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MICHIGAN A

authors

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## Tossups

1. Francis Irsch earned the Medal of Honor during the Civil War for leading an assault on one of these structures owned by Moses Mclean. It's not a house, but one of these structures was used by Patty Cannon to hold escaped slaves before she gave them back to their masters. Before his body was tossed into the Tallahatchie River, one of these structures was where Emmett Till was killed. Lizzie Borden was distressed after her father Andrew killed pigeons with a hatchet in one of these places. One of these structures owned by Richard H. Garrett was where John Wilkes Booth met his end. After World War II, many of them were replaced with more modern Quonset huts. A group of people including Silas Wright who left the Democratic National Convention during the election of 1848 were named for "burning" these structures. The Great Chicago Fire allegedly started in, for 10 points, what kind of structure used to house animals on a farm?

ANSWER: barns [accept Barnburners; prompt on "farm(s)"]

2. Sufferers of lung or breast cancer may have a paraneoplastic syndrome caused by the release of a hormone named for being related to this protein; that relative of this protein is also required for the differentiation of mammary glands. The body does not respond to this compound in a hereditary condition named for Albright that presents with identical symptoms to a "pseudopseudo" condition named for this compound. Defects in the receptor for this hormone result in Jansen's metaphyseal chondrodysplasia. The first 34 amino acids of this 84-residue protein are required for function and make up the osteoporosis drug teriparatide. This compound is released from chief cells and binds to osteoblasts, which indirectly activates osteoclasts. For 10 points, name this hormone that increases calcium levels by inducing bone resorption, which is released from a set of four glands found in the neck.

ANSWER: parathyroid hormone [or PTH; accept parathyroid hormone-related protein or PTHrP]

3. This academic movement was the subject of a 1987 summary by Jonathan Turley that was couched as a "hitchhiker's guide." Strong adherents of this movement completely rejected realism in formulating the "indeterminacy thesis," a position attacked as a "radical assault on truth" in Daniel Farber and Suzanna Sherry's book *Beyond All Reason*. This movement inspired the formation of a later and similarly named scholarly perspective by academics such as Mari Matsuda, Kimberlé Williams Crenshaw, and Derrick Bell. One of the founders of this scholarly movement argued that law school is intended to reproduce the structure of law firms in his monograph "Legal Education and the Reproduction of Hierarchy." Duncan Kennedy and Roberto Unger were founders of this movement that spawned a similarly named "race theory." For 10 points, what kind of "studies" in American law scholarship was inspired by a Frankfurt School "theory"?

ANSWER: critical legal studies [accept critical legal theory; prompt on "CLS" or "CLT"]

4. Responding to a work by this sculptor discussed in Mary Sheriff's *Moved by Love*, a critic wrote: "emulator of the gods, if they have animated the statue you have renewed the miracle by animating the sculptor." That sculpture by this artist shows a cupid kissing the hand of a woman standing on a pedestal as her creator kneels in front of her. This sculptor created his *Bather* and small figurines of children based on François Boucher paintings while working at the Sèvres Manufactory. This artist of *Pygmalion and Galatea* contributed his "Reflections on Sculpture" to the *Encyclopédie* of his friend Denis Diderot. This student of Jean-Baptiste Lemoyne had his own daughter-in-law, Marie-Anne Collot, model the face of the ruler depicted in his best-known work. That work by this sculptor sits atop the heaviest stone ever pulled by humans, the "Thunder Stone," and was financed by Catherine the Great. For 10 points, what Rococo sculptor created an equestrian statue of Peter the Great known as the *Bronze Horseman*?

ANSWER: Étienne Maurice Falconet ("FALCON"-ay)

5. In a play in this language, the female lead and a libertine repeatedly exclaim "look, look!" as they exchange poems about a rainstorm while standing under an umbrella held by a maid. Act II of a play in this language opens with the words "Damn! Damn! Damn!" spoken by a clown, who then complains about having to follow the protagonist. The proper dimensions of square, rectangular, and triangular playhouses are laid out in a dramaturgical treatise in this language, which holds that a play should evoke one of eight dominant "flavors" such as the "pathetic" or the "heroic." In a play in this language, a courtesan fulfills a boy's wish for a golden version of his only plaything by filling it with jewels. In another play in this language used to write *The Little Clay Cart*, a woman is cursed by an old sage to whom she forgets to offer food, but is saved when a ring is found in the belly of a carp. For 10 points, name this language used by Shudraka and the author of *The Recognition of Shakuntala*, Kalidasa.

ANSWER: Sanskrit [or sam.skr̥ta]

6. After selling a former advisor's estate, one ruler of this city forced Arete, the wife of that former advisor, to marry Timocrates. Another ruler of this city apparently drank himself to death after hearing that *The Ransom of Hector* had won the Lanaean festival. Leptines II and Polyperchon stabbed a former ruler of this city after conquering Rhegium. A duplicitous agreement between a ruler of this city and Himlico allowed the former to slip through Himlico's grasp. That ruler of this city patronized the historian Philistus and conspired to expel his uncle Dion, who then formed an army at Zacynthus to overthrow him. This city, which was once led by Agathocles, was the destination of an action meant to be led by Alcibiades before he was called to stand trial. That action against this city, in which the Spartan general Gylippus defeated an Athenian armada, was the Sicilian Expedition. For 10 points, name this ancient city of Sicily, the home of Archimedes.

ANSWER: Syracuse [or Syrakousai; or Siracusa]

7. A paper that opens by wondering whether recent work on this position could be any more embarrassing if it "had been secretly penned by conservatives" criticizes Philippe Van Parijs's and Richard Arneson's versions of it. Nagel argued that this doctrine should be based on urgency with the example of a family who must choose whether to move for the benefit of a handicapped child or a healthy one, an example critiqued in Harry Frankfurt paper that proposes the "doctrine of sufficiency" as an alternative to this position. Elizabeth Anderson attacked versions of this position that focusing on correcting for misfortune, dubbing that the "luck" type of this position. The title of Amartya Sen's Tanner Lectures asks what metric this position should focus on, and Dworkin discussed types of this position oriented towards resources and welfare. For 10 points, name this broad position that holds that people should get the same or be treated the same way.

ANSWER: egalitarianism [accept equality or word forms thereof]

8. One model of these systems was developed by Cholette and Cloutier, and considers "bypassing" and "stagnancy." Two related quantities in these systems are related by a convolution integral with a function symbolized  $E(t)$  ("E of t"). In the ideal case, the first moment of  $E(t)$  ("E of t") is equal to a ratio of volume and flow rate if there are no dead zones in these systems. Danckwerts boundary conditions may be used when modeling these systems. Levenspiel plots and the Damköhler number can be used to analyze these systems. Pulse-input experiments of these systems may be used to measure their residence time distribution. Segregation in these systems can range from 0 to 1 based on the amount of mixing between globules of different ages. Types of these systems include batch, continuous stirred-tank, and plug flow, and they can be used for industrial scale production of ammonia or acetic acid. For 10 points, name these vessels in which bond-breaking and -forming chemical processes take place.

ANSWER: chemical reactors [accept batch reactors or continuous stirred-tank reactors or plug-flow reactors]

9. This man's love of James Macpherson's *Ossian* poems prompted him to commission the painting *Ossian Conjures up the Ghosts of his Race on the Banks of the Lora*, as well as a painting in which Ossian welcomes "heroes . . . who died for their homeland in the war of liberty" into paradise. This man's dislike of neoclassical themes dominated by mythology and allegory prompted him to order a painter to remove the figure of Victory hovering over the soldiers depicted in the painting *Distribution of the Eagle Standards*. Because this man had poor eyesight, he chose paintings for his own collection based on the judgment of Baron Denon (deh-NOHN). Denon was appointed to head a museum that this man renamed after himself after this man ordered a campaign that captured many artifacts from Egypt. For 10 points, name this former namesake of the Louvre whom Jacques-Louis David painted at the Saint-Bernard Pass "crossing the Alps."

ANSWER: Napoléon Bonaparte [or Napoléon I; or Napoleone Buonaparte; accept Napoleon Crossing the Alps or Napoleon at the Saint-Bernard Pass; prompt on "Bonaparte" or "Buonaparte"]

10. After meeting this poet, a boy named Lucas who spontaneously recites his works deliberately maims himself with the factory machine that killed his brother. A detective named Catherine tries to stop a series of suicide bombings by children who recite this poet in the story "The Children's Crusade." This poet's work forms a motif in the stories that form Michael Cunningham's novel *Specimen Days*. A poem by this man is set at a time when "the lilac-scent was in the air and Fifth-month grass was growing," and describes "two feather'd guests from Alabama." This poet wrote of people singing "what belongs to him or her and to none else, / the day what belongs to the day" in a poem about the "varied carols" he heard in the title place. The phrase "the sea whisper'd me" ends a poem by this man about "the low and delicious word death" and "the mocking-bird's throat, the musical shuttle." For 10 points, name this poet of "I Hear America Singing" and "Out of the Cradle Endlessly Rocking," which appear in his book *Leaves of Grass*.

ANSWER: Walt Whitman

11. After the Birmingham church bombing, a mentor of this man “cured” him of racism by saying that “it doesn’t have to do with race; John Brown was a righteous man who put his life on the line for our welfare.” A memoir by this man recounts his years of study and ultimate falling out with Hamaas Abdul-Khaalis, whose family was killed at a house that this man bought for use as a gun range. In that memoir, co-written with his childhood friend Peter Knobler, this man also described how, after his house burned down and his thousands of jazz records melted, fans sent him new records. In 2016, this man and collaborator Anna Waterhouse published a detective novel titled *Mycroft Holmes*. The 1983 book *Giant Steps* is a memoir by this man, whose decision to boycott the 1968 Olympics is discussed in his 2017 book *Coach Wooden and Me*. For 10 points, name this NBA player who, before converting to Islam, was known as Lew Alcindor.

ANSWER: Kareem Abdul-Jabbar [accept Lew Alcindor or Ferdinand Lewis Alcindor before “Lew”]

12. According to legend, a woman sent off on horseback to marry a ruler of these people gained her name because a flock of geese forgot to flap their wings and dropped to the ground on hearing her sad song. An empire of these people was founded by a man who ordered any of his 10,000 soldiers to be beheaded if they failed to fire upon spotting his arrowhead, which he tested by killing his own wife and then his father. One leader of these people, Huhanye (hoo-hahn-yuh), engaged in civil war with his brother, who was defeated at the Battle of Zhizhi. These people fell in battle after Chen Ping bribed the wife of their founder, the son of Touman, who had united these people against the armies of Meng Tian. That founder, Modu, was named the first Chanyu of these people, who often participated in heqin, or marriage alliances, with the Han dynasty. For 10 points, name these nomadic Asian people who threatened China from the Mongolian steppe, leading to construction of the Great Wall.

ANSWER: Xiongnu (shung-noo) [or Hsiung-nu]

13. This process was studied using the “King and Wells method” by Cambridge researchers who developed a single-crystal calorimeter to measure the heat released by it. The Clausius-Clapeyron equation can be used to derive the isosteric heat of this process, symbolized  $q_s$  (“q sub s t”), and this process’s inverse can be modeled using the Polanyi-Wigner equation. An alternative to cryogenic distillation is known as the “pressure swing” type of this process. A simple model for this process was extended to multiple layers of material by Brunauer, Emmett, and Teller. Graphs used to study this process can be classified into five or six types, each named after a Roman numeral, and plot the ratio of the total amounts of mass of the two phases against pressure. This process is modeled by isotherms named after Freundlich and Langmuir, and it comes in “associative” and “dissociative,” as well as “physical” and “chemical,” types. For 10 points, name this process in which particles adhere to a surface.

ANSWER: adsorption [accept chemisorption or chemical adsorption or physisorption or physical adsorption; prompt on “sorption”; do not accept or prompt on “absorption”]

14. A linguist with this surname identified “don’t impose,” “give options,” and “make your receiver feel good” as the three maxims of the “politeness principle.” A second book by a linguist with this surname includes “hypercorrect grammar,” “superpolite forms,” and “hedges of various kinds” as among the nine modes of “women’s language.” *The Language War* and *Language and Woman’s Place* are books by a linguist with this surname. With Mark Johnson, a linguist with this surname argued that statements such as “argument is war” and “he shot down all my arguments” are meaningful because mappings between conceptual domains correspond to neural connections. That cognitive linguist with this surname wrote a 1987 book titled for the three broad categories in the feminine noun class of the Dyrbal language. For 10 points, give this married surname of Berkeley linguist Robin Tolmarch, whose ex-husband George wrote *Metaphors We Live By* and *Women, Fire, and Dangerous Things*.

ANSWER: Lakoff (LAY-koff) [accept Robin Tolmarch Lakoff or George P. Lakoff; accept Tolmach before “argument”; prompt on “Tolmach” after “argument”]

15. This work imagines the author’s country “rousing herself like a strong man after sleep” in a passage that also compares that country to “an Eagle muing her mighty youth.” This work compares what “a wicked race of deceivers” did to the “lovely form” of a certain allegorical figure while the Apostles were asleep to Plutarch’s account of “the Ægyptian Typhon” tearing up and scattering Osiris. This work claims that “he that can apprehend and consider vice with all her baits and seeming pleasures, and yet abstain . . . is the true wayfaring Christian,” and later argues “let [Truth] and Falsehood grapple; who ever knew Truth put to the worse, in a free and open encounter?” This treatise claims that “he who destroys a good book, kills reason itself” and takes its title from an Isocrates oration named for a hill in Athens. For 10 points, name this 1644 tract defending the “Liberty of Unlicenc’d Printing” by John Milton.

ANSWER: Areopagitica: *A Speech of Mr. John Milton for the Liberty of Unlicenc’d Printing, to the Parliament of England*

16. A mass by this composer features a motif in the bass voice of a falling fifth, from E to A; the fact that both of those notes would have been solmized on the same syllable inspired that piece's sometime title, *Missa "Mi-Mi"* (mee-mee). The death of Gilles Binchois (zheel BAN-shwa) inspired this composer's four-voice motet *Mort, tu es navré*, and he also wrote a mass based on Binchois's chanson *De plus en plus*. Johannes Lupi set to music a text written after this composer's death by Erasmus. Another lament written after this composer's death urges several composers to mourn this "good father," giving rise to the theory that this composer taught the man who set that Jean Molinet poem to music, Josquin des Prez. A work by this composer may have been composed for the death of one of his patrons, Charles VII of France. For 10 points, name this Franco-Flemish composer of the oldest surviving polyphonic requiem.

ANSWER: Johannes Ockeghem [or Jean (de) Ockeghem]

17. According to Pausanias, this object was brought to Attica where, in the confusion of night, Demophon took it by force from the visiting Argives. Because Demophon's horses accidentally trampled a man to death on his way home, the Athenian court for involuntary homicide was named for this object. While carrying this thing, one man escaped death after noticing, in the moonlight, the shadow of his companion as the latter raised his sword to strike him. This artifact was brought by the Pleiad Electra to its traditional home, where her son Dardanus received it. Its namesake, a daughter of Triton, was accidentally killed during a playful wrestling match, leading her friend to create this object in her honor. After having himself flogged, a man entered a city disguised as a beggar in order to find this thing. The *Little Iliad* relates how Odysseus and Diomedes stole this object after Helenus told them that a certain city could not fall so long as this statue was within its walls. For 10 points, name this wooden image of Athena that protected Troy.

ANSWER: Palladium [prompt on the "luck of Troy"]

18. During a battle in this war, one side allegedly looted a warehouse full of rum and fell over drunk during a failed invasion of Martinique, after which Thomas-Claude Renart defeated a ground force led by the Count of Styrum. During this war, Jurrien Aernouts (AR-noutz) turned the cannons of Fort Pentagoet (pen-tah-goot) on its own walls to demolish it, and the red cloak of Saint Hilaire was used as a target by the artillery of Raimondo Montecuccoli (mon-teh-koo-CHOH-lee) in the run-up to the Battle of Salzbach. One side in this war took advantage of its namesake Water Line, conceived of by Maurice of Nassau. This war included the deaths of the Vicomte de Turenne, and the De Witt brothers, at the hands of a lynch mob. At its conclusion, the territories of Franche-Comte and Maastricht were exchanged under the Treaty of Nijmegen (NYE-may-gen). One side suffered the *ramjaar*, or "disaster year," when this war began in 1672. For 10 points, name this war fought between armies led by King Louis XIV and Prince William of Orange.

ANSWER: Franco-Dutch War [or Guerre de Hollande; or Hollandse Oorlog; accept Third Anglo-Dutch War; prompt on "Anglo-Dutch War(s)"]

19. Uhm and Beloborodov developed a mechanical model to explain observations of these phenomena in terms of forward and reverse shocks. The achromatic breaks in the light curves of these phenomena provide evidence for strong collimation. These phenomena are divided into prompt emission and afterglow phases. The 1992 BATSE experiment resulted in a catalog of over 300 of these phenomena. The Neil Gehrels Swift Observatory is designed to detect these phenomena and was previously named for them. These events were first observed by the Vela satellites, which had originally been designed to detect terrestrial nuclear detonations. Unlike a similar class of events dubbed "soft repeaters," these events are believed to result from jets formed in massive supernovas, or "hypernovas." For 10 points, name these short astronomical events that are named for the extremely energetic photons that they release.

ANSWER: gamma-ray bursts [or GRBs; accept "hypernova" before mention; prompt on "collapsar" or "supernova"; prompt relativistic "jets" before mentioned]

20. A novel titled for one of these places opens by listing objects such as a toy water pistol and a comb that were found in the stomach of Roland the Walrus; that novel by the author of *The Ministry of Pain*, Dubravka Ugresic, is titled for one of these places "of Unconditional Surrender." While writing a novel about one of these places, the author created a real version of it that is depicted in a 2012 photobook whose image titles, such as "To Entertain a Small Hope That Might Allay My Heartache," are taken from the novel's chapter titles. In that novel titled for one of these places, the narrator steals china dogs off a TV set and records the dates on which he picks up 4,213 cigarette butts dropped by the owner of those dogs. After buying a counterfeit handbag from her, the protagonist of that novel, Kemal, falls in love with Füsün and creates one of these places dedicated to her. For 10 points, name this sort of place, one of which "of Innocence" titles an Orhan Pamuk novel.

ANSWER: museums [prompt on "collections" or other synonyms; accept *The Museum of Unconditional Surrender* or *The Museum of Innocence*]

**Bonuses**

1. Answer the following about Tarquin the Proud, for 10 points each.

[10] The beginning of the end for Tarquin's rule came when his son Sextus raped this woman, the wife of Lucius Tarquinius Collatinus, leading to her suicide.

ANSWER: **Lucretia** [or **Lucrece**]

[10] Under Tarquin, Lucius Junius Brutus held this office. These men commanded the king's namesake personal bodyguard. During the Roman Republic, their power was split between the "Master of Infantry" and the "Master of the Horse."

ANSWER: **Tribune**(s) of the **Celeres** [accept *Tribunus Celerum* or **Tribune**(s) of the **Knights**, prompt on "**Tribunes**"]

[10] Tarquin became king by overthrowing this man, who is credited with the creation of the Compitalia festivals. This man was the first Roman king to accede without election from the Senate.

ANSWER: **Servius Tullius** [prompt on "**Servius**" or "**Tullius**"]

2. Perhaps the most famous example of this phenomenon is Lifesavers Wint-O-Green candies glowing in the dark when chewed. For 10 points each:

[10] Name this effect in which a material produces light when crushed or rubbed.

ANSWER: **triboluminescence** [or **fractoluminescence**; prompt on "**mechanoluminescence**" or "**luminescence**"]

[10] Triboluminescence frequently occurs in crystals that are dissymmetric when pressure of this type is applied. This word more generally refers to the directional dependence of a material's properties.

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

[10] Symmetries of crystals can be described by these algebraic structures, which are sets of symmetry operations that leave the crystal structure invariant. There are 32 of these structures, which can be represented by Schoenflies or Hermann-Mauguin notation.

ANSWER: crystallographic **point groups** [prompt on "**groups**"; do not accept "space groups"]

3. The speaker of a poem from *Human Dark with Sugar* calls this thing a "kind of ancient / date-rape drug" because its functions are to "confuse me, ovulate me, / spoon-feed me longing." For 10 points each:

[10] Name this night-sky object that is told that the "sun is worth ten of you" in the aforementioned poem by Brenda Shaughnessy. In "Funeral Blues," W. H. Auden demands that we "pack up [this object] and dismantle the Sun."

ANSWER: **Moon** [or **Luna**]

[10] This English poet wrote that "our every corpuscle become an elf" in her poem "Moreover, the Moon." This close friend of Djuna Barnes wrote "Parturition," contributed to the Dada journal *The Blind Man*, and wrote a "Feminist Manifesto."

ANSWER: Mina **Loy** [or Mina Gertrude **Löwy**]

[10] This author drew on Philip Sidney's line "with how sad steps, O Moon, thou climb'st the skies!" for his poem "Sad Steps." This librarian at the University of Hull described a misery that "deepens like a coastal shelf" in a 1971 poem.

ANSWER: Philip **Larkin** [or Philip Arthur **Larkin**]

4. You are a ballet dancer rising up onto the tips of your toes. For 10 points each:

[10] Being on the tips of your toes is known by this French term.

ANSWER: *en* **pointe** [or *sur* **la pointe** or *sur les* **pointes**]

[10] The actual raising of your body from a plié is known by this other French term. In the French School, it is done with a smooth, continuous rise, while the Russian School uses a little spring.

ANSWER: **relevé** [do not accept or prompt on "**elevé**"]

[10] *Relevé* is done with a little spring in the ballet method named for this Italian man. After five years of running a private ballet school in London, he returned to Italy and became ballet master at La Scala.

ANSWER: Enrico **Cecchetti** [accept **Cecchetti** method]

5. The “Basic Laws” of this subject title a work whose Basic Law V (“five”) was shown to be subject to a set paradox in a letter Bertrand Russell wrote to its author while the second volume was at the printing presses. For 10 points each:

[10] Name this specific subject whose “foundations” title an 1884 treatise that introduced the context principle in its introduction and proved that the Peano axioms can be derived in second-order logic from Hume’s principle.

ANSWER: **arithmetic** [or **arithmetik**; accept *The Foundations of Arithmetic* or *Die Grundlagen der Arithmetik*; prompt on “mathematics”]

[10] *The Foundations of Arithmetic* and *The Basic Laws of Arithmetic* are key works of logicist philosophy of mathematics by this German thinker, who also wrote “On Sense and Reference.”

ANSWER: Gottlob **Frege** [or Friedrich Ludwig Gottlob **Frege**]

[10] Michael Dummett pinpointed paragraph 62 of Frege’s *Foundations of Arithmetic* as the start of this event, which he identified with the birth of analytic philosophy. This term was popularized by a 1967 Richard Rorty anthology of the same name.

ANSWER: **linguistic turn** [accept *The Linguistic Turn: Essays in Philosophical Method*]

6. After a character in this play is toasted with “*Vive la différence!*” to end one scene, the next scene opens with him saying “You see? They toast me. I’ve become patron saint of the socially inept.” For 10 points each:

[10] Name this play, in which the imprisoned diplomat Rene Gallimard claims to “have known, and been loved by . . . the Perfect Woman” and recalls the treason he committed while working in a French embassy during the 1960s.

ANSWER: ***M. Butterfly***

[10] In David Henry Hwang’s *M. Butterfly*, Gallimard’s lover, Song Liling, is revealed to a man who takes female roles in works of this form in Peking. Hwang has written librettos for works of this form by Philip Glass.

ANSWER: **operas**

[10] To pacify Gallimard about his insistence that they make love only in the dark, Song gives him one of these things supplied by Comrade Chin.

ANSWER: a **baby** [accept a **child** or a **son** or a **boy** or similar answers]

7. A neodymium-doped form of this substance serves as media in laser that emits 1064-nanometer radiation, which is often frequency-doubled to emit green light. For 10 points each:

[10] Name this synthetic garnet that must be doped to have any practical use. A cerium-doped variant serves as a phosphor used in cathode ray tubes and mercury vapor lamps.

ANSWER: **yttrium aluminum** garnet [or **YAG**; accept cerium or neodymium (doped) **yttrium aluminum** garnet or cerium or neodymium (doped) **YAG**]

[10] An Nd:YAG laser is used in this form of atomic emission spectroscopy which atomizes and excites samples using laser pulses.

ANSWER: **laser-induced breakdown** spectroscopy [or **LIBS**]

[10] Atomic emission spectroscopy is used for this more general task of determining the chemical composition of some substance. CHN analysis performs this task using combustion reactions.

ANSWER: **elemental analysis** [or **EA**]

8. A very large one of these items connects the two “married couple rocks” known as Meoto Iwa that represent Izanagi and Izanami. For 10 points each:

[10] Give this Japanese term for lengths of rope made of rice straw or hemp that are often festooned with a streamer known as a *shide* and are used to demarcate the boundaries of Shinto holy places.

ANSWER: ***shimenawa***

[10] The larger of the “married couple rocks” contains one of these holy gates that also mark the boundary between secular and sacred space in Shintoism.

ANSWER: ***torii***

[10] The “married couple rocks” are found on the coast near this shrine complex, which is torn down and rebuilt every 20 years and is dedicated to Amaterasu.

ANSWER: **Ise** Grand Shrine [or **Ise** Jingu; prompt on “**Naiku**” or “**Geku**” or “**Jingu**”]

9. This court case was the first to develop the idea of “constitutional avoidance,” which holds that federal courts should refuse to solve a case that could be solved on a non-constitutional basis. For 10 points each:

[10] Name this case that upheld the Tennessee Valley Authority’s creation of the Wilson Dam in the face of an injunction against it from Judge William Irwin Grubb.

ANSWER: Ashwander v *Tennessee Valley Authority*

[10] Naturally, the injunction was blasted by this Nebraska senator who was the prime sponsor of the TVA Act. He also co-sponsored a 1932 Anti-Injunction Bill with Fiorello La Guardia that outlawed yellow dog contracts.

ANSWER: George Norris [or George William Norris; accept Norris-La Guardia Act]

[10] This man was the co-director and first chairman of the Tennessee Valley Authority, and also the first chairman of the Atomic Energy Commission, in which role he co-authored a 1946 report on controlling atomic energy with Dean Acheson.

ANSWER: David Eli Lilienthal [or David Eli Lilienthal; accept Acheson-Lilienthal Report]

10. The legend of this object can be traced to Cicero’s *Tusculan Disputation*, which itself borrows from the *Histories* of Timaeus of Tauromenium. For 10 points each:

[10] Identify this sharp object named for a man in the court of Dionysius II of Syracuse. To teach the man about the burdens of power, Dionysius sat him in a golden couch over which this object hung precariously by a horse hair.

ANSWER: sword of Damocles

[10] Another man from Syracuse, Menecrates, was so confident of his skill in medicine that he referred to himself as this god. Because Salmoneus desired to be worshipped as this Greek deity, the god killed him with a thunderbolt.

ANSWER: Zeus

[10] The Greek equivalent of the “sword of Damocles” metaphor refers to the “rock of” this man, who some sources state was allowed to live forever with a boulder hanging over his head.

ANSWER: Tantalus

11. The second movement of this symphony is derived from an earlier concerto the composer wrote for two *lire organizzate* [lee-ray or-ga-ni-tza-tay]. For 10 points each:

[10] Name this symphony in which Haydn brought the cymbal, triangle, and bass drum from Turkish Janissary bands into the Western orchestra. It is nicknamed for its prominent trumpet fanfares.

ANSWER: Symphony No. 100 [or “Military”; or Haydn’s 100th Symphony]

[10] Like Johann Nepomuk Hummel, Haydn wrote a concerto for trumpet in this major key, which is shared by Haydn’s Opus 33, No. 2 string quartet called the “Joke.”

ANSWER: E-flat major

[10] The second movement of this Haydn symphony is a set of variations based on a theme introduced by solo oboe and cello in octaves. Like the “Oxford,” it is in G major and was written between the Paris and London symphonies.

ANSWER: Symphony No. 88 [accept *The Letter V Symphony*]

12. A novel of this movement is about the Englishwoman Clara, who regularly visits a prison in Canton to watch the torture of the inmates. For 10 points each:

[10] Name this movement of French literature exemplified by Octave Mirbeau’s *The Torture Garden*, which is often held to have begun with Joris-Karl Huysmans’s novel about the aesthete Jean des Esseintes (zhahn dayz eh-SAHNT), *À rebours* (ah reh-BOOR).

ANSWER: decadent movement [prompt on symbolist movement]

[10] One of Octave Mirbeau’s decadent novels is presented as the diary of one of these people, who encounters the boot-fetishist Monsieur Rabout. Erich Auerbach’s *Mimesis* devotes a chapter to the preface of the Goncourt brothers’ novel about a person of this profession, *Germinie Lacerteux*, the so-called the first “scientific” novel.

ANSWER: maids [or servants; or maidservants]

[10] A female author of decadent fiction, Rachilde, wrote an 1887 novel titled for a female version of this person. This 18th-century author depicted violent sexual acts in books such as *Justine* and *The 120 Days of Sodom*.

ANSWER: Marquis de Sade [or Donatien Alphonse François de Sade; accept *La Marquise de Sade*]

13. The q-expansion of a function named for this letter has coefficients that can be written as a linear combination of the dimensions of irreducible representations of the largest sporadic simple group, the Fischer-Griess Monster group.

[10] Name this letter used for the unit vector in the  $y$  direction; it also represents the column of a matrix element.

ANSWER: **J** [or **j**]

[10] This theory came about after John McKay observed that the second coefficient of the Fourier expansion of the  $j$ -function was one more than the dimension of the Griess algebra. It was named by John Conway and Simon Norton.

ANSWER: **moonshine** theory [accept monstrous **moonshine**]

[10] Electrical engineers commonly use “ $j$ ” to represent this quantity because the more common symbol is already used for a different quantity in circuit analysis.

ANSWER: **square root** of **negative one** [or **imaginary constant**; prompt on “ $i$ ”; do not accept or prompt on “current”]

14. An employee of this company authored a memo criticizing its “Ideological Echo Chamber,” which cited David Schmitt’s research on sex differences in personality and Richard Lippa’s review on differences in neuroticism. For 10 points each:

[10] Name this tech company that fired James Damore for sharing that memo on its diversity policies on an internal mailing list.

ANSWER: **Google** LLC [accept **Alphabet** Inc.]

[10] This psychologist expressed sympathy for Damore over his firing, despite criticizing research that attributes gender inequality to innate differences in books such as *Delusions of Gender* and *Testosterone Rex*.

ANSWER: Cordelia **Fine**

[10] Damore cited, and Fine criticized, this psychologist’s theories that women are more interested in “empathizing” than “systemizing.” He conjectured that autism-spectrum disorders result from an “extreme male brain.”

ANSWER: Simon **Baron-Cohen**

15. This essay was published under the pseudonym “K. Freigedank” (kah FRY-geh-dahnk), which means “K. Free-thought.” For 10 points each:

[10] Name this essay, published in a magazine founded by Robert Schumann, which ends by telling a certain group of people to undergo “regenerative work of deliverance through self-annulment,” and that they can only lift their curse by “the redemption of Ahasuerus.”

ANSWER: “**Jewishness in Music**” [or “**Judaism in Music**” or “Das **Judenthum in der Musik**”]

[10] “Jewishness in Music” was an essay by this composer. In 1981, Zubin Mehta led a rare public performance of this man’s work in Israel when he played an encore consisting of excerpts of this man’s opera *Tristan and Isolde*.

ANSWER: Richard **Wagner** [or Wilhelm Richard **Wagner**]

[10] This man’s wife Eva was the illegitimate daughter of Richard Wagner by the wife of Hans von Bülow. This British-born German philosopher wrote several books on Wagner before turning his attention to the supposed threat that Jews posed to Aryan culture in *Foundations of the Nineteenth Century*.

ANSWER: Houston Stewart **Chamberlain**

16. The Palais de Papes is located in this city, the namesake of a time period that included the burning of Jacques de Molay and the dissolution of the Knights Templar by Philip IV. For 10 points each:

[10] Name this French city, where the papacy was based after Pope Clement V refused to return to Rome.

ANSWER: **Avignon** [or **Avenio**]

[10] Saint Catherine of Siena persuaded this pope to move the papacy back to Rome. This pope also hired John Hawkwood to fight on his behalf in the War of the Eight Saints.

ANSWER: Pope **Gregory XI** [or Pierre-Roger de **Beaufort**; prompt on “Gregory”]

[10] Catherine of Siena’s letters claim that this process occurred between her and Jesus at age 21, and was signified not with a gold ring, but with Jesus’s foreskin.

ANSWER: **mystical marriage** [prompt on “marriage” or similar answers]

17. One of these figures titles a novel in which Morrow is hired to authenticate stolen paintings, the last entry of a loosely linked series with *The Book of Evidence* and *Ghosts*. For 10 points each:

[10] Name these figures who observe Arden House, where the mathematician Adam Godley lies dying, in a 2009 novel narrated by one of them, *The Infinities*.

ANSWER: **Greek gods** [or the **Olympian** gods; or the **Greek pantheon**; answers mentioning **Greek** or **Greece** or **Olympic** or **Olympian** and the idea of **divinities** or **deities**, or other synonyms; prompt on “gods” or synonyms]

[10] The author of *Athena* and *The Infinities*, John Banville, is a contemporary writer from this country. Other novelists from this country include Colm Tóibín and Flann O’Brien.

ANSWER: **Ireland** [or **Eire**; or Republic of **Ireland**; or Poblacht na hÉireann]

[10] In *The Infinities*, Adam Godley’s work has allowed the development of cars that run on a substance taken from this place. This place titles Banville’s novel about the narrator’s memories of the Grace family, and Charles Arrowby stars in an Iris Murdoch novel repetitively titled for it.

ANSWER: the **sea** [or the **ocean**; or the **brine**; accept *The Sea* or *The Sea, the Sea*]

18. Bacterial resistance mechanisms to these compounds are the basis of an inducible gene expression system relying on the TRE (“T-R-E”) element. For 10 points each:

[10] Name this class of antibiotics that prevent the binding of aminoacyl tRNAs to the A site.

ANSWER: **tetracyclines**

[10] Tetracyclines inhibit translation by binding to the 30S subunit of these structures, which are responsible for the roughness of the rough endoplasmic reticulum.

ANSWER: **ribosomes**

[10] The consumption of expired tetracyclines can cause this disease in which resorption in the proximal tubules is impaired, resulting in excessive amount of excretion of glucose and bicarbonate. In children, this condition is most often caused due to cystinosis.

ANSWER: **Fanconi** syndrome [or **Fanconi**’s syndrome]

19. Answer the following about Japanese art painted on *byōbu*, or decorative folding screens, for 10 points each.

[10] In a pair of folding screens by Ogata Korin, a river separates two of these fruit trees. One of Hiroshige’s *One Hundred Famous Views of Edo*, later copied by Van Gogh, is a closeup view of the “Sleeping Dragon” tree of this type at Kameido.

ANSWER: **plum** trees [or *Prunus mume*]

[10] A leader of this school of art, named Eitoku, created a screen painting of Chinese lions for Toyotomi Hideyoshi. It was the dominant school of Japanese art for nearly 400 years starting in the Ashikaga Shogunate.

ANSWER: **Kano** School

[10] Several screen paintings from different eras depict chapters like “Purple Trousers” and “A Boat on the Water” from this Heian era novel by Lady Murasaki.

ANSWER: *The Tale of Genji* [or *Genji Monogatari*; prompt on “*Genji*”]

20. This dynasty, whose heartland was centered on the Kaveri River, was ultimately supplanted by the Pandyan dynasty. For 10 points each:

[10] What long-ruling Tamil dynasty controlled much of southern India and Sri Lanka until the 13th century?

ANSWER: **Chola** dynasty [or **Cola** dynasty]

[10] Rajendra Chola successfully invaded this kingdom, conquering its port of Kadaram and taking its jeweled war gate. Previously, this empire had its capital of Palembang sacked by Dharmawangsa (d’har-mah-WAHNG-sah) of the Mataram Kingdom.

ANSWER: **Srivijaya** [or **Sri Vijaya**]

[10] This Dravidian temple of the Chola in Thanjavur was dedicated to Shiva, and has a vimana tower built from granite. Its construction began during the rule of Raja Raja Chola I.

ANSWER: **Brihadisvara** (bri-hah-dis-vah-rah) Temple at Thanjavur [or *Dakshina Meru*]