

Saturnalia: Packet 9

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THESE TOSSUPS ARE PAIRED WITH BONUSES. IF A TOSSUP IS NOT CONVERTED, SKIP THE PAIRED BONUS AND MOVE ON TO THE NEXT TOSSUP. DO **NOT** COME BACK TO THE SKIPPED BONUS.

1. A 20th-century school of epistemology named after this philosopher employs Dutch Book arguments to discover self-defeating beliefs. This thinker's namesake "rule" was created in response to Hume's problem of induction, and its application is called conditionalization. This thinker's subjectivist definition of probability treats it as the degree of (*) belief in an event. This thinker's namesake interpretation of statistics is contrasted with frequentism for its use of prior and posterior probability. For 10 points, name this logician who names a theorem that allows probability to be updated given additional evidence.

ANSWER: Thomas **Bayes** [accept **Bayesian** statistics; accept **Bayesian** epistemology]

<Philosophy — Bowman> [Edited]

1. In a story, a knight is given one year and one day to find the answer to this question, or else the queen who spared his life would have him killed. For 10 points each:

[H] Name this question. Proposed answers to this question include honor and "fun in bed," but the ultimate answer is revealed to the knight by an old "crone" whom the knight is forced to marry.

ANSWER: What is the thing that **women** most **desire**? [accept any answer describing "What **women want** most" like "What do **women want** most?" or "What is it that **women love best**?"; prompt on BUT DO NOT REVEAL answers describing a question in the Wife of Bath's Tale]

[M] This character tells a story about a knight who goes on a quest to discover what women most desire. This character defends her multiple marriages by citing the biblical example of Abraham and Jacob.

ANSWER: The **Wife** of Bath [or **Wif** or **Alison**]

[E] The Wife of Bath's tale appears in this collection of Middle-English stories written by Geoffrey Chaucer.

ANSWER: *The **Canterbury Tales*** [or ***Tales of Caunterbury***]

<Short Fiction — Laurence Li> [Ed. Condron]

2. One of these particles annihilates with its antiparticle in the Drell-Yan process. These particles are the heavier of the two types of particles that form jets after high-energy collisions. Fermilab's Tevatron accelerator was used to observe one of these particles with a very high mass, comparable to gold or tungsten. These particles interact with eight types of gauge ("gayj") bosons to form (*) hadrons in color confinement. In the Standard Model, elementary particles are either bosons, leptons, or these particles. These particles are held together by gluons in the strong interaction. For 10 points, name these particles whose up and down flavors compose protons and neutrons.

ANSWER: **quarks** [accept top **quark** or up **quark** or down **quark**]

<Physics — French> [Edited]

2. The Makgadikgadi ("mak-GAD-eeek-GAD-ee") Salt Pan, home to a massive population of greater flamingos and possibly the historical origin of *Homo sapiens*, is only one of many amazing geographical features in the Kalahari Desert. For 10 points each:

[M] The Kalahari desert contains an endorheic one of these geographical features centered around the Okavango River. These features, also called watersheds, are defined by having their runoff water all flow into a single outlet.

ANSWER: catchment **basins**

[E] The Okavango disappears in the desert into an inland one of these features, which are characterized by alluvial fans in the shape of a namesake Greek letter. These features occur when rivers deposit sediment near their mouths.

ANSWER: **deltas**

[H] The Kalahari lies on and names one of these geological features where substantial amounts of ancient basement rock has been preserved. Their exposed areas are called shields.

ANSWER: **cratons**

<Geography — Daniel Ma> [Edited]

3. An essay by this author asks that girls who lack “one single groat to their fortunes” and who “cannot stir abroad without a chair” be treated like a girl from Formosa as described by Psalmanazar (“sahl-MAHN-uh-zar”). This author described how three brothers treat the coats they inherit from their father to analogize three branches of Christianity, which are represented by (*) Peter, Martin, and Jack. Another essay by this author devises a policy in order to “lessen the number of Papists among us.” For 10 points, name this author of “A Tale of a Tub,” who suggested eating Irish babies to resolve a famine in his satirical essay “A Modest Proposal.”

ANSWER: Jonathan **Swift**

<Other Literature — McAvoy-Bickford> [Ed. Condrón]

3. Male performers of this genre wear a *charro* composed of a jacket, tight pants, and boots, usually embroidered with metallic thread. For 10 points each:

[M] Name this musical genre that developed from *Son jalisciense* (“hah-lee-see-AYN-say”) when the guitarrón (“ghee-tah-ROHN”) and vihuela (“vee-WAY-lah”) replaced the harp in traditional ensembles.

ANSWER: **mariachi**

[E] Mariachi as a genre originated in the state of Jalisco (“hah-LEE-scoh”) in this country, where instruments like the violin, guitar, and trumpet were introduced by Spanish colonists.

ANSWER: **Mexico** [or United **Mexican** States or *Estados Unidos Mexicanos*]

[H] This folk song popular in Mexico is often performed by mariachi bands. In some versions of this song, the title animal’s inability to walk references the drunkenness of Mexican President Victoriano Huerta.

ANSWER: “La **Cucaracha**” [or “The **Cockroach**”]

<Classical Music — Jeffrey Ma> [Edited]

4. This architect wrapped corrugated metal around a pink bungalow in the design for his residence in Santa Monica. The economic prosperity brought about by major architectural projects is an “effect” named for one of this architect’s buildings. A project by this architect was built in a dilapidated port and has a winding (*) titanium facade in the shape of a boat. The Los Angeles Philharmonic plays in a building designed by this architect, who designed a Spanish extension of a New York art museum. For 10 points, name this Canadian architect of the Walt Disney Concert Hall and the Guggenheim Museum Bilbao.

ANSWER: Frank Owen **Gehry** (“gary”)

<Architecture — Felix Wang> [Ed. Bowman]

4. At the end of this film, Death leads a line of people holding hands up a hill. For 10 points each:

[M] Name this film which ends with that “dance of death.” This film follows the ongoing chess match between Death and Antonius Block.

ANSWER: *The **Seventh Seal*** [or *Det **sjunde inseglet***]

[E] This Swedish director of *The Seventh Seal* explored religious themes in many of his films, including *Through a Glass Darkly*, in which Karin has visions of God as a monstrous spider.

ANSWER: Ernst Ingmar **Bergman**

[H] *Through a Glass Darkly* is the first entry in a trilogy whose third entry is titled for this quality. A 2016 Martin Scorsese film about a Portuguese Jesuit priest in 17th century Japan is also titled for this quality.

ANSWER: **silence** [accept word forms like **silent**; do NOT accept or prompt on synonyms]

<Film — Faeder> [Ed. Bowman]

5. A politician from this country said “We want to dare for more democracy” after entering into a coalition with Walter Scheel’s (“sheel’s”) party. That leader of this country was nearly ousted in a vote of no confidence in 1972 after the defection of FDP deputies. As a part of a policy inspired by “change through rapprochement,” this country recognized its neighbor’s (*) Oder–Neisse (“OH-duh NYE-suh”) line in 1970. A leader of this country resigned after his secretary, Günter Guillaume (“ghee-YOHM”), was revealed as a foreign agent working for the Stasi, the secret police of this country’s Eastern neighbour. For 10 points, name this country where Willy Brandt served as chancellor.

ANSWER: **West Germany** [or **Federal Republic of Germany** or *Bundesrepublik Deutschland* or *Westdeutschland*; prompt on **Germany**; do NOT accept or prompt on “East Germany” or “German Democratic Republic” or “*Deutsche Demokratische Republik*”] (the unnamed policy was Ostpolitik)

<European History — McAvoy-Bickford> [Ed. Iyer]

5. This type of event removes an individual from Adam's sinful lineage and integrates them into God's sinless lineage. For 10 points each:

[H] Name this type of event that takes place during the Unification Church's Blessing Ceremony, which is believed to bring about the establishment of God's kingdom on Earth.

ANSWER: mass **weddings** [or **marriage**; accept **marriage rededication**]

[M] The Unification Church follows a text known as the *Divine Principle* and was founded in this nation.

ANSWER: **South Korea** [or **Republic of Korea** or **ROK** or **Daehan Minguk**; prompt on **Korea**; do NOT accept or prompt on "North Korea" or "Democratic Republic of Korea"]

[E] According to the Unification Church, Sun Myung Moon had to take over the role as head of a sinless human society due to the premature death of this man, who Christians believe to be the crucified Messiah and son of God.

ANSWER: **Jesus** [or **Christ** or **Yeshua** or **Isa**]

<Religion — McAvoy-Bickford, Dai> [Ed. Dai]

6. **This ruler called for every law to "judge very evenly" in a law code to which he appended Ine's (EE-neh's) law code. This king strengthened an ancient fort at Athelney to provide a base for his troops before a battle that was described by his chronicler, the bishop Asser. The Burghal Hidage ("BER-guhl HIGH-didge") describes the burh system established by this king. This king led his troops in a charge up a hill while his brother (*) Aethelred ("ATH-el-red") was taking Mass during the battle of Ashdown. This leader won the battle of Edington against the Great Heathen Army, after which he signed the Treaty of Wedmore with Guthrum to establish the Danelaw ("DANE-law").** For 10 points, name this king of Wessex known as "the Great."

ANSWER: **Alfred** the Great (The law code was the *domboc* or Dome Book.)

<European History — McAvoy-Bickford> [Ed. Iyer]

6. For 10 points each, answer the following about movies with scenes that take place in bowling alleys:

[M] This movie climaxes with Donny, played by Steve Buscemi, having a heart attack in a bowling alley parking lot. In this film, "The Dude" gets caught up in a kidnapping scheme involving a millionaire with the same name as him.

ANSWER: *The **Big Lebowski***

[H] Daniel Plainview beats the reverend Paul Sunday to death with a bowling pin at the end of this film written and directed by Paul Thomas Anderson.

ANSWER: ***There Will Be Blood***

[E] Will Smith's character uses an alien's head to play bowling in the third entry of this series that features men wearing dark suits and sunglasses.

ANSWER: ***Men in Black*** [accept any entry in the ***Men in Black*** franchise]

<Popular Culture — Ashbrook> [Ed. Maharjan]

7. **It's not hydrogen, but Johann Wilhelm Hittorf discovered an "alpha-metallic" allotrope of this element that crystallizes out of molten lead. Some experimental FETs ("F-E-T's") use the tunable band gap of a form of this element that occurs in orthorhombic, graphene-like monolayers. That "black" allotrope of this element can be heated under pressure to form a tetrahedral allotrope of it that is commonly stored under (*) water due to its high reactivity. Incendiary weapons often contain this element's "white" allotrope. This element is located directly beneath nitrogen on the periodic table. For 10 points, name this nonmetallic element whose "red" allotrope is used to coat matches.**

ANSWER: **phosphorus** [or **P**; accept violet **phosphorus** or black **phosphorus** or **phosphorene** or red **phosphorus** or white **phosphorus**]

<Chemistry — Yin> [Edited]

7. One text compares this concept to all the rivers of the world, which all diverge yet eventually meet as one in the oceans. For 10 points each:

[H] Name this concept, which Vedanta philosophers assert is the first principle of existence. The Brihadaranyaka (“bree-ha-da-rahn-ya-ka”) equates this concept to Brahman.

ANSWER: **Atman** [or **self** or **soul** or **spirit** or real **self** or true **self** or ultimate **self**; prompt on **breath**; do NOT accept or prompt on “Anatman” or “not-self”]

[M] The metaphor of the rejoining rivers is found in the Chandogya (“chan-DOAG-yuh”), which like the Brihadaranyaka is one of these texts. These Hindu philosophical texts grew out of commentaries on the Vedas.

ANSWER: the **Upanishads** [accept the Chandogya **Upanishad**; accept the Brihadaranyaka **Upanishad**]

[E] Unlike Hindu philosophers, followers of this person believe his doctrine of *anatta*, or “no-soul.” This person taught that following “the middle way” would lead to achieving inner peace, or *nirvana*.

ANSWER: the **Buddha** [or **Siddhartha** Gautama or Siddhartha **Gautama**; accept **Shakyamuni**]

<Philosophy — Athreya> [Ed. Ashbrook]

8. In a case involving this right, Louis Brandeis came up with the so-called “time to answer” test. California’s criminal syndicalism statute was held not to violate this right in the *Whitney* decision, which was overturned in a case where William O. Douglas attacked *US v. O'Brien*’s restrictions on this right. Douglas’s opinion in *Brandenburg v. Ohio* set the (*) “imminent lawless action” standard regarding this right. Oliver Wendell Holmes used the “clear and present danger” doctrine to curtail this right in *Schenck v. United States*. For 10 points, shouting “fire” in a theater is not protected under what right that is paired with freedom of the press and religion in the First Amendment?

ANSWER: freedom of **speech** [or right to free **speech**; prompt on **First Amendment** rights]

<U.S. History — Iyer> [Edited]

8. Osteoclasts are cells specialized in breaking down bone tissue. For 10 points each:

[H] Osteoclasts dissolve bone by secreting hydrogen ions, which they produce using this enzyme. This diffusion-limited enzyme catalyzes the conversion between bicarbonate and carbon dioxide.

ANSWER: **carbonic anhydrase** [or **carbonic dehydratase**]

[E] Parathyroid hormone signals osteoclasts to break down bone in response to low concentrations of this ion in the bloodstream. This is the main cation (“CAT-eye-on”) found in bone tissue.

ANSWER: **calcium** 2+ [or **Ca**²⁺]

[M] Osteoclasts are created from the fusion of these immune cells’ precursors. Like dendritic cells, these immune cells present antigens using MHC (“M-H-C”) class II (“two”), and their M1 (“M-one”) variety secretes pro-inflammatory cytokines (“SYE-toh-kine’s”).

ANSWER: **macrophages**

<Biology — Athreya, Yin> [Ed. Yin]

9. Lord Kelvin was the first to analyze these phenomena by isolating their harmonic constituents, the largest of which are designated S_2 (“S-two”) and M_2 (“M-two”). Rotary examples of these phenomena are centered around amphidromic points, where their magnitudes are zero. A set of partial differential equations describing the “dynamic theory” of these phenomena was developed by (*) Pierre-Simon Laplace (“luh-PLOSS”). The strongest examples of these phenomena occur during syzygy (“SIH-zih-jee”) and are known as their “spring” variety. The semidiurnal (“semi die-ER-nul”) class of these phenomena exhibit two high and two low phases per day. For 10 points, name these short-term, periodic changes in sea level.

ANSWER: **tides** [accept **tidal** constituents or rotary **tide** or dynamic **tidal** theory or spring **tides** or semidiurnal **tides**]

<Earth, Atmospheric, and Ocean Science — Yin> [Edited]

9. This quantity equals atomic number minus a shielding constant. For 10 points each:

[M] Name this net positive charge experienced by an electron. The outermost electron shells in an atom experience the lowest amount of this quantity because of greater shielding effects.

ANSWER: **effective nuclear charge** [prompt on nuclear charge]

[H] The effective nuclear charge on an electron can be calculated from an atom's electron configuration using this set of rules. In this set of rules, electrons in the same group reduce the effective nuclear charge by .3 ("point three") or .35 ("point three five").

ANSWER: **Slater's** rules

[E] These electrons experience the lowest effective nuclear charge, since they occupy the outermost occupied shell. The dots in Lewis dot structures represent these electrons.

ANSWER: **valence** electrons

<Chemistry — Athreya> [Edited]

10. **In a painting from this movement, a bishop was replaced with a cuckolded husband whose white dog barks at the risqué central scene of the painting. Another painting from this movement formerly known as *Gilles* shows stock characters sitting behind the clown Pierrot. One painting from this movement has undergone debate as to whether a golden boat is docking or departing. That painting established the genre of (*) *fête galante*.** A statue of Cupid puts its finger to its lips in a painting from this movement in which a woman on a swing kicks off one of her shoes. For 10 points, name this ornate French art movement also known as the Late Baroque style.

ANSWER: **Rococo** [accept **Late Baroque** until mentioned; do NOT accept or prompt on "Baroque"]

<Painting and Sculpture — Felix Wang> [Ed. Bowman]

10. The "warm-hot" variety of this substance is thought to comprise the "missing" 40 to 50 percent of the universe's baryonic matter. For 10 points each:

[H] Name this substance. Cosmologists analyze the distribution of this substance by measuring its inverse Compton scattering of the cosmic microwave background.

ANSWER: **intergalactic medium** [or **IGM**; accept warm-hot **intergalactic medium**; prompt on **WHIM**]

[M] Evidence for the warm-hot intergalactic medium has been found in the spectra of quasars, which form when these objects accrete large amounts of matter. Sagittarius A* ("A-star") is one of these objects.

ANSWER: supermassive **black holes** [prompt on active galactic nuclei or AGNs]

[E] The intergalactic medium primarily consists of this element in its ionized state. This element is the most abundant in the universe and has atomic number 1.

ANSWER: **hydrogen**

<Astronomy — Yin> [Edited]

11. **In a novel by this author, an assassin is mistaken for a reporter when he cannot make a sign language "X." A man in that novel by this author misses the allusion in a poem's title since his copy of *Timon of Athens* was a bad translation. Despite lacking a "single obscene term," the potential censorship of a novel by this author is discussed in a foreword by the fictional psychologist (*) John Ray. In a novel by this author, the line "I was the shadow of the waxwing slain" opens a poem by John Shade with endnotes by the deposed King of Zembla, Charles Kinbote ("KIN-boat"). A novel by this author centers on Humbert Humbert's attraction to the title nymphet. For 10 points, name this author of *Pale Fire* and *Lolita*.**

ANSWER: Vladimir **Nabokov**

<Long Fiction — Faeder> [Ed. Condron]

11. George Macartney presented the Qianlong (“CHEE-an-long”) Emperor with a series of toys and inventions in an attempt to end a system named for this city. For 10 points each:

[M] Name this Chinese city where all foreign trade was confined to the Thirteen Factories region. Traders in this city dealt with foreigners through the *Cohong* (“co-HONG”) system, and in 1557 the Portugese leased Macau (“ma-COW”) to trade with this city.

ANSWER: **Canton** [or **Guangzhou**]

[E] The British tried to circumvent the Canton System by selling this addictive drug made from the poppy flower. The British Empire and Qing Dynasty fought two wars named after this drug.

ANSWER: **opium** [accept **Opium** Wars or First **Opium** War or Second **Opium** war]

[H] The Convention of Chuenpi (“chuh-WAHN-bee”) and the later Treaty of Nanjing that ended the First Opium War were referred to by this specific two-word term by the Chinese. These agreements forced China to pay large reparations and open itself up to foreign trade.

ANSWER: **unequal treaties** [or **unequal treaty**; prompt on **treaty**]

<World History — Louis Li> [Ed. Iyer]

12. **A mock epic by this author opens by urging the listener to “Think of sweet and chocolate” and describes a character who is rejected by the “tan man.” This author tells subjects who “never giggled or planned or cried” that “I loved you all” in a poem beginning, “Abortions will not let you forget.” The subjects of a poem by this author “who have lived their day” are described as “Mostly (*) Good” and see dinner as a “casual affair.” A poem by this author set at “the Golden Shovel” is narrated by “Pool Players” who “left school,” “jazz June,” and “die soon.”** For 10 points, name this author of *Annie Allen*, “The Bean Eaters,” and “We Real Cool.”

ANSWER: Gwendolyn **Brooks**

<Poetry — Tagtmeier> [Ed. Condrón]

12. For 10 points each, answer the following about the relationship between the clergy and nobility Shakespeare’s history plays:

[M] The Archbishop of Canterbury convinces the title character of this play that Salic (“SAY-lick”) law permits him to take over the French throne. In the invasion that follows, the title character of this play claims that “We few, we happy few, we band of brothers” will be remembered each St. Crispin’s day.

ANSWER: **Henry V** (“the fifth”) [or *The Life of King **Henry the Fifth***]

[H] This play’s title character tells Cardinal Pandulph that “no Italian priest / Shall tithes or toll in our dominions.” In this chronologically-first of Shakespeare’s histories, Faulconbridge the Bastard avenges his father by beheading the Duke of Austria.

ANSWER: **King John** [or *The Life and Death of **King John***]

[E] John was admired by Elizabethan Protestants, who compared him to this monarch who founded the Anglican Church. In the Shakespeare play titled for him, he is “tangled in affection” with Lady Anne Boleyn.

ANSWER: **Henry VIII** (“the eighth”) [prompt on **Henry**; accept *The Famous History of the Life of King **Henry the Eighth***]

<Drama — Condrón> [Edited]

13. **It’s not San Diego, but this city’s Biofreeze Performance Center lies in its Mission Bay neighborhood. Footage of the Ferry Building in this city was found in a Miles Brothers film made three weeks after the film *A Trip Down Market Street*. Boudin (“boo-DAH-N”) Bakery’s flagship location is on this city’s Pier 39, part of Fisherman’s Wharf. Hunter Thompson nicknamed one neighborhood in this city (*) Haight-Ashbury, where flower children came for the Summer of Love in 1967. This city, which is known for its steep hills, suffered a devastating fire and earthquake in 1906.** For 10 points, name this Northern California city on a namesake bay crossed by the Golden Gate Bridge.

ANSWER: **San Francisco**

<Geography — Daniel Ma> [Edited]

13. This deity is depicted as an old, bearded man at the center of a silver dish found in the Mildenhall treasure. For 10 points each:

[H] Name this deity, who embodies a namesake river surrounding the world. With his wife, this deity fathered a group of three-thousand nymphs including Clymene (“KLYE-mee-nee”), Doris, and Styx.

ANSWER: **Oceanus** [or **Okeanos**; accept **Oceanids** or **Okeanides**]

[E] Oceanus is a brother of this leader of the titans, who castrated their father, Ouranos (“OH-rah-nohs”). This titan swallowed his children when it was prophesied that they would overthrow him.

ANSWER: **Kronos** [or **Cronus** or **Cronos**]

[M] Although Hesiod wrote that Kronos and Oceanus were brothers, this author wrote that Oceanus was the father of Kronos in his *Timaeus* (“tih-MAY-us”). In another myth by this author, Gyges (“JYE-jeez”) finds a ring that lets him become invisible.

ANSWER: **Plato** [or **Platon**]

<Mythology — French> [Edited]

14. **C. P. E. Bach’s unusual two-movement G major sonata for this instrument is nicknamed the *Hamburger Sonata*. The finale to J. S. Bach’s *Orchestral Suite No. 2* is a flashy “Badinerie” for this instrument. The trio sonata from J. S. Bach’s *The Musical Offering* is written for violin, basso continuo, and this instrument, and the whole collection is dedicated to a player of this instrument. The Baroque (*) *traverso* form of this instrument, which was played by Frederick the Great, eventually became this instrument’s modern transverse form. For 10 points, name this reedless woodwind instrument whose modern players often double on the piccolo.**

ANSWER: **flute** [or transverse **flute**; accept **traverso** before “traverso” is read]

<Classical Music — Ashbrook> [Ed. Jeffrey Ma]

14. The Norwegian delegation at this event called for the liquidation of the Bank of International Settlements. For 10 points each:

[M] Name this conference in New Hampshire that established the IMF (“I-M-F”). This conference also created a namesake “system” which pegged currencies to a certain reserve currency.

ANSWER: **Bretton Woods** conference [accept **Bretton Woods** system]

[E] This economist and author of the *General Theory of Employment, Interest, and Money* proposed the International Clearing Union at the Bretton Woods conference.

ANSWER: John Maynard **Keynes** (“kaynz”)

[H] The International Clearing Union would regulate this currency that Keynes proposed as the reserve currency of the Bretton Woods system. Gold would have been exchangeable for this currency, but not vice versa.

ANSWER: **bancor**

<European History — McAvoy-Bickford> [Ed. Iyer]

15. **They’re not neurotransmitters, but the YUC (“Y-U-C”) and IPA (“I-P-A”) pathways synthesize these compounds from tryptophan. In a mechanism involving these compounds, the motion of statoliths (“STAT-uh-liths”) signals the repositioning of the PIN (“pin”) proteins that transport these compounds. A decrease in the amount of these hormones allows ethylene to stimulate abscission. These hormones may promote cell elongation by activating (*) proton pumps, as posited by the acid growth hypothesis. Cytokinins (“syeh-toh-KYE-nins”) oppose these hormones’ promotion of root growth and apical dominance. For 10 points, name this class of plant hormones responsible for gravitropism and phototropism.**

ANSWER: **auxins** [accept **indole-3-acetic acid** or **indoleacetic acid** or **IAA**]

<Biology — Yin> [Edited]

15. A dynasty ruled by this ethnic group was toppled by the led Abbasid revolution, which was led by Abu Muslim. For 10 points each:

[E] Name this ethnic group that ruled the Umayyad Caliphate. The Abbasid Revolution attempted to equalize the status of muslims not of this ethnic group to muslims of this ethnic group, which Muhammad belonged to.

ANSWER: **Arabs** [prompt on Quraysh with “What larger ethnic group are they a part of?”]

[H] Discontent against the Umayyad caliphate rose after Husayn, the grandson of the prophet Muhammad, was killed at this 680 C.E. battle by an Umayyad force under Yazid I (“the first”).

ANSWER: Battle of **Karbala**

[M] After the Abbasid Revolution, caliph As-Saffah’s forces secured Abbasid hegemony over central Asia by defeating this Chinese dynasty at the Battle of Talas. An Lushan, a general of partial Sogdian descent, led a rebellion against this dynasty.

ANSWER: **Tang** Dynasty

<World History — Athreya> [Ed. Laurence Li]

16. **In a parallel to the Book of Job, this author created a character who discusses “Wickedness and Misfortunes” with the angel Jesrad and who defeats Itobad in battle to win Astarté in marriage and become the king of Babylon. A character created by this author argues that the Bay of Lisbon was made for Jacques the Anabaptist to drown in. This author of (*) *Zadig* wrote about an exiled young man who is conscripted to fight in the Bulgarian army. That character created by this author is tortured during an auto-da-fé alongside Pangloss, a parody of Leibniz who argues that God created “the best of all possible worlds.”** For 10 points, name this French author of *Candide*.

ANSWER: **Voltaire** [or François-Marie **Arouet**]

<Long Fiction — Condrón> [Edited]

16. The beginning of this poem describes an object that “grins and lies” and “hides our cheeks and shades our eyes.” For 10 points each:

[H] Name this poem whose title object prevents the public from knowing that “the clay is vile / Beneath our feet, and long the mile” and that “With torn and bleeding hearts we smile.”

ANSWER: “**We Wear the Mask**”

[M] “We Wear the Mask” is part of this American poet’s collection *Majors and Minors*. This poet’s early dialect poems were included in his collection *Oak and Ivy*.

ANSWER: Paul Laurence **Dunbar**

[E] Dunbar’s poem “Sympathy” provides the title for this author’s memoir, *I Know Why The Caged Bird Sings*.

ANSWER: Maya **Angelou**

<Poetry — Lewis> [Ed. Condrón]

17. **One man became the leader of this religion after a lake revealed a vision of a monastery with a green-and-gold roof and a house with blue roof tiles. Many leaders of this religion were selected with the Golden Urn and are known as “Ocean Masters.” Although the current leader of this religion resides in Dharamshala (“dah-rum-SHAH-luh”), leaders of this religion traditionally use the (*) Potala Palace as their winter home. Leaders of this religion are believed to be manifestations of Avalokiteśvara (“UH-vuh-loh-kih-TAY-sh’vah-ruh”), and the current one, the fourteenth, is Tenzin Gyatso. For 10 points, name this religion whose Yellow Hat sect is led by the Dalai Lama.**

ANSWER: **Tibetan Buddhism** [accept **Yellow Hat** before “Yellow Hat”; prompt on Buddhism or Vajrayana Buddhism or Mahayana Buddhism]

<Religion — McAvoy-Bickford, Dai> [Ed. Dai]

17. This novel's author described it simply as "the first book." For 10 points each.

[M] Name this novel which takes its title from the Book of Genesis. In this novel, the Trask family moves to the Salinas valley, where Cathy Ames takes over a brothel after poisoning Madame Faye.

ANSWER: **East of Eden**

[E] This author of *East of Eden* also wrote *Of Mice and Men*, which takes its title from a Robert Burns poem addressed to a "tim'rous beastie."

ANSWER: John **Steinbeck**

[H] In this novel by Steinbeck, Ethan Hawley resolves to become wealthy by building an airport and taking over a business owned by the illegal immigrant Alfio Marullo ("mah-ROO-yoh"). This novel's title is taken from a Shakespeare monologue whose speaker is "determined to prove a villain."

ANSWER: *The **Winter of Our Discontent***

<Long Fiction — Condon> [Edited]

18. **Jeff Sessions said this politician's questioning "makes me nervous" during one hearing. This politician once raised a hand when asked if she supported a plan to abolish private health insurance, but she later claimed that she believed the question was about her personal health insurance. This politician told Joe Biden (*) "I do not believe you are a racist" during a Democratic debate. This politician discussed how she was bused to a recently integrated school in an attack on Biden's past opposition to busing. When this senator ran in a presidential primary, she was attacked for her record as a DA and California attorney general. For 10 points, name this 2020 Democratic vice presidential nominee.**

ANSWER: Kamala **Harris**

<Current Events — McAvoy-Bickford> [Edited]

18. Art historians use the length of this leader's beard to date a portrait of him in which he sits in front of a green background. For 10 points each:

[H] Name this leader. This leader sponsored an artist to paint the walls of a room with frescoes representing theology, law, poetry, and philosophy.

ANSWER: Pope **Julius II** ("the second") [or **Giuliano della Rovere**; prompt on Julius or della Rovere]

[M] Julius II commissioned this artist to paint those frescoes for the Stanza della Segnatura. This artist painted scholars debating transubstantiation in the fresco representing theology, *La Disputa*.

ANSWER: **Raphael**

[E] Raphael painted this fresco to represent philosophy for the Stanza della Segnatura. In this fresco, Plato points to the sky while Aristotle gestures to the world around them.

ANSWER: *The **School of Athens*** [or **Scuola di Atene**]

<Painting and Sculpture — French> [Ed. Bowman]

19. **This value equals one for every element of the special linear group. It's not the definition, but Sylvester's criterion for positive definiteness checks whether several of these values are all positive. This value is the constant term of the characteristic polynomial. This value for $A - \lambda I$ ("A minus lambda I") equals zero whenever lambda is an (*) eigenvalue. A vector whose components are ratios of these values is the solution found by Cramer's rule. This value can be computed recursively via a cofactor expansion. If this value for a matrix is zero, then the matrix is not invertible. For 10 points, name this value which, for a 2 by 2 matrix, equals $ad - bc$ ("a d minus b c").**

ANSWER: **determinant** [prompt on det]

<Math — French> [Edited]

19. Within matter, this law is phrased in terms of the H-field and the free current density. For 10 points each:

[M] Name this law. The integral form of this law states that the line integral of the magnetic field around a closed path is proportional to the current enclosed by the path.

ANSWER: **Ampère's law** [or **Ampère's circuital law** or **Ampère-Maxwell law**; do NOT accept or prompt on "Ampere's force law"]

[H] On the other hand, the differential form of Ampère's law is a formula for this operation of the magnetic field. The wave equation for the magnetic field can be derived by applying this operation to both sides of Ampère's law.

ANSWER: **curl** [prompt on del cross; do NOT accept or prompt on "del" or "del dot" or "cross"]

[E] This physicist added a displacement current term to Ampère's law when he derived it in his paper "On Physical Lines of Force." This physicist names the set of four equations central to classical electromagnetism.

ANSWER: James Clerk **Maxwell** [accept **Maxwell's equations**]

<Physics — Ye> [Ed. Gurazada, French]

20. This leader was accused of misappropriating army funds while serving as a colonel in the Gold Scandal. Supporters of this leader's predecessor were massacred at the Jinja and Mbarara ("im-BAH-rah-rah") barracks. Dan Shomrom led a military operation in this leader's country where Yonathan Netanyahu was killed. This leader overthrew the author of *The Common Man's Charter*, (*) Milton Obote ("oh-BOH-tay"). This leader's failed invasion of Kagera led to his overthrow by Julius Nyerere ("nee-uh-RARE-ay"). As part of an "economic war," this leader ordered the expulsion of his country's Asian minority. The film *The Last King of Scotland* details the rise of this leader. For 10 points, name this dictator of Uganda from 1971 to 1979.

ANSWER: Idi **Amin** Dada Oumee

<World History — Athreya> [Ed. Iyer]

20. This speech gave an almost complete inventory of the objects in the White House at the time. For 10 points each: [H] Name this three-day long speech by Charles Ogle that denounced the "regal splendor of the President's Palace."

ANSWER: **Gold Spoon** Oration

[M] During the speech, Ogle compared William Henry Harrison to a "silver spoon" in an attempt to showcase him as the ideal candidate for this party. This party was split into Conscience and Cotton factions during disputes over slavery.

ANSWER: **Whig** party [accept Conscience **Whigs** or Cotton **Whigs**]

[E] After defeating Martin Van Buren in the election of 1840, Harrison gave a two-hour long speech while coatless in freezing weather at one of these ceremonies. These ceremonies signal the official beginning of a new presidency.

ANSWER: **inaugurations** [or **inaugurals**; accept **inaugural** address]

<U.S. History — Louis Li> [Ed. Laurence Li]