

ACF Fall 2019

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Tossups

1. In *How the Mind Works*, Steven Pinker controversially stated that this activity is evolutionarily-useless “cheesecake [for] our mental faculties.” Jerrod Levinson revived interest in the German Romantic debate on whether the ideal version of this activity is “absolute” or “programmatic.” Schopenhauer believed that the purest expression of “the will” was this art form. The full title of a Friedrich Nietzsche book claims to trace *The Birth of Tragedy from the Spirit of this art form*. Several ancients theorized a kind of this phenomenon made by “the spheres.” For 10 points, Pythagoras studied intervals to help explain what art form that Edgard Varèse (“va-REZ”) defined as “organized sound”?

ANSWER: **music** [accept **music of the spheres** or **universal music** or **musica** universalis; prompt on art until read; prompt on sound or harmony or melody]

<Philosophy>

2. Components of this object were outlined by H II (“H two”) regions in the work of Walter Baade (“BAH-duh”), who used metallicity to define two “populations” contained within this object: disk type I and bulge type II. This object is orbited by an extremely luminous globular cluster called Mayall II (“two”). After this object was controversially deemed an “island universe,” the discovery of Cepheid (“SEFF-ee-id”) variables inside this object resolved the 1920 Shapley–Curtis Debate by proving that this object is not a nebula. Messier 31 designates, for 10 points, what spiral galaxy that will collide with the Milky Way in 4.5 billion years?

ANSWER: **Andromeda** Galaxy [accept **Messier 31** or **M31** until read; accept **NGC 224**]

<Other Science>

3. A child requests the poet to “Pipe a song about” this animal in the introduction to a collection that Northrop Frye analogized to the mythical paradise of Beulah. In another poem, this animal wears “clothing of delight” and feeds “by the stream & o’er the mead.” That poem is often paired with a poem that asks “Did he who made” this animal “make thee?” A poem titled for this animal uses the couplet “He is meek & he is mild, / He became a little child” to allude to the coming of Jesus. That poem asks this animal, “Dost thou know who made thee?” For 10 points, name this animal described in a poem by William Blake that is often contrasted with “The Tyger.”

ANSWER: **lamb** [accept “The **Lamb**”; prompt on sheep]

<British Literature>

4. *Description acceptable*. Sparked by the treachery of Servius Sulpicius Galba, this region saw the “War of Fire” led by Viriathus. In this region, many Numantians committed suicide to avoid slavery after being besieged by Scipio Aemilianus. Quintus Sertorius fought a namesake guerilla campaign in this region, which was finally conquered by Augustus in 19 BC. This home to the Cantabrians was originally divided into “Ulterior” and “Citerior” portions by the Romans. Hannibal’s attack on this region’s city of Saguntum was the initial impetus for the Second Punic War. Both Trajan and Hadrian were born in, for 10 points, which region that includes modern-day Lisbon and Madrid?

ANSWER: **Hispania** [accept **Iberia** or the **Iberian** Peninsula; accept **Spain** or **Portugal**; accept **Hispania** Citerior, **Hispania** Ulterior, or **Hispania** Tarraconensis; accept Hispania **Lusitania**; accept Celt**iberia**]

<European History>

5. A scheme in which Nicolas Chedeville (“nee-ko-LAH shed-VEEL”) published music under the name of this composer resulted in his alleged Opus 13, entitled *Il Pastor Fido*. A catalogue of 826 of this composer’s works, including over 500 concerti, was created by Danish musicologist Peter Ryom (“RUE-yum”). This composer’s most

celebrated work is often paired with his C major mandolin concerto. This composer often wrote for the all-female ensemble of the *Ospedale Della Pieta* orphanage-convent. The opening of his *The Contest Between Harmony and Invention* is a set of four concerti grossi each paired with a sonnet on changing weather throughout the year. For 10 points, name this “Red Priest” who wrote *The Four Seasons*.

ANSWER: Antonio **Vivaldi** [or Antonio Lucio **Vivaldi**]

<Classical Music>

6. This constructivist termed the ability for a learner to focus on multiple aspects of a problem “decentration.” This scholar proposed that one’s peer group was the primary influence on one’s ethics in *The Moral Judgment of the Child*, which led Lawrence Kohlberg to develop his namesake ethical model. Assignment rubrics are often considered real-world examples of schemas, which are critical to this thinker’s genetic epistemology. This psychologist’s namesake educational programs limit material based on which of four cognitive developmental stages the student is in; those stages include the concrete operational and sensorimotor. For 10 points, name this Swiss child psychologist.

ANSWER: Jean **Piaget** (“pee-ah-ZHAY”)

<Social Science>

7. Traditionally, this practice’s stages are based on the Rigveda’s hymn 10.85 to Sūrya. The recently repopularized *gandharva* form of this practice is one of eight varieties listed by the *Manusmriti*. This practice includes the tying of the *mangala sutra* and the *jai mala* ceremony. A participant in this practice may arrive on a horse, accompanied by his *baraat*. After undergoing this practice, women begin applying red *sindoor* powder to the part of their hair. Garlands are exchanged during this activity, whose participants walk around a fire seven times, making their vows in the presence of Agni. For 10 points, name this practice whose “arranged” variety is often facilitated by the parents of the bride and groom.

ANSWER: Hindu **marriage** [accept **weddings**; accept **vivāha** or **vivaah**; accept **kalyanam**; prompt on **samskāra**]

<Religion>

8. Along with carbon and hydrogen, this element is found in selectride anion reducing agent. Herbert C. Brown discovered a reaction that, prior to oxidation, adds this element and hydrogen across carbon–carbon double or triple bonds to yield alcohols in an anti-Markovnikov fashion. Clusters containing this element can be designated closo-, nido-, or arachno- when applying PSEPT (“P-sept”) or Wade’s rules. This element’s trifluoride is considered “electron-deficient” due to its violation of the octet rule and is a common Lewis acid. An oxide of this element is combined with silica to form pyrex glass. For 10 points, name this metalloid whose atomic number is 5 and whose chemical symbol is B.

ANSWER: **boron** [accept **B** until read]

<Chemistry>

9. Starting in the 1940s, labor unions in this country annually negotiated for higher pay and benefits in the “spring wage offensive.” This nation’s car industry increased production efficiency through the development of Just in Time practices. The collapse of this country’s asset price bubble in 1991 led to crippling economic stagnation during the Lost Decade, which its current government has attempted to reverse through “Abenomics” (“AH-bay-nomics”). By the 1970s, this nation had overcome damage caused by Allied attacks in World War II to become the world’s third largest economy. For 10 points, name this East Asian country home to companies like Honda, Sony, and Toyota.

ANSWER: **Japan** [or **Nippon**-koku; or **Nihon**-koku]

<World History>

10. This character compares stars to “a great number of little bells that knew how to laugh” in a book whose last chapter talks about the “loveliest and saddest landscape in the world.” This character kills caterpillars for a companion who lives under a glass globe. After leaving a home that contains volcanoes to heat his breakfast, this

character dies of a snake bite. A book titled for this character opens with the narrator's drawing of an elephant that was swallowed by a boa constrictor. This character talks about his life on asteroid B-612 with an aviator who crashes in the Sahara. For 10 points, name this royal character who titles a much-translated novella by Antoine de Saint-Exupéry ("ann-TWAHN duh SAN-teg-zoo-pay-REE").

ANSWER: the **little prince** [accept le **petit prince**; prompt on **prince**]

<European Literature>

11. Victor Veselago hypothesized an inverse form of this phenomenon on materials with a negative index of refraction. This phenomenon produces spectral line broadening proportional to the square root of temperature. The transverse type of this effect was observed in the Ives–Stilwell experiment. One plus v over c , all times the starting frequency, is equal to the observed frequency in this effect. Measurements of the radial velocity of galaxies are affected by relativistic forms of this effect called redshift and blueshift. For 10 points, name this phenomenon that results in a change of pitch for a moving siren.

ANSWER: **Doppler** effect [or **Doppler** shift; accept **redshift** or **blueshift** until read]

<Physics>

12. In this city, the window panels of a reflective glass tower designed by Henry Cobb were replaced after several fell onto the street. A white triangular tower and a dark cube of glass and steel comprise a presidential library in this city designed by I. M. Pei. Its City Hall is widely hated for its brutalist design. A college campus located just outside this city includes a building with a thin-shell concrete roof shaped like one-eighth of a sphere, Eero Saarinen's ("arrow SAH-ree-nen's") Kresge ("KREZ-ghee") Auditorium, as well as Frank Gehry's Stata ("STAY-ta") Center. For 10 points, name this city home to the John Hancock Tower and the John F. Kennedy Presidential Library, whose suburb of Cambridge is home to the campus of MIT.

ANSWER: **Boston**

<Other Arts>

13. Prior to becoming a renowned architect, Alfréd Hajós ("HA-yohsh") was inspired to participate in these events following his father's death by drowning. Lavish donations from George Averoff funded renovations for the first of these events, stymying Ferenc Kemény's proposal that it take place in Budapest. On the basis of being "impractical, uninteresting, unaesthetic, and incorrect," women were excluded from the first of these events by Pierre de Coubertin, often considered their founder. At the first of these events, Spyridon Louis won an event inspired by the Pheidippides ("fye-DIP-uh-deez") legend, the marathon. For 10 points, 1896 saw the first of which modern international sporting events in Athens?

ANSWER: the **Olympic** Games [or the **Olympics**; accept **Summer Olympics**; accept the 1896 Summer **Olympics** in Athens; do not accept or prompt on "Winter Olympics"]

<European History>

14. Thomas dgx yhl ("D-G-X Y-H-L") wrote a song titled "Glory to" this city to replace Linda Stassen-Benjamin's "Sing Hallelujah to the Lord." The *People's Daily* newspaper criticized protestors in this city who used the black bloc method while removing alleged facial recognition towers in this city. Violence at this city's airport resulted in almost all flights of Cathay Pacific being cancelled. On September 4th, 2019, the Chief Executive of this city, Carrie Lam, withdrew an extradition bill that sparked the Anti-ELAB protests. For 10 points, name this former British colony that became a special administrative region of China in 1997.

ANSWER: **Hong Kong** [or **Hong Kong** Special Administrative Region; or **Hong Kong** SAR; or **Xiānggǎng**; or **Hēunggóng**; or **HK**]

<CE/Geo/Other/Pop Culture>

15. The speaker of a poem titled for one of these locations claims, "Where from above the milder sun / Does through a fragrant zodiac run." Godber delivers cream puffs in a short story titled for one of these places, which ends with a

girl asking her brother, “Isn’t life—.” A poem titled for one of these locations describes “Annihilating all that’s made / To a green thought in a green shade.” Laura takes a basket of leftovers to Scott’s widow in a Katherine Mansfield short story titled for a party in one of these places. In a short story [emphasize] *titled* for one of these locations, Stephen Albert is killed by Yu Tsun. For 10 points, Jorge Luis Borges (“BOR-hays”) wrote a short story titled for what kind of place “of the Forking Paths?”

ANSWER: **gardens** [accept “The **Garden** Party” or “The **Garden** of Forking Paths”; prompt on labyrinth]
<World/Other Literature>

16. IRE-BP is the cytoplasmic isoform of one compound in this process. An input to this pathway can alternatively form a 3-hydroxy-3-methylglutaryl compound in cholesterol biosynthesis. Alpha-ketoglutarate and succinate are intermediates in this process, which reduces FAD to FADH₂ in a step catalyzed by fumarase. This process starts after an input of pyruvate is converted to acetyl-CoA (“uh-SEE-till co-A”) yielding three NADH. For 10 points, name this phase of cellular respiration following glycolysis and preceding the electron transport chain, also referred to as the citric acid cycle.

ANSWER: **Krebs** cycle [or **tricarboxylic acid** cycle; or **TCA** cycle; accept **citric acid** cycle until read] (The first clue refers to aconitase.)

<Biology>

17. During an attack led by this tribe, Adolph Metzger fought using his bugle before dying alongside 80 others in the Fetterman massacre. A coalition led by this tribe forced the permanent closure of the Bozeman Trail after winning Red Cloud’s War. In a later conflict, this tribe was targeted by the “sell or starve” policy to force them to cede lands promised to this tribe by the 1868 Treaty of Fort Laramie, including the Black Hills. Days after winning the Battle of the Rosebud, a force led by this tribe’s chief Crazy Horse wiped out a U.S. cavalry detachment led by George Custer at the Little Bighorn. For 10 points, name this Native American tribe of the Great Plains.

ANSWER: **Sioux** (“soo”) [or Great **Sioux** Nation; or **Seven Council Fires**; accept **Lakota** or **Dakota** or **Nakota**]

<American History>

18. Paul Durrenberger and Bob Quinlan have suggested that these people did not strongly associate the Sun with day and the Moon with night. A major source for these people’s cosmology is a poem whose title translates as “The Seeress’s Prophecy.” Myths from these people refer to three wells: a well of venom, a well of fate, and a well of knowledge. In these people’s creation myth, a cow and a giant are born out of fire and ice that mixes together in the cosmic void, Ginnungagap (“GIN-ung-uh-GAP”). These people divided the universe into nine worlds that were rooted together by the great ash tree Yggdrasil. For 10 points, name these people that called the earth “Midgard” and worshipped gods like Odin and Thor.

ANSWER: **Norse** [accept **vikings** or **Icelanders** or **Danes** or **Norwegians**]

<Mythology>

19. A posthumous (“POSS-chuh-miss”) publication by this author is based on interviews with Cudjo Lewis, the last survivor of the Atlantic slave trade. This author of *Barracoon* is given a gravestone inscribed with “Genius of the South” in an Alice Walker essay about “Looking For” this author. Nanny marries off the protagonist of a novel by this author after she kisses Johnny Taylor under a pear tree. As she recounts her life to Pheoby Watson, a woman in a novel by this author describes her marriage to the mayor of Eatonville, Jody Starks. In a novel by this author, Tea Cake is bitten by a rabid dog and is shot by Janie Crawford. For 10 points, name this author of *Their Eyes Were Watching God*.

ANSWER: Zora Neale **Hurston** [prompt on “Looking for Zora”]

<American Literature>

20. A painting by this artist features a black ball in front of an archway opening onto a beach. In that painting by this artist, as well as in other paintings with the same title, strips of white paint mark the edges of canvases that blend

into the background. This artist painted several works depicting a dark street lit only by a single lamp below a daytime sky. This artist of *The Human Condition* and *The Empire of Light* depicted a train emerging from a fireplace in one painting, and showed an apple obscuring the face of a man wearing a bowler hat in *The Son of Man*. For 10 points, name this Belgian surrealist whose painting *The Treachery of Images* states “this is not a pipe.”

ANSWER: Rene Magritte [or René François Ghislain Magritte]

<Painting/Sculpture>

Bonuses

1. This musician was the first to win Grammy awards for jazz and classical music in the same year. For 10 points each:

[10] Name this trumpeter whose brother Branford wrote music for his album *Black Codes*. He is currently the jazz director at the Lincoln Center.

ANSWER: Wynton **Marsalis** (“mar-SAL-iss”)

[10] Marsalis’s oratorio *Blood on the Fields* was the first jazz work to win the music category of this prize, whose 2018 iteration went to Kendrick Lamar’s *DAMN*. Columbia University awards seven of these prizes named for a newspaper magnate.

ANSWER: **Pulitzer** Prizes [accept **Pulitzer** Prize for Music]

[10] Wynton’s brother Delfeayo (“DEL-fee-oh”) plays this instrument, an octet of which appears on the album *Jay and Kai* + 6. The Dixieland “tailgate” style of playing this instrument makes much use of its ability to play true glissandos.

ANSWER: **trombone** [or slide **trombone**; accept tenor **trombone** or bass **trombone**; accept tailgate **trombone**] <Other Arts>

2. In her essay “Professions for Women,” Virginia Woolf declared that “the occupation of the woman writer” was to kill this figure, who typified the domestic standard established by the idea of separate spheres. For 10 points each:

[10] Name this conceptual person that titles Coventry Patmore’s most famous poem. This idealized portrayal of the perfect wife shaped household culture during the Victorian era.

ANSWER: *The **Angel in the House*** [prompt on **Angel**; accept “**angel in the home**,” which is a lesser-used term]

[10] Opposite the Victorian “angel” was the “woman” described by this adjective, who had lost her virtue via sex, alcohol, or a different vice. William Gladstone devoted much effort to “saving” these women, who often participated in prostitution.

ANSWER: **fallen** women

[10] In her *Book of Household Management*, the Victorian Isabella Beeton compared the wife to the “Household General,” who had to command these general household workers that included stewards, gardeners, and cooks.

ANSWER: **servants** [accept **attendants**; accept **domestic** workers; accept **maids**; accept **butlers**; accept **housekeepers**; accept **flunkies**; accept word forms of all prior answers; prompt on **subordinates**; prompt on **employees**]

<European History>

3. Booker T. Washington started this school after purchasing a shanty house from the Butler Chapel A.M.E. Zion Church. For 10 points each:

[10] Name this private historically black university in Alabama where George Washington Carver began his peanut experimentation to help sharecroppers.

ANSWER: **Tuskegee** University [accept **Tuskegee** Institute National Historic Site]

[10] An investigation of experiments on syphilis performed on unknowing black sharecroppers resulted in the creation of this report, which defines modern guidelines on the ethical use of human subjects in research.

ANSWER: **Belmont** Report

[10] Tuskegee’s campus was designed by Robert Taylor, whose son lends his name to the Robert Taylor Homes. Then the largest housing project in the U.S, the Homes were located in this city’s neighborhood of Bronzeville.

ANSWER: **Chicago**

<CE/Geo/Other/Pop Culture>

4. Tetraabenazine is used to treat a symptom of this disease. For 10 points each:

[10] Name this autosomal disease that is most severe when 40 or more glutamine repeats are present in the mutated protein that causes it. Chorea (“kuh-REE-uh”) is a physical manifestation of this disease.

ANSWER: **Huntington**'s disease [or **Huntington**'s chorea]

[10] Huntington's disease is caused by three repeating nucleobases: cytosine, adenine, and this nucleobase symbolized G.

ANSWER: **guanine**

[10] Huntington's disease and many trinucleotide repeat disorders exhibit this phenomenon, in which symptoms appear at an earlier age for each successive generation, possibly with an increase in severity. Myotonic dystrophy also displays this phenomenon.

ANSWER: **anticipation**

<Biology>

5. This novel begins and ends with a prayer to the sunrise. For 10 points each:

[10] Name this novel by Leslie Marmon Silko in which the mixed-race Tayo battles PTSD from World War II and tries to reconnect with his indigenous ancestry.

ANSWER: ***Ceremony***

[10] In *Ceremony*, Tayo returns home to one of these places after World War II. Louise Erdrich's novel *Love Medicine* is set on one of these places home to the Ojibwe ("oh-JIB-way") tribe.

ANSWER: Native American **reservations**

[10] In a poem from *Ceremony*, a grandmother who is one of these animals tells the Sun how to outsmart a gambler. Luis and Valentín are cellmates in a Manuel Puig ("pweeg") novel whose title mentions this animal.

ANSWER: **spiders** [accept **araña**; accept **Spider** Woman; accept ***Kiss of the Spider Woman***]

<World/Other Literature>

6. André Derain ("duh-RAN") and Raoul Dufy ("doo-FEE") were members of this artistic movement. For 10 points each:

[10] Name this art movement whose derisive name was coined by Louis Vauxcelles ("voh-SELL") to express his preference for a Donatello sculpture. Works in this style are characterized by their use of intense colors.

ANSWER: **Fauvism** [or Les **Fauves**; or word forms]

[10] This leader of the Fauves painted *The Dance* and *Woman with a Hat*. He produced many cut-out collages later in life.

ANSWER: Henri **Matisse** [or Henri Émile Benoît **Matisse**]

[10] Fauvism member Maurice de Vlaminck painted a bright 1905 landscape set during this time. Vauxcelles coined the name of Fauvism at a 1905 salon named for this time period.

ANSWER: **autumn** [accept **fall**; accept ***Autumn Landscape*** or ***Autumn Salon***; accept Salon d' ***Automne***]

<Painting/Sculpture>

7. Most candidates in the 1992 Democratic presidential primaries looked past this state due to the candidacy of home state senator Tom Harkin. For 10 points each:

[10] Name this midwestern state whose first-in-the-nation caucuses mark the beginning of the presidential primary season.

ANSWER: **Iowa**

[10] Iowa has held the first Democratic primary since 1972, when the party's primary system was overhauled by a commission co-chaired by this senator. He went on to win the 1972 Democratic nomination for president but lost to Richard Nixon.

ANSWER: George **McGovern**

[10] The closest ever Iowa caucus result occurred in 2012, when this former Pennsylvania senator defeated Mitt Romney by 34 votes.

ANSWER: Rick **Santorum**

<American History>

8. In a play by this author, a girl is killed by the little men she carves out of an apple after she feeds some of them to her father. For 10 points each:

[10] Name this author who described child murders that match the plots of Katurian's fairy tales in *The Pillowman*. This Irish playwright also wrote a trilogy set in the Aran ("AR-un") Islands.

ANSWER: Martin **McDonagh** ("muck-DON-uh")

[10] Martin McDonagh wrote the screenplay to a dark comedy in which two members of this profession hide out in Bruges ("broozh"). In a play, two members of this profession argue about the phrases "light the kettle" and "put on the kettle."

ANSWER: **hitmen** [or paid **assassins** or hired **killers**; accept any answer indicating a person who kills people for money]

[10] The hitmen Gus and Ben receive instructions from the title device in this author's play *The Dumb Waiter*. This British playwright also wrote *The Birthday Party*.

ANSWER: Harold **Pinter**

<British Literature>

9. This physicist discovered a law describing the force between two current-carrying wires. For 10 points each:

[10] Name this physicist who also names a law stating that the closed line integral of the magnetic field is equal to permeability times the enclosed current.

ANSWER: André-Marie **Ampère**

[10] This term representing the time derivative of the electric flux density was added to Ampère's law by James Clerk Maxwell.

ANSWER: **displacement current** [prompt on *J*-sub-*D*]

[10] Maxwell's equations unified magnetism and this phenomenon, which is caused by the presence of charged particles.

ANSWER: **electricity** [accept **electrostatics**]

<Physics>

10. This character's name derives from a Canaanite word for "Lord," which has the same root as a Hebrew word that may substitute for the name Yahweh ("YAH-way") when speaking aloud. For 10 points each:

[10] Name this beautiful mortal man and lover of Aphrodite. Aphrodite asks him not to go out to hunt, but he does anyway and is killed by a wild boar.

ANSWER: **Adonis** (The Hebrew word is Adonai.)

[10] Adonis was born out of a tree that used to be this woman. This woman was transformed into a tree as punishment for having sex with her father, King Cinyras ("sin-NYE-russ").

ANSWER: **Myrrha** [or **Smyrna**]

[10] In the *Metamorphoses*, the story of Adonis is framed as a song sung by this musician. This hero travels to the underworld to bring back his wife Eurydice ("yoo-RID-uh-see"), but he fails since he turns back to look at her.

ANSWER: **Orpheus**

<Mythology>

11. The music of Nadia Boulanger's sister Lili is considered to be part of this movement, whose music contains parallel motion, heavy chromaticism, and an emphasis on colorful timbre ("TAM-burr"). For 10 points each:

[10] Name this broad art movement. The compositions of Claude Debussy and Maurice Ravel are considered exemplary of both symbolism and this later movement, despite their rejection of the label.

ANSWER: **impressionism** [or word forms]

[10] In his study, Debussy kept a *koto*, a zither from this country. Its other folk instruments include a pear-shaped lute called *biwa*, an end-blown flute called *shakuhachi* ("sha-koo-HA-chee"), and a large drum called *taiko*.

ANSWER: **Japan** [or **Nippon**-koku; or **Nihon**-koku]

[10] To evoke Eastern music, Debussy often used this symmetrical hexatonic scale. Since all of its notes are a major second apart, this scale lacks a leading tone and contains neither augmented intervals nor half steps.

ANSWER: **whole tone** scale

<Classical Music>

12. Sixteen seconds after taking off from Gibraltar, this country's prime minister died in a disputed 1943 plane crash that was long suspected to have been orchestrated by the pilot and sole-survivor, Eduard Prchal ("pur-KHALL").

For 10 points each:

[10] Name this country once led by Władysław Sikorski. This country's President, Lech Kaczyński, also died in a similarly controversial plane crash in 2010 after taking off from his country's capital, Warsaw.

ANSWER: **Poland** [or Republic of **Poland**; or **Polska**]

[10] This statesman died in a 1961 plane crash while travelling to hold peace talks with Moïse Tshombe ("mo-EEZ CHOM-bay"). He was the only man to win the Nobel Peace Prize posthumously, and he succeeded Trygve Lie ("TRIG-vuh LEE") to his most famous position.

ANSWER: Dag **Hammar-skjöld** ("dog HA-mar-hweld")

[10] In 2016, 64 members of this country's premier military choir died after their plane crashed into the Black Sea. Aeroflot Flight 593 crashed in this country's Kemerovo ("KAY-meh-ro-vuh") Oblast after the pilot's children accidentally disengaged the autopilot.

ANSWER: **Russia** [or **Russian** Federation; or **Rossiya**] (The choir was called the Red Army Choir or Alexandrov Ensemble.)

<European History>

13. Name some authors who were inspired by the Brooklyn Bridge, for 10 points each.

[10] This author described the structure as "sleepless as the river under thee" in the "Proem" that opens his long poem *The Bridge*.

ANSWER: Hart **Crane** [or Harold Hart **Crane**]

[10] The speaker claims to be "the perfect man, the Buddha of This World" in this author's unpublished "Brooklyn Bridge Blues." This Beat author wrote about Sal Paradise in his novel *On The Road*.

ANSWER: Jack **Kerouac** [or Jean-Louis **Kérouac**]

[10] This poet called the Brooklyn Bridge "Climactic ornament, a double rainbow" in the poem "Granite and Steel." The speaker says, "I, too, dislike it" in this author's poem "Poetry."

ANSWER: Marianne **Moore** [or Marianne Craig **Moore**]

<American Literature>

14. Products of the Sharpless epoxidation have this property. For 10 points each:

[10] Name this property possessed by the products of asymmetric syntheses. Molecules with this property can rotate plane-polarized light.

ANSWER: **chirality** ("kye-RAL-ity") [or word forms; or **optical activity**]

[10] This scientist demonstrated chirality by showing that some crystals of a salt rotate light to the right while others rotate light to the left. The technique of heating milk to sterilize and extend shelf life is also named for this chemist.

ANSWER: Louis **Pasteur** [accept **pasteurization**]

[10] Pasteur used the enantiomers of this four-carbon molecule to demonstrate chirality. In the Sharpless epoxidation, an ester of this compound determines the stereochemistry of the product.

ANSWER: **tartaric acid** [or diethyl **tartrate** or diisopropyl **tartrate**]

<Chemistry>

15. This psychologist founded the Heroic Imagination Project, inspired in part by his most famous experiment. For 10 points each:

[10] Name this psychologist who discussed Abu Ghraib (“grayb”) in light of that experiment in *The Lucifer Effect*. His future wife Christina Maslach (“MAZZ-lock”) intervened and ended that unethical experiment after six days.

ANSWER: Philip **Zimbardo**

[10] Ron Jones’s Third Wave Experiment was conducted in Palo Alto, which is home to this university. The Third Wave Experiment is often compared to Zimbardo’s “prison experiment” at this university.

ANSWER: **Stanford** University

[10] This Stanford graduate’s research on the “misinformation effect” has saved many from wrongful imprisonment on account of faulty eyewitness testimony. She co-developed the “Lost in the Mall” technique with James Coan (“KO-in”) to study false memories.

ANSWER: Elizabeth **Loftus**

<Social Science>

16. This empire’s conquest of the Sosso kingdom helped it assert control over trade routes across the Sahara. For 10 points each:

[10] Name this West African empire founded by Sundiata Keita in the 13th century. It was later eclipsed by the Songhai Empire.

ANSWER: **Mali** Empire [or **Manden** Kurufaba]

[10] This *mansa* of Mali legendarily caused the price of gold to plummet across the Middle East through the generosity he showed during a 1325 pilgrimage to Mecca.

ANSWER: Mansa **Musa** [or **Musa** Keita I]

[10] *Description acceptable*. Mansa Musa took power after his predecessor, Abu Bakr II, supposedly disappeared while trying to perform this action. Rutgers professor Ivan Van Sertima tried to prove that Abu Bakr succeeded in this action by cherry-picking passages from Bartolomé de las Casas.

ANSWER: **crossing** the **Atlantic** ocean [accept descriptive equivalents indicating that Abu Bakr disappeared in the course of **exploring the ocean**; accept **discovering the Americas** or **discovering the New World** or equivalents; accept **sailing west**]

<World History>

17. The Festival of Santa Esterica, a fictional figure, was celebrated by individuals attempting to hide this trait, many of whom settled on Majorca as the Xueta (“shoo-ET-uh”) people. For 10 points each:

[10] Name this religious identity that characterized the domestic life of Sabbatai Zevi’s (“SHAH-beh-tye ts’VEE’s”) Dönme community in the Ottoman Empire. A solitary community of these people in Belmonte (“bel-MON-tih”) embodied the idea of the “Crypto” type of them.

ANSWER: they were **Jews** [accept **Jewishness** or word forms; accept believers in **Judaism**; accept Crypto-**Jews**; prompt on **hiding one’s religion** or **hiding one’s faith** by asking “which faith were they hiding?”; prompt on **not actually being Christian** or **Muslim**]

[10] This Spanish term referred to people who continued to practice Judaism secretly, even after forced conversion to Christianity. While originally an insult, many Jews later adopted this term in honor, explaining its etymology via their dietary habits.

ANSWER: **marranos** [prompt on **conversos**]

[10] This term refers to the Jewish ethnic group originally from Spain and Portugal; they constitute the majority of European Jews along with the Ashkenazi.

ANSWER: **Sephardic** Jews [or **Sephardim**]

<Religion>

18. Procedural generation can be implemented through these computational systems. For 10 points each:

[10] Name these discrete models that consist of grids of elements, with each element in one of a finite set of states and surrounded by a “neighborhood,” that progresses through “generations” under a mathematically defined rule.

ANSWER: **cellular automaton** [accept tessellation **automaton**; accept **automata** in place of “automaton”; prompt on **automaton**; prompt on **CA**]

[10] Natural cellular automata often generate these infinitely self-similar curves that appear to be the same upon successive magnifications. Examples of these curves include the Menger (“MENG-er”) sponge and the Sierpinski carpet.

ANSWER: **fractal** curves

[10] This Yale mathematician coined the term “fractal,” one of which can be formed by his namesake set. His most famous paper discusses a paradox regarding the length of Britain’s coastline.

ANSWER: Benoit B. **Mandelbrot** [accept **Mandelbrot** set] (The “B.” does not stand for anything.)

<Other Science>

19. The field of philosophy of action is often traced back to this thinker’s monograph *Intention*. For 10 points each:

[10] Name this analytical Thomist (“TOM-ist”) who introduced the term “consequentialism” in the paper “Modern Moral Philosophy.” This student of Ludwig Wittgenstein is credited with reviving virtue ethics in that paper.

ANSWER: G. E. M. **Anscombe** [or Gertrude Elizabeth Margaret **Anscombe**]

[10] This early text includes practical wisdom, or *phronesis* (“fro-NEE-sis”), as one of the five intellectual virtues. It asserts that the highest good is a state of “energeia” happiness called *eudaimonia* (“yoo-da-MO-nee-uh”).

ANSWER: **Nicomachean Ethics**

[10] Philippa Foot’s neo-Aristotelian virtue ethics have been overshadowed by her invention of this dilemma. It asks if you should pull a lever to make the namesake vehicle run over only one person, rather than five.

ANSWER: **trolley** problem

<Philosophy>

20. Answer the following about Eastern European authors who wrote really long sentences, for 10 points each.

[10] Bohumil Hrabal used just a single 128-page sentence for his novel *Dancing Lessons for the Advanced in Age*, which he wrote in this language. Tomáš and Tereza’s dog Karenin dies of cancer in another novel in this language.

ANSWER: **Czech** (The second novel is Milan Kundera’s *The Unbearable Lightness of Being*.)

[10] This author wrote a ten-page sentence about the history of the Theresienstadt (“tuh-RAY-zin-shtott”) ghetto in his novel *Austerlitz*. This author intersperses photographs throughout his novels, which include *The Emigrants* and *The Rings of Saturn*.

ANSWER: W. G. **Sebald**

[10] Polish author Jerzy Andrzejewski (“YEHR-zih on-dray-YEFF-skee”) used only two sentences, the second of which is four words, in his novel *The Gates of this location*. John Milton wrote an epic titled this location *Lost*.

ANSWER: **paradise** [accept *The Gates of* **Paradise** or **Paradise Lost**]

<European Literature>