

Fall Open 2019

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Tossups

1. In one film, one of these characters front-flips in front of an entirely black background during a montage of nobles' corpses. Nobuhiko Obayashi based one of these characters living in the title *Hausu* on his daughter's suggestions. Kaneto Shindo's film *Kuroneko* centers on a search for two of these characters. One of these characters sits in a cage-like bamboo hovel in another film and sings "oh fascinating, the life of man, oh fascinating" as he turns a spinning wheel. The potter (\*) Genjurō has an affair with one of these characters in *Ugetsu*. One of these characters said he would be "willing to forgive" Toshiro Mifune's character for offering to kill his wife, and one serves as the *Macbeth* witches in *Throne of Blood*. One of them claims that his wife was seduced by the bandit Tajōmaru and then demanded the bandit kill him while speaking through a medium. For 10 points, name this sort of character, who in *Rashōmon* proves to be as unreliable as the living characters.

ANSWER: ghosts [or spirits; accept any obvious equivalent or Japanese term as long as it's clear that the answer refers to dead characters; accept shapeshifters and equivalents since only the *Rashōmon* ghost doesn't; prompt on samurai, wives, daimyo, assassins, or women and equivalents with "in what physical state?"] (the first clue is from *Kuroneko*)

<JG, Film>

2. In 2012, this denomination released "A Statement of the Traditional" view of salvation that has been criticized as endorsing Semi-Pelagianism by the leader of its theological seminary, Albert Mohler. Acts 1:8 ("chapter-one-verse-eight") is cited by this denomination for the "three levels of cooperation" its churches can participate in as part of its Cooperative Program. This denomination's Ethics and Religious Liberty Commission is led by Russell Moore. In 2012, this denomination chose (\*) Fred Luter as its first African American president. Under J. D. Greear in 2019, this denomination announced the creation of a committee for investigating sexual abuse. This denomination's teachings are laid out in its namesake "Faith and Message." The Women's Missionary Union is an auxiliary organization associated with this denomination, which experienced a "conservative resurgence" during the 1970s. For 10 points, Billy Graham was a member of what largest Protestant denomination in the United States?

ANSWER: Southern Baptist Convention [or SBC; prompt on Baptists]

<AK, Religion>

3. Progressive writers in this language that met at the Pak Tea House modernized its literature in the collection *Angaaray*. The narrator of a story written in this language describes a maid giving constant massages to a pederast noble's wife, and has an amusingly hard time figuring out that they have lesbian sex under the title "Quilt." A writer in this language caused one of his many obscenity trials with a story about a man who sleeps with a rural woman after inviting her in from the rain, and then can never shake her title "Smell." That writer used this language in a story that ends with a (\*) lunatic collapsing between barbed wire fences because "In between, on that piece of ground that had no name, lay Toba Tek Singh." Saadat Hasan Manto used this language, and Muhammad Iqbal was a pioneer in its modern literary use. This language developed as a literary register from Persian poetry in the *Hindavi* style. For 10 points, name this national language of Pakistan.

ANSWER: Modern Standard Urdu [accept Hindustani or Hindi-Urdu, but prompt on just Hindi (whether Hindi and Urdu are separate languages is a whole thing not worth litigating); prompt on Persian or Farsi]

<JG, Miscellaneous Lit>

4. This is the first title concept of a book critiquing the avoidance of the "problem of domination" in the work of Alasdair MacIntyre in a chapter titled for "Traditions" and "Understandings." A form of *the opposite of*

**this concept has “testimonial” and “hermeneutical” types, according to a book by Miranda Fricker on the epistemic form of this concept’s opposite. This concept is paired with gender and “the family” in a book by (\*) Susan Moller Okin. A masculine perspective based on this concept is contrasted in Carol Gilligan’s *In a Different Voice* with a feminine perspective based on care. This is the second title concept of a book analyzing Ancient Greek sexual norms and its author’s capabilities approach; that book pairing sex with this concept was written by Martha Nussbaum. A book titled for this concept introduced the “difference principle,” equates this concept with fairness, and proposes the “veil of ignorance.” For 10 points, name this concept that titles a book by John Rawls.**

ANSWER: **justice** [or ***A Theory of Justice***; or ***Sex and Social Justice***; or ***Justice, Gender, and the Family***]  
<AK, Philosophy>

**5. Fragmentation in these molecules occurs along a concerted path in the “shrink wrap” mechanism. A through-space interaction between ten p orbitals known as periconjugation was discovered in a derivative of one of these molecules. One of these molecules with a triply degenerate LUMO (“LOO-mo”) is capable of undergoing six one-electron reductions reversibly. In the last step of a reaction used to functionalize these molecules, a carbanion (“carb-ANN-aye-on”) displaces bromine in nucleophilic aliphatic substitution. That cyclopropanation (“cyclo-propane-ation”) of these molecules is named for (\*) Bingel. One of these molecules has 6,6 (“six-comma-six”) bonds that resemble double bonds, and shorter 5,6 (“five-comma-six”) bonds that resemble single bonds. Ichihashi and Iijima used arc-discharge evaporation to synthesize one type of these molecules. Kroto and Smalley discovered one of these molecules that is not superaromatic because its pentagonal rings lack double bonds. For 10 points, name these hollow allotropes of carbon that resemble soccer balls.**

ANSWER: **fullerenes** [accept buckminster**fullerene**; accept **buckyballs**; accept carbon **nanotubes**; accept **buckytubes**; prompt on carbon allotropes; prompt on carbon molecules]  
<JS, Chemistry>

**6. In the first volume of *Capital*, Karl Marx describes how this region experienced a process by which “deer have received extended ranges,” while men have been hunted within a narrow circle. *A History of the Dispossessed* was written by T. M. Devine in a book about a process in this region, which coincided with the collapse of the kelp industry. The “runrig” (“run-rig”) system of farming in this region was replaced by a system called “crofting.” A principle called *dùthchas* (“doo-HASS”) was violated in a series of evictions in this region known as its namesake (\*) “clearances.” The late appearance of one group in this region to take a loyalty oath led to the Glencoe massacre. Groups in this region were put down in the Battle of Culloden Moor with the defeat of Bonnie Prince Charlie, and were represented by patterns called tartans. For 10 points, name this northern region of a country that was dominated by clans such as the MacDonalds and Campbells.**

ANSWER: **Scottish Highlands** [prompt on Scotland; prompt on Highlands]  
<AK, European History (Commonwealth, Ancient, Historiography)>

*Note to players: description acceptable.*

**7. These processes are characterized by behaviors called “WUNC displays” in a seminal study of them that opens by noting, “1765 was a lively year.” Benford and Snow introduced a common description of these processes as involving creation of “diagnostic,” “prognostic,” and “motivational” frames and of their success involving “frame realignment.” They were considered irrational deviance until scholars like Sidney Tarrow and Doug McAdam introduced rational “resource mobilization” theories of them. Charles (\*) Tilly’s seminal studies of these processes highlight “repertoires of contention” that develop to exploit “political opportunity structures.” Theories of “new” types, like South Africa’s Shack-Dwellers, argue that they are spurred by “moral shocks” and often focus on emotion, social media, and identity claims as employed by, for example #MeToo (“hashtag-me-too”). For 10 points, name these campaigns for major change in social structures and attitudes, like those for suffrage and Civil Rights.**

ANSWER: social movements [accept collective actions or mobilizations; accept contentious politics or word forms of “contend” until “contention” is read; accept protests or demonstrations and obvious equivalents until “frame realignment” and prompt after; accept social revolutions or cultural revolutions and prompt on revolution or political revolutions; accept campaigns until mentioned but do NOT accept or prompt on answers like “election campaigns”; accept any answer that describes an organized/mass effort to affect social, cultural, or political change; prompt on attitude change and equivalents that do not mention the organized pushes for it]

<JG, Other Academic>

8. A rebel leader of these people used the shibboleth “Butter, rye bread, and green cheese” and carried a seven-foot-long sword. Many of these people’s kings, including Edzard the Great, belonged to their Cirksena family. One of their kingdoms ended after Bubo unsuccessfully attempted an amphibious landing at the Battle of the Boarn. The giant pirate Pier Gerlofs Donia led these people in guerrilla warfare against Charles V (“the-fifth”). The assistance of these people under Magnus Forteman during Charlemagne’s attack on Rome was one of the supposed reasons why they never adopted a (\*) feudalistic power structure. These people, who martyred Saint Boniface, worshipped a god similar to the Norse god Forseti. Climate change may have been responsible for spreading these people across the coasts of Schleswig-Holstein, Lower Saxony, and Groningen. For 10 points, name these people of the northern Netherlands and Germany whose languages are the closest relatives of English.

ANSWER: Frisians

<KS, European History (Continental)>

9. This artist recently came out of retirement to curate an exhibit titled *The Smiths*, which features over 30 artists with the surname Smith. It’s not Marina Abramovic (“ah-BRAH-moh-vitch”), but he curated an exhibit titled “The Artist is Present” featuring a one-to-six scale wooden box that depicts the Sistine Chapel frescoes on its inside. A 2011 Guggenheim retrospective of this artist featured over 130 of his pieces being hung from the ceiling with string, including his frequent subjects of taxidermied horses and Hitler puppets. A participatory sculpture by this artist was installed among pictures of Winston Churchill and stolen from Blenheim Palace in September 2019. He used shattered glass and volcanic rock for his piece (\*) *La Nona Ora*, which depicts Pope John Paul II being struck by a meteor. A piece by this artist was made for the Guggenheim Museum and is a functioning toilet made from 18-karat gold. For 10 points, name this satirical contemporary Italian sculptor of *America*.

ANSWER: Maurizio Cattelan

<AK, Painting and Sculpture>

10. When a character created by this playwright is threatened with an unloaded revolver, he dismisses the weapon as an “old tin whistle.” That Catholic character created by this author insists that a woman swear her love for him on a cross, only to discover she was raised Lutheran. A character in a play by this author is infuriated when everyone around him mechanically replies, “I beg your pardon” as he bumps into them. The stage instructions of one of this author’s plays direct the title character to frequently (\*) sit “in the exact attitude of Rodin’s *The Thinker*.” In a play by this author, an Irish man aims to marry the title former prostitute despite the protests of her father Chris Christopherson. In another play by this author, the title character scares off Mildred Douglas, gets thrown out of an IWW office, and is crushed to death by a gorilla. For 10 points, identify this author who wrote about the coal stokers Mat Burke and Yank in his plays *Anna Christie* and *The Hairy Ape*.

ANSWER: Eugene O’Neill [or Eugene Gladstone O’Neill]

<INB, Drama>

11. This behavior usually obeys a negative binomial distribution, but in the limit of a high degree of aggregation the Anderson-May model predicts that it will converge to a Poisson (“pwah-SAWN”) distribution. A restricted area of discovery is assumed in a theory of this behavior that works in a delayed

**density dependent manner. The manner in which *D. dendriticum* practice this behavior provides evidence for the adaptive manipulation hypothesis. The cyclic population dynamics of the red (\*) grouse are due to his behavior. Wasps that engage in this behavior are used as a biological pest control. A unique form of this behavior that uses other organisms to rear offspring is practiced by cuckoos. Aphids (“AY-fids”) perform the “ecto-” form of this behavior, while the “endo-” form of it is exemplified by helminths. For 10 points, name this symbiotic behavior in which one organism benefits at the expense of another organism.**

ANSWER: parasitism [accept social parasitism; accept parasitoidism; accept brood parasitism; accept endoparasitism; prompt on prompt on symbiosis before “symbiotic”] (The second clue is the Nicholson-Bailey model. *D. dendriticum* is a fluke that manipulates ants to go to the top of grass blades at night and sit there to increase the probability of the ant getting eaten by sheep)

<JS, Biology>

*Note to players: description acceptable.*

**12. Evil Mapuche wizards supposedly used special ointments to gain this ability to become a chonchon. This ability can be fatally turned on creatures known for it in Southeast Asia by rubbing salt or garlic onto their legs. The garlands hanging from witch masks in Balinese dance depict the gruesome result of this ability’s use by krasue and leyak. A figure with this ability trades a deer, a boar and a fox for kisses in a deal to trade what he catches while hunting for what his (\*) guest “gained” that day, invariably kisses from the wife of that figure with this ability. That figure with this ability unexpectedly shows it off in a “Christmas game” that he mandates be repeated a year and a day later. Despite lacking this ability, a knight survives that repeat due to a girdle he received from Lady Bertilak. For 10 points, name this ability, which in Arthurian myth is possessed in at very least illusory form by the Green Knight.**

ANSWER: (self)-decapitation [accept any answer describing being able to become a disembodied head or to survive getting your head cut off; accept equivalents related to separating one’s entire upper torso given the clues from Southeast Asia] (the Balinese masks are designed as such since leyaks and their cousins are thought to separate their heads at night such that their internal organs dangle from their flying heads)

<JG, Mythology>

**13. Observations of Jupiter were used to calibrate the gain of this instrument’s ten differencing assemblies. Kashlinsky, Atrio-Barandela, Kocevski (“ko-CHAY-ooH-skee”), and Ebeling analyzed the data from this instrument to find the first evidence for a component of the peculiar velocity of galaxy clusters they called “dark flow.” Charles Bennett attributed human psychology to the discovery of anomalies in the quadrupole and octupole components of this instrument’s data. This instrument is the (\*) second in a line of instruments whose results are displayed using the Mollweide projection. Analysis of this spacecraft’s data determined that the universe is within 0.4% of flat, supporting both the Lambda-CDM model and the theory of inflation. This spacecraft that was retired in 2010 discovered a region of the celestial sphere called the Cold Spot. For 10 points, what spacecraft that measured the temperature anisotropy of the CMBR succeeded COBE (“CO-bee”)?**

ANSWER: WMAP [or Wilkinson Microwave Anisotropy Probe]

<JS, Astronomy>

**14. A poet with this first name wrote about stumbling “back into the Jew-hating world” after attending a Yom Kippur synagogue service in the poem “High Holy Days.” An Ann Arbor-born poet with this first name addressed her depression in such collections as *Otherwise*, and was married to Donald Hall until her 1995 death. A 1953 poem compares a person with this name to a wren whose song trembled the “twigs and small branches,” and from whom “light syllables leaped.” A person with this name “cast herself down into such a pure depth” that “even a (\*) father could not find her.” At a funeral, the professorial speaker of a poem imagines the “limp and damp” neck curls of his student with this name, and speaks lovingly of her despite having “no rights in this matter,” as he is neither her father nor her lover. For 10 points, give this name of the woman for whom Theodore Roethke (“ret-KEE”) wrote an “Elegy.”**

ANSWER: Jane [accept Jane Shore or Jane Kenyon or “Elegy for Jane”]  
<INB, Non-epic Poetry>

15. A book by David Conroy examines the hierarchy and social conventions of these places in eighteenth century America, and recounts an incident in which Samuel Sewall was publicly humiliated by a large crowd. The namesake of Gettysburg, Samuel Gettys, was an owner of one of these places. The first North American meetings of Freemasons took place in one of these places. That one of these places was also the site of the first recruitment of the US Marines and was built on Tun alley. These places were similar to the (\*) *ordinaries* back in England, and included the Indian Queen in Philadelphia. One of these establishments was where the Boston Tea Party was planned and was known as the Green Dragon, which Daniel Webster called “the headquarters of the American Revolution.” For 10 points, name these establishments in Colonial America that sold whiskey and rum.

ANSWER: taverns [accept inns; prompt on bars; prompt on pubs; do not accept or prompt on terms like “saloons” or “speakeasies”]  
<AK, US History>

16. This symphony’s final note is a loud *tutti* E major chord which the winds, marked *lunga*, sustain and decrescendo into a *ppp* dynamic. This symphony’s scherzo begins with the rhythmic motif of two eighth notes followed by a half note, which parallels the scherzo of Beethoven’s Ninth; the two scherzos also share the tempo marking *Molto vivace* (“*vee-VAH-cheh*”). This symphony begins with a 4/8-time (“*four-eight-time*”) *Adagio* slow introduction. Because its composer’s music was published out of order, this symphony was formerly known as No. (\*) 8, and before that as No. 5. The second movement of this symphony begins with four bars of wind chords that transition from E major, the piece’s parallel key, to D-flat major, the movement’s home key. Afterwards, a pentatonic melody in *Largo* tempo is introduced by the English horn. For 10 points, name this symphony titled for the land whose black spirituals inspired its composer Antonin Dvořák.

ANSWER: New World Symphony [or Z nového světa; or Dvořák 9; or Symphony No. 9, *From the New World*; or Symphony No. 9 by Antonin (Leopold) Dvořák; prompt on partial answer]  
<KL, Classical Music and Opera>

*Note to moderator: read the first sentence slowly.*

17. Letting  $dx/dt$  (“*D-X-D-T*”) equal  $P$  and  $dy/dt$  (“*D-Y-D-T*”) equal  $Q$ , there are no orbits with this property if  $dP/dx$  (“*D-P-D-X*”) plus  $dQ/dy$  (“*D-Q-D-Y*”) has constant sign within a simply connected domain. A continuous, real-valued function that has a point  $p$  with this property will have another point  $q$  with this property, for any  $q$  above  $p$  in the Sarkovskii ordering. If the omega-limit set of the positive orbit contains no equilibrium point, then that omega-limit set must possess this property by the Poincaré-Bendixson theorem. A fixed point of the Poincaré map correspond to an orbit with this property. (\*) Action-angle coordinates are used to study systems with this property that cannot be solved analytically. An isolated orbit with this property is a limit cycle. Systems experience a cascade in which the quantity associated with this property doubles before becoming chaotic. Fourier series are used to analyze functions with this property, for which  $f$ -of- $t$  equals  $f$ -of- $t$ -plus- $\tau$  for some  $\tau$ . For 10 points, name this property of a function that repeats itself at regular intervals.

ANSWER: periodic [prompt on closed] (The first clue is Bendixson’s criterion)  
<JS, Physics>

18. It doesn’t have to do with education, but a policy of this type that influenced Jose Vasconcelos was developed in the book *Los Grandes Problemas Nacionales* by Andres Molina Enriquez. Along with devaluing the peso, the administration of Luis Echeverría (“*etch-ay-ver-REE-ah*”) pursued a massive policy of this type that provided easy access to credit from the Banrural (“*bahn-roo-RAHL*”) to its beneficiaries. One of these policies known as the *reparto* drew upon its country’s (\*) Article 27 to create units called *ejidos* (“*ay-HEE-doz*”). Article 27 was gutted in 1992 by the administration of Carlos Salinas to enact one of these policies, sparking a revolt in Chiapas by the Zapatistas. Under the government of Lazaro Cardenas, one policy of this type benefited

*campesinos* (“kahm-pay-SEE-no’s”) and led to the collectivization of *haciendas* (“ah-s’YEN-dah’s”). For 10 points, along with the nationalization of oil, Cardenas enacted what kind of policy, which involves the redistribution of an arable resource?

ANSWER: **land reform** [or **agrarian reform**; prompt on collectivization, redistribution, or privatization with “of what resource?”]

<AK, Other History>

19. **This city displays arches of lights donated by Italy during an annual memorial festival called the Luminarie. The outskirts of this city are home to the abandoned Maya Hotel, named after a mountain that provides a so-called “ten million-dollar” night view of this city. A natural event commonly named for this non-English speaking city is often linked to the collapse of the London-based Barings Bank. In 1975, the U.S. military largely abandoned this city after it passed an ordinance banning ships carrying (\*) nuclear weapons from entering its harbor. The Takatori Catholic Church in this city was temporarily replaced by a “Paper Dome” designed by Shigeru Ban. The world’s longest-spanning suspension bridge, the Akashi Kaikyo (“KYE-k’yo”) Bridge, links Awaji Island to this city. This city was Japan’s busiest port until it was struck by the Great Hanshin earthquake in 1995. For 10 points, name this city immediately west of Osaka that lends its name to an expensive type of Wagyu (“WAH-g’yoo”) beef.**

ANSWER: **Kobe**, Japan

<KS, Geography>

20. **A character in this novel reassuringly explains that “fish live on water, not on air” after sealing off a fishbowl to deter a starving cat. This novel ascribes a “majestic” sort of “bad taste” to its primary setting, in contrast to England’s “nervous vulgarity” and Germany’s “blinded vulgarity.” A character in this novel derides her companion for “failing honorably” during a conversation at the Church of Saint Deodata. A woman in this novel is likened to Emma Bovary as she attempts to follow the plot of (\*) *Lucia di Lammermoor*, whose performance is repeatedly interrupted by the rowdy audience. During a storm in this novel, Harriet admits that she stole an eight-month-old baby who dies after a horse-drawn carriage violently flips over. This novel was originally titled *Monteriano* after the Italian town where Gino Carella weds the lovestruck Lilia Herriton. For 10 points, an Alexander Pope quote about “fools” that “rush in” provided the title of what novel by E. M. Forster?**

ANSWER: ***Where Angels Fear to Tread***

<INB, Long Fiction>

## Bonuses

1. A 1792 portrait of this person glancing upwards depicts her in the likeness of the Cumaean (“coo-MAY-en”) Sybil. For 10 points each:

[10] Identify this subject of another 1792 portrait, in which she stands grinning in front of an erupting Vesuvius while lifting a tambourine over her head.

ANSWER: Emma, Lady **Hamilton** [or Amy **Lyon**]

[10] Both of those portraits of Emma Hamilton were completed by this artist. She painted *Peace Bringing Back Abundance* after Louis XVI (“the-sixteenth”) pressured the French Academy to admit her on behalf of his wife Marie Antoinette.

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

[10] During her exile, Vigée Le Brun painted a portrait of the wife of a future holder of this title leaning on a red pillow. Étienne Falconet’s (“et-YEN fal-co-NAY’s”) *The Bronze Horseman* depicts a mounted holder of this title.

ANSWER: **Tsar** of All Russia

<INB, Painting and Sculpture>

2. Although his name does not appear on the Turin King List, most scholars dispute Manetho’s claim that this pharaoh ruled for 66 years. For 10 points each:

[10] Name this Old Kingdom pharaoh. A causeway links the Great Sphinx constructed by this man to his pyramid, which he literally named after his own greatness.

ANSWER: **Khafre** [or **Khafra**; or **Chephren**]

[10] Khafre’s pyramid is the second largest pyramid at this Egyptian site, which is home to a Great Pyramid built for Khufu that’s actually slightly lopsided.

ANSWER: **Giza**

[10] This Egyptologist currently directs the Giza Plateau Mapping Project, which is creating a detailed 3D topography of the entire complex. With Zahi Hawass, this man studied the worker’s villages of the pyramid builders and argued they weren’t slaves.

ANSWER: Mark **Lehner**

<AK, European History (Commonwealth, Ancient, Historiography)>

3. This work states that Egyptian art is pure symbolic art but falls short of the “ideal beauty” of the works of Praxiteles or Phidias. For 10 points each:

[10] Name this work that outlines the five major arts in ascending order of “inwardness,” with poetry being the “most perfect art” capable of expressing human emotion.

ANSWER: **Lectures on Aesthetics** [or **Vorlesungen über die Ästhetik**; accept any answer indicating it’s a “**Hegel** lecture on **aesthetics**”]

[10] According to Hegel, this art is the least inward and most symbolic of the arts. A manifesto by Le Corbusier outlines the “five points” of this art form.

ANSWER: **architecture**

[10] The triadic structure of the *Lectures on Aesthetics* mirrors that of this Hegel work that divides its title concept into the doctrines of being, essence, and notion.

ANSWER: **Science of Logic** [or **Wissenschaft der Logik**]

<JM, Philosophy>

4. In 2001, Zouni et al. studied the three-dimensional structure of this complex while it was fully active and found that D1, D2, CP43 (“C-P-forty-three”) and CP47 (“C-P-forty-seven”) have rotational symmetry around the pseudo-C2 axis. For 10 points each

[10] Name this complex whose relationship with a similar complex in *Rhodospseudomonas* (“rhodo-pseudo-monas”) *viridis* was studied by Deisenhofer, Michel, and Huber.

ANSWER: **photosystem II** [or **PSII**; accept **water-plastoquinone oxidoreductase**]

[10] Four manganese atoms and one calcium atom make up the core of this component of photosystem II that generates a namesake gas.

ANSWER: **oxygen-evolving complex** [or **OEC**; accept but do **NOT** reveal **water-splitting complex**]

[10] The OEC oxidizes this compound. In the overall balanced equation for photosynthesis, six molecules of carbon dioxide combine with six molecules of this compound to give glucose and six molecules of oxygen.

ANSWER: **water** [or **H<sub>2</sub>O**; accept **dihydrogen monoxide**]

<JS, Biology>

5. In his Nobel lecture, this writer relayed the “harsh national experience” of his country with the following proverb: “ONE WORD OF TRUTH SHALL OUTWEIGH THE WHOLE WORLD.” For 10 points each:

[10] Identify this Russian author whose essay *Two Hundred Years Together* was panned as anti-Semitic. He drew on his experience working in a “Special Camp” in Kazakhstan to write *One Day in the Life of Ivan Denisovich*.

ANSWER: Aleksandr **Solzhenitsyn** [or Aleksandr Isayevich **Solzhenitsyn**]

[10] Solzhenitsyn (“sol-zhuh-NEET-sin”) faced renewed accusations of anti-Semitism when H. T. Willetts’ translation of this novel came out in 1984. This novel, which follows Vorotyntsev, was described as “swollen and misshapen” by Irving Howe.

ANSWER: **August 1914** [or **Aegzycm 1914**]

[10] Though Irving Howe derided *August 1914* as the “self-immolation of a once major writer,” he looked favorably upon Solzhenitsyn’s *Cancer Ward*, which follows this character’s admission to a hospital in Kazakhstan.

ANSWER: **Oleg Kostoglotov** [accept either name]

<INB, Long Fiction>

6. Sample preparation using this compound creates a mixture with about between 0.1 and 1 percent of the sample, and can often display a hydroxyl peak due to this compound’s hygroscopic properties. For 10 points each:

[10] Name this compound used for sample preparation for one technique. That technique can either use discs of this compound to sandwich a Nujol suspension, or a disc-shaped pellet of this substance created in a die press.

ANSWER: **potassium bromide** [or **KBr**]

[10] Attenuated total reflection can obviate the need for a potassium bromide matrix or Nujol suspension in this technique. The “fingerprint region” of this vibrational spectroscopy technique is between 500 and 1500 inverse centimeters.

ANSWER: **IR** spectroscopy [or **IR** spec; or **infrared** spectroscopy; or **FTIR** spectroscopy]

[10] Interpreting the results of IR spec can be made more difficult by the presence of overtones. For example, the first overtone for one of these groups may appear as a small peak for a hydroxyl group or a primary amine.

ANSWER: **carbonyl** [or **CO**]

<AK, Chemistry>

7. Answer the following about the two authors who won the Nobel Prize in Literature just last month. For 10 points each:

[10] This Austrian novelist and winner of the 2019 prize collaborated with director Wim Wenders to turn his novels *The Goalkeeper’s Anxiety at the Penalty Kick* and *Wings of Desire* into movies.

ANSWER: Peter **Handke**

[10] The Polish winner of the 2018 award, Olga Tokarczuk (“toh-KAR-chook”), borrowed the title of her novel *Drive Your Plow Over the Bones of the Dead* from the “Proverbs of Hell” of this poet’s *The Marriage of Heaven and Hell*.

ANSWER: William **Blake**

[10] A vignette from Tokarczuk’s *Flights* about the Muslim woman Jasmine instructs the “citizens of the world” to perform this action. Boris Pasternak’s “Black Spring” orders the reader to perform this action and “weep.”



ANSWER: **pick up your pen**(s) [accept “Citizens of the world, **pick up your pens!**” or “Black Spring! **Pick up your pen**, and weeping”  
<INB, Miscellaneous Lit>

8. This man gained the epithet “Old Gimlet Eye” while leading marines to the aid of Manuel Bonilla’s pro-U.S. Honduran regime, and he also won the Battle of Masaya for American interests in Nicaragua. For 10 points each:  
[10] Name this top U.S. commander in the Banana Wars, who later denounced such endeavors in *War Is a Racket*. This commander denounced a cabal that he claimed planned to replace FDR with him in the “Business Plot.”

ANSWER: Smedley **Butler** [or Smedley Darlington **Butler**]

[10] Smedley Butler was particularly disillusioned by his time overseeing the 1915 to 1934 American occupation of this country. The occupation enforced racial segregation in this country and cracked down on its *Vodou* traditions.

ANSWER: **Haiti** [or République d’**Haïti**; or Repiblik **Ayiti**]

[10] Butler defeated the *caco* rebels providing the occupation’s *casus belli* by capturing this mountain fort from a *caco* force more than twice the size of Butler’s. Its capture followed Butler’s destruction of Fort Dipitie.

ANSWER: Fort **Rivière**

<JG, US History>

9. This architectural movement was properly defined by a 1988 exhibition at the MoMA organized by Mark Wigley and Philip Johnson and included the work of Bernard Tschumi (“CHEE-mee”). For 10 points each:

[10] Name this architectural movement that includes Günter Behnisch’s (“BAY-nish’s”) design for the Hysolar Institute and Peter Eisenman’s Wexner Center, which includes several angled and fragmented forms and an exposed white metal grid.

ANSWER: **deconstructivism** [accept word forms]

[10] The fragmented and undulating metal exteriors of many buildings designed by this American architect incorporate deconstructivism, such as his designs for the Walt Disney Concert Hall and Guggenheim Bilbao.

ANSWER: Frank **Gehry** [or Frank Owen **Gehry**]

[10] This experimental firm’s projects in Vienna include the Falkestrasse (“FAL-kuh-sh’TRAH-suh”), a Deconstructionist extension to a traditional Viennese office space, and the conversion of four enormous gas storage tanks into apartment buildings.

ANSWER: **Coop Himmelb(D)au** [or **Coop Himmelbau**]

<AK, Architecture>

10. After he feuded with Olaf Tryggvason (“TRIG-vuh-son”), Gunnar Helming fled to Sweden, where he discovered a statue of this deity that was “married” to a local priestess. For 10 points each:

[10] Identify this fertility deity commonly honored with phallic statuettes, such as the one described by Adam of Bremen at the Temple of Uppsala. In the *Prose Edda*, this Vanir dies at the hands of Surtr during Ragnarok.

ANSWER: **Freyr** [do **NOT** accept or prompt on “Freya”]

[10] In the *Ögmunðr dyttir*, Gunnar performs this action, then impersonates Freyr and impregnates his priestess. In *Njáls* (“n’YALZ”) *saga*, Thor destroyed the ship of Thangbrandr, a man who encouraged others to perform this action.

ANSWER: **converting to Christianity**

[10] According to the *Víga-Glúms saga*, Glum’s decision to forsake Freyr causes one of these events in which Freyr ignores Glum’s dead kinsmen. Odin, in the guise of Vegtam, asks a *völva* about some of these episodes.

ANSWER: **dreams** [or *Baldrs* **draumar**; accept “Baldr’s **dreams**”]

<INB, Mythology>

11. Beijing was the site of the first international forum for this initiative, which has been seen by critics as neocolonialism through debt-trap diplomacy. For 10 points each:

[10] Name this massive initiative undertaken by the Chinese government consisting of hundreds of construction projects to develop trade infrastructure in other countries through the creation of several “economic corridors.”

ANSWER: **Belt and Road** Initiative [or **One Belt One Road**]

[10] One of the largest construction initiatives undertaken by the Chinese government in Africa was a nearly three-billion-dollar railway connecting Djibouti to this capital city of Ethiopia. It began operation in January of 2018.

ANSWER: **Addis Ababa**

[10] Recently, Chinese and Omani investors have been given an ultimatum in their negotiations to build a ten-billion-dollar special economic zone in this small East African fishing port, which if built would dwarf nearby Mombasa.

ANSWER: **Bagamoyo**, Tanzania

<AK, Current Events>

12. This anthropologist noted that among the Iroquois, children of a parent’s same-sex siblings referred to each other with sibling kinship terms, creating the delineation between parallel cousins and cross-cousins. For 10 points each:

[10] Name this anthropologist who also studied the Crow and the Omaha to create his six major kinship systems, laid out in his book *Systems of Consanguinity and Affinity of the Human Family*.

ANSWER: Lewis H. **Morgan** [or Lewis Henry **Morgan**]

[10] This anthropologist studied the Navajo with his Value Orientations theory, analyzing their attitudes toward five aspects of human life like “activity” and the “man-nature” relationship in his book *Beyond the Rainbow*.

ANSWER: Clyde **Kluckhohn** (“CLOOK-hone”)

[10] This anthropologist worked with Kluckhohn on the text *Culture* and created the Penutian language grouping with Roland Dixon. He is better known for detailing the life of Ishi, the last member of the Yahi tribe of California.

ANSWER: A. L. **Kroeber** [or Alfred Louis **Kroeber**]

<JM, Anthropology>

13. This scientist names a simple quantum error correction code that combines a three-qubit phase flip code and three-qubit bit flip code. For 10 points each:

[10] Name this scientist. This scientist also names an algorithm that accomplishes period finding through repeated squaring and an inverse quantum Fourier transform.

ANSWER: Peter **Shor** [or Peter Williston **Shor**]

[10] Shor also co-names a class of these codes called CSS codes. Daniel Gottesman introduced this formalism in quantum error correction with a group-theoretic name, which can construct quantum codes from classical linear codes over GF(4).

ANSWER: **stabilizer** formalism [or **stabilizer** codes]

[10] The operation of any single qubit quantum gate or quantum error can be modeled by a linear combination of this man’s three spin matrices. This physicist also formulated an exclusion principle for fermions.

ANSWER: Wolfgang **Pauli** [or Wolfgang Ernst **Pauli**]

<AK, Physics>

14. This piano piece begins with a theme in D-flat major and 12/16 (“twelve-sixteen”) time, played by both hands on a single staff. For 10 points each:

[10] Name this *ossia*-filled piece whose Andantino espressivo middle section is based on a traditional melody of the Crimean Tatars.

ANSWER: **Islamey**

[10] This Russian composer of *Islamey* brought together a mighty handful of nationalist contemporaries into a group called the Five.

ANSWER: Mily **Balakirev** [or Mily Alexeyevich **Balakirev**]

[10] Balakirev wrote a solo piano arrangement of this Russian composer’s “The Lark,” the tenth piece in his song cycle *A Farewell to St. Petersburg*.

ANSWER: Mikhail **Glinka** [or Mikhail Ivanovich **Glinka**]  
<KL, Classical Music and Opera>

15. A string of temples in Tamil Nadu that are dedicated to these objects were built near the spot where Shiva lifted a curse of leprosy after a sage prayed to the wrong gods. For 10 points each:

[10] Name these objects. In Hindu temples, deities representing these objects are often arranged in a 3 by 3 grid, with each one facing in their specific direction and wearing a colored robe.

ANSWER: the nine **planets** [or **navagraha**]

[10] Traditionally, black granite is used to make these objects when depicting the *navagraha* (“nuh-vuh-GRAH-huh”). This is the Sanskrit term for the idols used in Hindu pujas.

ANSWER: **murti**

[10] At the center of the three-by-three grid of the *navagraha* is Surya, the Hindu god of this celestial body, who is often shown riding a chariot with seven horses.

ANSWER: the **Sun**

<AK, Religion>

16. Constructing a model of ZFC requires assuming the existence of cardinals with this property. For 10 points each:

[10] Name this property. A cardinal  $\kappa$  satisfies the strong form of this property if, for any  $\kappa$ -bar less than  $\kappa$ , “two-to-the-kappa-bar” is also less than  $\kappa$ .

ANSWER: **inaccessible**

[10] Cardinals are a specific type of these numbers. The smallest infinite number of this type is denoted  $\omega$  and the arithmetic of these numbers has counterintuitive results like “one-plus- $\omega$  equals  $\omega$ ,” but “ $\omega$ -plus-1 does not equal  $\omega$ .”

ANSWER: **ordinals**

[10] Cardinals are studied in the branch of mathematics concerned with these objects. These objects are collections of elements, and examples include the real numbers and the rational numbers.

ANSWER: **sets** [accept **set** theory]

<SK, Math>

17. In “Health Advice,” this poet suggested that “If you want to stay alive / sit and read a book.” For 10 points each:

[10] Identify this poet of the 2018 collection *Anecdotal Evidence*. This poet lamented “The leaves have fallen / and the snow has fallen and / soon my hair also” in the second of three haikus written as the fictitious Jason Strugnell.

ANSWER: Wendy **Cope**

[10] Cope expressed distaste for this position, citing Kipling’s view that “a poet has no business becoming an employee of the state.” Carol Ann Duffy held it until 2019, when she was succeeded by Simon Armitage.

ANSWER: **Poet Laureate** of the United Kingdom [do **NOT** accept “Poet Laureate of the United States”]

[10] In response to 9/11, Armitage pictured a “half-excoriated Apple Mac” that “still quotes the Dow Jones” in a poem with this title. An earlier poem with this title attributes the sinking of the Titanic to the “Immanent Will that stirs and urges everything.”

ANSWER: “The **Convergence of the Twain**” (The second poem is by Thomas Hardy.)

<INB, Non-epic Poetry>

18. An inscription written on the Seven-Branched Sword describes how it was made by a crown prince of this kingdom. For 10 points each:

[10] Name this kingdom whose last ruler, Uija (“ooh-EEH-jah”), was the progenitor of the Kudara no Konikishi clan. Yamato-era Japan lost 800 ships attempting to save this kingdom, whose incorporation into a larger kingdom was followed shortly by a similar conquest of Goguryeo (“GO-goo-r’yuh”).

ANSWER: **Baekje** (“BECK-jay”)

[10] A distinctive “smile” appears in Baekje artworks inspired by this religion, which Baekje emissaries brought to Japan. During the Kamakura era, Nōnin opened Japan’s first school of this religion’s Zen variety.

ANSWER: **Buddhism**

[10] The inscription on this artifact from the Goguryeo kingdom was studied by Japanese scholars, who often claimed that its passage recording a “sinmyo (“SHIN-m’yo”) year” was evidence that Japan once ruled Baekje and Silla (“SIL-luh” or “SHIL-luh”).

ANSWER: **Gwanggaeto Stele** [accept any answers indicating a memorial to **Gwanggaeto**]

<KS, Other History>

19. Because her father believes she is a product of infidelity, this character is abandoned in Bohemia by Antigonus, who is immediately killed offstage by a bear. For 10 points each:

[10] Name this daughter of King Leontes who marries the Bohemian Prince Florizel in *The Winter’s Tale*.

ANSWER: **Perdita**

[10] Perdita is a princess of this Mediterranean island. According to a popular theory, Shakespeare was an Italian named Michelangelo Florio Crollanza born on this island’s city of Messina, where *Much Ado About Nothing* is set.

ANSWER: **Sicily** [or **Sicilia**]

[10] After her success in the role of Perdita, this actress was selected to be George IV’s (“the-fourth’s”) mistress. This author shook the nickname “Perdita” and became known as “The English Sappho” with the success of works such as *Sappho and Phaon*, a sonnet sequence inspired by her relationship with Banastre Tarleton.

ANSWER: Mary **Robinson**

<NC, Drama>

20. The policies of governor-general Andrei Korf led several inhabitants of one of these places to drink poison, in what became known as the Kara Tragedy. For 10 points each:

[10] Name these places that were the usual destination for *sybiraks* (“suh-BEE-raks”) captured after the November and January Uprisings. Explorer and journalist George Kennan toured the U.S. dressed like inhabitants of these places to promote a two-volume book about a “system” of them.

ANSWER: **katorgas** [prompt on Siberian **labor camps** or **exile camps** by asking “What specific term were they called?”; do **NOT** accept “gulags”]

[10] Under this ruler, many participants in Poland’s January Uprising and members of Narodnaya Volya were sent to Siberian katorgas. Narodnaya Volya members later assassinated this tsar during a military procession in 1881.

ANSWER: **Alexander II** of Russia [prompt on **Alexander**]

[10] One of the largest projects built with labor from katorgas was a “cart road” named after this river. Through the Treaty of Nerchinsk, Russia ceded its territory north of this river to China.

ANSWER: **Amur** River [or **Heilongjiang**]

<KS, European History (Continental)>