songs, such as “El testament d’Amèlia” (“ull tuss-tuh-MEN duh-MELL-ee-uh”), for guitar.

ANSWER: Miguel **Llobet** (“you-BET”)

<Music>