2022 ACF Winter

Packet 1 by Claremont A, SIUE A, UIUC A

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Tossups

1. In Gujarat, participants in an activity involving these items celebrate by shouting “kai po che!” (“kai poh CHAY”) Due to widespread injury by features called “Chinese” manja, many cities in the Indian subcontinent have banned these items during festivals like Uttarayan and Makar Sankranti. Some sources claim that these items were invented for wartime surveying by philosophers Lǔ Bān and Mòzǐ. In a novel, a boy in a California park gives a “lopsided” smile as he looks at a green example of these items used by his adoptive father, who finds himself again uttering the phrase “for you, a thousand times over.” In that novel, failure to relinquish a prized example of these items results in Hassan being raped by Assef in front of his best friend Amir. For 10 points, a Khaled Hosseini (“kuh-LEED hoh-SAY-nee”) novel centers on a “runner” of what toy aircraft?

ANSWER: **kite**s [accept fighter **kite**s; accept **patang**; accept **tukkal**; accept *The* ***Kite*** *Runner*]

<Other Academic>

2. This phenomenon’s effect is quantified by a tensor that includes a nonlinear term equal to the wedge product of the field *A* with itself, a feature that helps explain the OZI (“O-Z-I”) rule. A feature of a theory of this phenomenon occurs for positive values of the beta function, which occurs when “n sub f” is less than 33 over 2. That feature of this phenomenon explained Bjorken (“B’YOR-ken”) scaling and was discovered by Gross, Wilczek (“WILL-check”), and Politzer. A theory of this phenomenon is described by the SU(3) (“S-U-3”) symmetry group, which is generated by eight traceless matrices named for Murray Gell-Mann. This interaction’s strength unusually [emphasize] *decreases* as range decreases, a feature called asymptotic freedom. Quantum chromodynamics describes how this interaction is mediated by gluons. For 10 points, particles in a nucleus are held together by what most powerful fundamental force?

ANSWER: **strong** interaction [or **strong** force or **strong** nuclear interaction or **strong** nuclear force; or **color force**; prompt on asymptotic freedom or color or color confinement before “interaction’s” is read by asking “what interaction displays that feature?”; prompt on gluons before “interaction’s” is read by asking “what interaction do they mediate?”; prompt on QCD or quantum chromodynamics before “interaction’s” is read by asking “what interaction is explained by that theory?”]

<Physics>

3. A king in this biblical book has his thumbs and big toes cut off as a punishment for mutilating seventy kings in the same way. A man in this book tests God by laying a fleece of wool on a threshing floor to see if only it, and not the floor, will get wet. In this book, a warrior says, “I have a message from God unto thee” and then buries a sword in the stomach of a fat king. One of the oldest passages in the Bible is a victory hymn from this book sung by the wife of Lappidoth (“LAP-ih-DAWTH”) and Barak (“buh-ROCK”). In this book, the Canaanite (“CAY-nan-ite”) general Sisera (“SISS-err-uh”) has a tent peg driven through his head by Jael (“yah-EL”). Another man in this book loses his strength while he sleeps after Delilah has his hair cut off. For 10 points, Deborah and Samson are two of the eponymous leaders of what book of the Old Testament?

ANSWER: Book of **Judges** [or Sefer **Shoftim**]

<Religion>

4. In 1968, military explosives unearthed this dynasty's mausoleum for Liú Shèng (“l’yoo shung”) of Zhōngshān (“jong shahn”), where molten metal sealed off Dòu Wǎn’s (“doh wahn’s”) jade burial suit. This dynasty’s official Sāng Hóngyáng (“sahng hongyahng”) instituted state control of grain and liquor under an emperor who established Gojoseon’s (“koh-joh-SUN’s”) “Four Commanderies” and Tàixué’s (“tai-shweh’s”) Imperial Academy. The polymath Zhāng Héng (“jahng hung”) invented a hydraulic armillary sphere and seismometer in this dynasty’s second capital of Luòyáng (“l’woh-yahng”). Monopolies on salt and iron funded this dynasty’s southward conquest of the Yuè (“yoo-eh”), which began the first “Northern Domination” under the Legalist rule of Wǔdì (“oo-dee”). Vietnam later rebelled against this dynasty under the Trưng (“jung”) sisters. For 10 points, the Pax Romana was roughly contemporary with the “Eastern” period of what dynasty that succeeded the Qín (“chin”)?

ANSWER: **Hàn** dynasty [or **Hàn**cháo; accept Western **Hàn** or Xī**hàn** or Former **Hàn** or Qián**hàn**; accept Eastern **Hàn** or Dōng**hàn** or Later **Hàn** or Hòu**hàn**; accept Emperor Wǔ of **Hàn** or **Hàn** Wǔdì; accept Four Commanderies of **Hàn** or **Hàn** Sìjùn; reject “Xīn dynasty”]

<Other History>

5. A subsidiary of this brand hired female directors like Isobel Sandoval and Ava DuVernay to make short films for the *Women’s Tales* series. Catherine Martin worked with this company to design the dresses for her husband Baz Luhrmann’s adaptation of *The Great Gatsby*. Sexism in the fashion industry has been highlighted by an anonymous Instagram account called “Diet” this brand. Vandals painted the words “Dum Dum” on an Elmgreen and Dragset installation that resembles one of this brand’s stores in Marfa, Texas. This company sells nylon Saffiano handbags and owns the Miu Miu (“myoo myoo”) brand. Some design executives refused to cameo in a film named for this brand due to fear of *Vogue* editor Anna Wintour. For 10 points, the title of a Meryl Streep film claims that “the Devil wears” what brand?

ANSWER: **Prada** [accept *The Devil Wears* ***Prada***; accept ***Prada*** *Marfa*; accept Diet **Prada**; accept **Miu Miu** until read, and prompt afterwards by asking “what company owns Miu Miu?”]

<Other Fine Arts (Design)>

6. In this author's last story, a man goes insane from excessively reading about metempsychosis (“met-em-sai-KOH-siss”)*.* In a story by this author of “Dr. Heraclius Gloss,” peasants think that a church bell is bewitched due to its constant ringing after Baron von Eyrick’s funeral. Two fishermen are executed for refusing to give up a password in this author’s story “Two Friends.” A character created by this author is stabbed with a dessert knife by the prostitute Rachel and receives the title nickname from his fellow Prussian officers. This author wrote a story in which Madame Loisel (“l’wah-ZELL”) spends years trying to pay off an object until Madame Forestier (“foh-rest-YAY”) reveals that it was made of paste. For 10 points, name this French author of “Mademoiselle Fifi” and “The Necklace.”

ANSWER: Guy de **Maupassant** (“ghee duh moh-pah-SAHNT”) [or Henri René Albert Guy de **Maupassant**]

<European Literature>

7. This activity names a tentative World Heritage Site at a counterpart of Mayumba in the former Vili Kingdom of Loango. F. F. de Souza (“jee SOH-zuh”) briefly revitalized this declining activity under King Gezo (“GAY-zoh”), as attested by records of palm oil from Ouidah (“WEE-duh”) in a former Oyo tributary. Nominal opposition to this activity led the French navy to hire Mpongwe (“mm-PAWNG-way”) craftsmen to build the modern-day capital of Gabon (“gah-BONE”). 2019’s “Year of Return” memorialized this activity, whose supposed hub at a “house” with a feared “door” was fabricated by Boubacar Joseph Ndiaye (“boo-bah-CAR zho-ZEFF nn-d’YAI”) on Gorée (“go-RAY”) Island. Europeans exaggerated Dahomey’s (“duh-HOH-mee’s”) primacy in this activity, whose 1807 British prohibition was achieved by activists like Olaudah Equiano (“uh-LAO-duh eh-quee-AH-no”). For 10 points, what activity based in the Bights of Biafra and Benin transported millions through the Middle Passage?

ANSWER: **slave** trade [accept **enslave**ment or **slavery** or **forced labor** or equivalents; accept transatlantic **slave** trade; accept **Slave** Trade Act 1807; accept “**Slave** Coast”; accept “House of **Slave**s” or “Maison des **Esclave**s”; accept Loango **Slavery** Harbor; prompt on trade or export or sales or harbors or ports or similar by asking “what specific activity with an economic component?”] (Gabon’s capital is called Libreville because of an abortive plan to settle freedmen there. The door was the so-called “Door of No Return.”)

<World History>

8. A hydrodynamic form of this technique in which a centrifuge rotates along a “planetary” axis to hold liquid molecules in place is named for “counter-currents.” This technique’s standard paradigm may be reversed by components marked “C18.” A form of this technique is sped up with inert gas pressure. In a form of this technique, a capillary tube can be used to “spot” samples onto silica gel plates before developing them in a solvent system such as ethyl acetate. Different marker dyes can be distinguished by using water to separate spots on a cellulose backing in a form of this technique named for “paper.” For 10 points, name this technique in which a mixture of compounds is separated by running a mobile phase through a stationary phase.

ANSWER: **chromatography** [accept paper **chromatography**, thin-layer **chromatography**, gas **chromatography**, high-performance liquid **chromatography**, flash column **chromatography**, or counter-current **chromatography**, or column **chromatography**; accept **PC** or **TLC** or **GC** or **LC** or **HPLC** or **FCC** or **CCC** or **CC**]

<Chemistry>

9. A poem by this author describes “a longing like despair” for a woman separated by “the unplumb’d, salt, estranging sea.” That poem, which notes, “we mortal millions live alone,” is the sequel to a poem by this author titled “Isolation.” During his honeymoon with Frances Wightman, this author wrote a poem that asks the addressee “come to the window, sweet is the night-air!” This author collected the poem “To Marguerite” with his long dramatic poem *Empedocles on Etna*. This poet described a “long, withdrawing roar” in a poem that imagines what “Sophocles, long ago, heard on the Aegean” and declares, “ah, love, let us be true to one another!” For 10 points, name this poet who described a “darkling plain…where ignorant armies clash by night” in his poem “Dover Beach.”

ANSWER: Matthew **Arnold**

<British Literature>

10. This quantity’s relative importance in India and Turkey is compared in a 1974 paper by Anne Krueger. A behavior named for this quantity has counterintuitively low costs per the Tullock paradox. Grades numbered 1, 2, and 3 are invoked in *On the Principles of Political Economy and Taxation* to show that this quantity should equal the corresponding maximum economic advantage. David Ricardo names that law concerning this quantity, whose “seeking” is a behavior that increases one’s own wealth without creating new wealth. This quantity is the income earned from the ownership of a factor of production. For 10 points, what quantity shares its name with the money paid by a lessee to a lessor in exchange for temporary usage of a property?

ANSWER: economic **rent** [or word forms like **rent**ers; accept **rent**-seeking; accept Ricardo’s law of **rent**]

<Social Science>

11. A man in this play argues with his lover whether life is an endless circle or an endless line, before he refers to her as “what the New World hath finally wrought.” In this play, a snotty college student says, “Good night, Prometheus,” to a man who later angrily tells his wife, “who even cares about you?” That man in this play drunkenly calls himself “Flaming Spear” while his sister chants “OCOMOGOSIAY!” This play ends with a woman retrieving her wilting houseplant after forgiving her son for losing his father’s ten-thousand-dollar life insurance check on a liquor store investment. In this play, Karl Lindner is rebuffed for trying to stop the central family from moving to Clybourne Park. For 10 points, name this play about the Younger family by Lorraine Hansberry.

ANSWER: *A* ***Raisin in the Sun***

<American Literature>

12. A story in which the king Thamus chastises this deity for making people lose their memories is related in Plato’s dialogue *Phaedrus*. Amulets that may reference a story in which this deity “fills” a god’s torn-out eye were found in 2020 in the tombs of high clergy at Tuna el-Gebel (“TOO-nah ell-gah-BALL”). Serpents guarded five nested boxes at the bottom of a river that hold this deity’s spellbook. This deity’s cult center was in Hermopolis, which was named after the Greeks’ syncretization of him with Hermes. This deity gives Isis the words for her and Osiris (“oh-SAI-riss”) to conceive Horus. The Egyptians credited this deity with inventing hieroglyphs. For 10 points, name this Egyptian god of knowledge who is often portrayed with the head of an ibis.

ANSWER: **Thoth** [or **Djehuty**; or **Tehut**; or **Thōout**; or **Ḏḥwtj**]

<Mythology>

13. In a painting from this movement, a woman in white stands between a woman with sheet music and a woman with a palette. That self-portrait is by an artist from this movement who also created a painting in which a woman holds a necklace while another virtuously gestures to her sons. An artist from this movement painted *Cornelia Presenting Her Children as Her Treasures* and a portrait of a German art historian whose work influenced this movement, Johann Winckelmann (“VIN-kell-mahn”). Women weep as three soldiers raise their arms in salute in a painting from this movement, *The Oath of the Horatii* (“hoh-RAY-shee-ai”). For 10 points, name this 18th-century movement that included Angelica Kauffmann and Jacques-Louis David, and sought to revive ideals from Greek and Roman art.

ANSWER: **Neoclassicism** [or **Neoclassical** art or the **Neoclassicist**s or **Néo-classicisme** or **Klassizismus** or **Neoklassizismus** or **Neuklassizismus**; prompt on history painting or historical painting; prompt on classicism]

<Painting & Sculpture>

14. A text in this language challenges the dualist-physicalist dichotomy by arguing that Socrates and his soul aren’t identical, yet are both subjects of existence. That text’s distinction between essence and existence inspired a school of existentialism founded by Jacques Maritain. A philosopher who wrote in this language used the phrase “faith seeking understanding” to describe his philosophical approach in a text that contains an argument that was challenged by Gaunilo (“gah-NEE-loh”). A text written in this language includes arguments “from degree” and “from contingency” as two of the so-called “five ways.” The ontological argument first appeared in a text in this language by Anselm of Canterbury. For 10 points, name this language used by Thomas Aquinas to write *Summa Theologica*.

ANSWER: **Latin** [or lingua **Latina**; or **Latinum**; accept Ecclesiastical **Latin**; accept Medieval **Latin**]

<Philosophy>

15. An assay for this process uses GR24 to induce it, then stains with TTC or MTT. An ability to induce this process allowed scientists to discover strigolactones. Borthwick et al. showed that pulses of red light could activate this process, an effect mediated by phytochromes. Depending on where this process occurs, it can be considered epigeal (“ep-uh-JEE-ull”) or hypogeal. Imbibition promotes this process, during which the aleurone layer secretes amylase (“AM-uh-laze”) to break down the endosperm. During this process, the first structure to emerge is the radicle. This process occurs when gibberellin (“jib-uh-RELL-in”) secretion overcomes the effects of abscisic (“ab-SISS-ick”) acid, resulting in rupture of the coat. For 10 points, name this process in which a new plant emerges from a seed.

ANSWER: **germination** [or word forms like **germinat**ing; or **sprout**ing; prompt on descriptions like a plant bursting from its seed or emergence of a new plant]

<Biology>

16. A speech given in this election year ends with its speaker chanting the phrase "Keep Hope Alive!" thrice. During this election’s primary, the *National Enquirer* published a photograph of a candidate aboard the yacht *Monkey Business*. During this election’s vice presidential debates, a participant was told “senator, you’re no Jack Kennedy” by Lloyd Bentsen. A vicious attack ad during this election asked viewers if they were okay with “weekend prison passes” for a man convicted of armed robbery and rape. This election’s loser was hurt by a photo-op taken in a tank and the Willie Horton ad, while the winner promised “read my lips: no new taxes.” For 10 points, name this election in which Michael Dukakis was defeated by George H. W. Bush.

ANSWER: **1988** US presidential election [or United States presidential election of **1988**; prompt on election of ‘88]

<American History>

17. A composer from this country wrote a cantata whose four movements celebrate spring plowing, planting seeds, the harvest, and the “abundant year.” In a violin concerto from this country, the soloist enters [read slowly] B, D E-F and a sudden high note in the sixth movement represents a title character’s suicide. A composer from this country allegedly took only six days to write a cantata with a prelude about boatmen on the title river that was adapted into a piano concerto. A concerto inspired by this country’s legend of the Butterfly Lovers is often performed on this country’s traditional instruments, such as the two-stringed, bowed èrhú (“arr-hoo”) and the liǔqín (“lee-oh-chin”). For 10 points, name this home country of Chén Gāng (“chun gahng”) and Hé Zhànháo (“huh jahn-how”).

ANSWER: **China** [or People’s Republic of **China**; or **PRC**; or **Zhōngguó**; or **Zhōnghuá** Rénmín Gònghéguó; reject “Republic of China”] (The piece in the first sentence is Xiǎn Xīnghǎi’s *Production Cantata*; the piece in the third sentence is his *Yellow River Cantata*.)

<Classical Music>

18. The 20-year-old protagonist of a novel by this author is raised by a couple who own a dry goods store, who tell her that she is a foundling. In another novel by this author, the protagonist recollects how as a child, he saw a woman trim hair on a large birthmark on her breast. The suitor Hideo (“HIH-dee-oh”) confuses Naeko (“NAH-eh-koh”) with her twin sister Chieko (“chee-EH-koh”) in this author’s novel *The Old Capital*. In another novel by this author, a woman smashes her mother’s old Shino bowl and Mrs. Ota commits suicide shortly after sleeping with Kikuji. One of this author’s protagonists looks up at the Milky Way while a fire rages in a hot springs town after he has an affair with a geisha named Komako. For 10 points, name this Japanese author of *Thousand Cranes* and *Snow Country*.

ANSWER: Yasunari **Kawabata** [or **Kawabata** Yasunari]

<World Literature>

19. Equations named for this shape can be stably solved by using the Forward Time Centered Space scheme, as well as variants of the Crank–Nicolson method. A class of equations named for this shape is related by the Feynman–Kac (“kots”) formula to stochastic processes. A class of PDEs named for this shape is exemplified by [read slowly] “u sub t equals the Laplacian of u,” which is the heat equation. Graphs are approximated with parts of these shapes in Simpson’s method of numerical integration. This 2D shape names a type of “reflector” that reflects parallel incident light to this shape’s single focus. For 10 points, with negligible air resistance, projectiles follow what open conic sections that form the graphs of quadratic functions?

ANSWER: **parabola** [accept **parabolic** partial differential equation; accept **parabolic** reflector; accept accept **paraboloid** or **paraboloid**al in place of “parabolic”]

<Other Science>

20. A resource is extracted from this commodity in a steam-based process patented by Norway’s Möller family. A so-called “war” fought over this commodity led to the sinking of the patrol boat *Aegir* after it collided with the frigate *Apollo*. A prized variety of this commodity was extracted with a small ventjager(“VENT-yah-kher”) that assisted a type of Dutch “buss.” The Spanish and Portuguese acquired this commodity from the Flemish Cap near a “Grand” feature in Newfoundland. The Dogger Bank is named after objects used to obtain this commodity, which the Romans used to make garum. After fighting Iceland in a 1970s “war” over this commodity, the UK abandoned its “open seas” approach to acquiring it. For 10 points, name this commodity obtained by trawling.

ANSWER: **fish** [accept **cod** or Atlantic **cod** or ***Gadus*** *morhua* or **Cod** Wars or Second **Cod** War; accept **herring** or Atlantic **herring** or *Clupea harengus* or **herring** buss; accept **fish** oil; accept **fish**ing banks or **fish**ing boats; prompt on seafood or meat or protein; prompt on oil by asking “derived from what commodity?”] (The first clue refers to Möller fish oil.)

<European History>

TB. 388 distinct frequencies corresponding to these phenomena were discovered by a scientist who described them using six “arguments” denoted “beta 1” to “beta 6.” These phenomena are described by the Doodson numbers, which can be established using a set of PDEs that relate two directional derivatives of “velocity times height” to the time derivative of vorticity, and which are named for Pierre-Simon Laplace (“pee-AYR sih-MOHN lah-PLAHSS”). A component of these phenomena has zero magnitude at amphidromic points. When these often semidiurnal phenomena are at their maximum and minimum, they are respectively referred to as their “spring” and “neap” types. For 10 points, the Earth’s gravitational attraction to the Sun and Moon contributes to what cyclical changes in water level?

ANSWER: **tide**s [accept **tidal** forces or spring **tide**s or neap **tide**s; prompt on water waves or surface waves]

<TB (Other Science)>

Bonuses

1. The French scientist Emilie du Châtelet (“shot-LAY”) used this two-word term to refer to an early form of conserved energy. For 10 points each:

[10h] Give this two-word term that names an orbital equation derived from the conservation of energy, which gives the speed squared at any point in a Keplerian orbit.

ANSWER: ***vis viva*** [accept ***vis viva*** equation]

[10e] du Châtelet's concept of *vis viva* is similar to modern definitions of this form of energy, which is equal to one half mass times speed squared.

ANSWER: **kinetic** energy [accept translational **kinetic** energy; prompt on KE or T]

[10m] du Châtelet also produced the standard French translation of this 1687 book, whose section *De motu corporum* (“day MOH-too cor-POR-um”) states the inverse-square law of gravity and derives many results in orbital mechanics.

ANSWER: ***Principia*** [or *Philosophiæ Naturalis* ***Principia*** *Mathematica*;or *Mathematical* ***Principles*** *of Natural Philosophy*] (It was written by Isaac Newton.)

<Physics>

2. This thing’s disappearance is compared to watching “the stain of the rainbow fading out of the sky.” For 10 points each:

[10h] Name this thing that resembles a small crimson hand. A scientist who finds this thing a “frightful object” creates an elixir to remove it, which he first tests on a geranium.

ANSWER: Georgiana’s **birth-mark** [accept “The **Birth-Mark**”]

[10e] This author described Aylmer’s fatal experiments on his young wife Georgiana in his story “The Birth-Mark.” He also wrote *The Scarlet Letter*.

ANSWER: Nathaniel **Hawthorne**

[10m] In this story by Hawthorne, Giovanni realizes that the title character, Beatrice, has become as poisonous as the plants that her botanist father grows.

ANSWER: “**Rappaccini’s Daughter**”

<American Literature>

3. Guillaume Apollinaire (“ghee-YOHM ah-poh-lee-NAIR”) coined the term “surrealism” in response to this composer’s ballet *Parade*. For 10 points each:

[10m] Name this French avant-garde composer and mentor of Les Six (“lay seess”), who wrote the repetitive piece *Vexations* and *Three Pieces in the Shape of a Pear*.

ANSWER: Erik **Satie** [or Eric Alfred Leslie **Satie**]

[10e] After founding a spoof of the Rosicrucian sect, Satie wrote a *Messe des pauvres* (“mess day pohv”) featuring this instrument. Satie’s Notre Dame-inspired piece *Ogives* (“oh-ZHEEV”) imitates these keyboard instruments that drive air through pipes.

ANSWER: pipe **organ**s

[10h] These Satie piano pieces with no bar lines or time signatures were partly inspired by Indonesian music. Satie’s involvement with esoteric sects likely inspired the name he coined for these slow, free-time pieces.

ANSWER: ***Gnossienne****s* (“naw-SYEN”) [accept *Three* ***Gnossienne****s*or *Trois* ***Gnossienne****s*]

<Classical Music>

4. In the years before this conflict, the Cananea strike led by Sonora’s copper miners and the Río Blanco strike of textile workers in Veracruz and Puebla epitomized popular discontent with the government. For 10 points each:

[10e] Emiliano Zapata led an agrarian faction during what 1910–1920 civil war that ended the 35-year administration of the Porfiriato?

ANSWER: **Mexican Revolution** [or **Revolución mexicana**; reject “Mexican Civil War”]

[10h] During the Mexican Revolution, Venustiano Carranza canceled a Red Cross mission to control Mexico City’s 1915 outbreak of this disease. Mexico adopted DDT to combat malaria and this louse-borne disease.

ANSWER: **typhus** [or **typhus** fever or epidemic **typhus**; accept endemic **typhus** or murine **typhus**; accept scrub **typhus**; reject “typhoid” or “typhoid fever”] (The Instituto Nacional Indigenista led preventative medicine campaigns with DDT.)

[10m] Women protested border delousing measures to control typhus in this city’s 1917 “Bath Riots.” This city is named for a Zapotec president of Mexico who enacted liberal anticlerical laws during the War of the Reform.

ANSWER: **Juárez** [or Ciudad **Juárez** or **Juárez** City; accept El **Paso del Norte**; accept Benito **Juárez** or Benito Pablo **Juárez** García]

<World History>

5. The author of this sociological essay states that he understands a central concept as “the ownership of the earth forever and ever, Amen!” For 10 points each:

[10h] Name this essay that first appeared in the collection *Darkwater: Voices from Within the Veil.* The author states that “none intrigue me more” than this essay’s title group, whose prized attribute is “a very modern thing.”

ANSWER: “The **Souls of White Folk**” [reject “The Souls of Black Folk”]

[10e] This author of the essay “The Souls of White Folk” coined the term “double-consciousness” and stated that the title people live “within the Veil” in his book *The Souls of Black Folk*.

ANSWER: W. E. B. **Du Bois** (“doo BOYZ”) [or William Edward Burghardt **Du Bois**]

[10m] In the final chapter of *The Souls of Black Folk*, Du Bois discusses this type of work, preserved by writers such as Lucy McKim Garrison. Each chapter of *The Souls of Black Folk* begins with a poem and an excerpt from these American works.

ANSWER: **spiritual**s [accept “Of the **Sorrow Songs**”; prompt on Christian music or songs or hymns]

<Social Science>

6. The Talmudic tractate *Sanhedrin* (“san-HEE-drin”) calls Adam one of these beings, since he was a creature of dust who was given life. For 10 points each:

[10e] Name these anthropomorphic creatures from Jewish folklore that are usually made from animated mud. The most famous of these creatures was created to defend Prague in the 16th century.

ANSWER: **golem**s

[10h] In the Prague legend, this Rabbi created the golem to protect the Jewish community. He later had to deactivate the golem by removing the scroll from its mouth when it became uncontrollable.

ANSWER: Judah **Loew** ben Bezalel (“YOO-dah LAYV ben beh-ZAH-lull”) [or Yehuda **Loew** or Yehuda **Lev** or Yehuda **Leib**; or Rabbi **Loew**; or the **Maharal** of Prague]

[10m] The scroll in a golem’s mouth obtains its power from one of these things inscribed on it. The Quran lists 99 of these things, such as “The Subduer,” “The Witness,” and “The Beneficent.”

ANSWER: **name**s of **God** [or equivalents such as **title**s for **God** or **epithet**s for **God**; accept **Allah,** **Yahweh**, **Adonai**, **Shaddai**, **Tzevaot**, **El**, or **Elohim** in place of “God”; prompt on names or equivalents]

<Mythology>

7. J. P. Morgan helped to end the Panic of 1907 by pledging to invest his personal money into keeping these institutions afloat. For 10 points each:

[10e] Name these financial institutions that were subjected to “runs” during periods of financial instability.

ANSWER: **bank**s [accept **bank** runs]

[10h] Prior to the Panic of 1907, Charles W. Morse, the so-called “king” of this good, attempted to buy up as many shares of United Copper as possible. Another “king” of this good, Frederic Tudor, used a massive fleet of ships to deliver it from New England to the Caribbean.

ANSWER: **ice** [prompt on water or H2O]

[10m] The events of the Panic of 1907 included the collapse of New York’s third-largest trust, which was named after this word. A satirical 1809 history popularized this term for New Yorkers who had Dutch ancestry.

ANSWER: **knickerbocker** [accept ***Knickerbocker****'s History of New York*; accept Dietrich **Knickerbocker**; accept **Knickerbocker** Trust Company]

<American History>

8. Inulin (“IN-yoo-lin”) usually gives a very accurate measure of this organ’s function because it is not secreted or reabsorbed by its tubules. For 10 points each:

[10e] Name this organ whose functional unit is the nephron. An ascending infection of the urinary tract can cause an infection of this organ called pyelonephritis (“PAI-loh-neh-FRY-tiss”).

ANSWER: **kidney** [accept **kidney** tubules or **renal** tubules]

[10h] One way to assess kidney function is measuring the blood level of this byproduct of muscle metabolism. The Cockcroft–Gault formula calculates the estimated clearance of this molecule from its level in serum.

ANSWER: **creatinine** [accept **creatinine** clearance; reject “creatine” (ask players to spell their answer if necessary)]

[10m] Creatinine clearance estimates the glomerular filtration rate, which is highly dependent on the dilation and contraction of afferent and efferent examples of these vessels. They are smaller than arteries.

ANSWER: **arteriole**s [accept afferent **arteriole**s or efferent **arteriole**s]

<Biology>

9. This author described the “mad impulse / to put them / into a golden / cage” in a poem addressed to his socks. For 10 points each:

[10e] Name this Chilean poet who used more conventional addressees for his collection *Twenty Love Poems and a Song of Despair*.

ANSWER: Pablo **Neruda** [or Neftali Ricardo **Reyes** Basoalto]

[10m] Neruda included that poem about his socks in this collection of poems, which are addressed to ordinary objects like “A Large Tuna in the Market.”

ANSWER: ***Elemental Odes*** [or ***Elementary Odes*** or ***Odas elementales***; prompt on Neruda’s odes]

[10h] In an ode addressed to this poet, Neruda described the time they both spent in Europe, which inspired this poet’s work *Spain, Take This Cup From Me*. This Peruvian poet wrote *The Black Heralds* and *Trilce* (“TREEL-say”).

ANSWER: César **Vallejo** [or César Abraham **Vallejo** Mendoza]

<World Literature>

10. Answer the following about various defenestrations of Prague, for 10 points each.

[10m] In the First Defenestration of Prague, council members were killed by supporters of this reformist Bohemian theologian, who was burned at the stake at the Council of Constance.

ANSWER: Jan **Hus** [or John **Hus** or Johannes **Hus** or Johannes **Huss**]

[10e] The more famous 1618 Defenestration of Prague led to this conflict, whose Bohemian phase ended with the Battle of White Mountain. This conflict pitted the Catholic League against various Protestant kingdoms.

ANSWER: **Thirty Years**’ War [or **Dreißigjähriger** Krieg or **Třicetiletá** válka]

[10h] Believers in a modern Defenestration of Prague argue that a Czechoslovak Minister of Foreign Affairs with this surname was murdered. His father, who also had this surname, was the first president of Czechoslovakia.

ANSWER: **Masaryk** [accept Tomáš Garrigue **Masaryk**; accept Jan **Masaryk** or Jan Garrigue **Masaryk**]

<European History>

11. Complexes with this geometry usually split their d-orbitals into four energy levels and belong to the D4h (“D-four-h”) point group. For 10 points each:

[10m] Name this geometry of 16-electron complexes like cisplatin (“SISS-plat-in”) and xenon tetrafluoride.

ANSWER: **square planar**

[10e] Square planar complexes are typically low-spin complexes, meaning that these negatively charged particles fill the d orbitals according to the Aufbau principle.

ANSWER: **electron**s [accept **e-** (“e-minus”)]

[10h] Generally speaking, a complex with a large value for this quantity tends to be low-spin. For a low-spin complex, this quantity is greater than the electron pairing energy.

ANSWER: **delta** [or crystal field **splitting** energy; or **CFSE** or crystal field **splitting** parameter; accept ligand-field **splitting** parameter or **LFSE**]

<Chemistry>

12. Answer the following about the Muslim musician Yusef Lateef, who pioneered the use of non-Western instruments in jazz, for 10 points each.

[10e] Lateef switched to playing this instrument’s tenor variety after hearing the distinct playing style of Lester Young, who also influenced Charlie Parker’s style on this instrument.

ANSWER: **saxophone** [accept tenor **saxophone**; accept alto **saxophone**; accept **sax**]

[10m] Lateef converted to Islam while touring with this bandleader, who himself considered converting to Islam before embracing the Baháʼí Faith after MLK’s death. This bandleader disliked the title of his standard “A Night in Tunisia.”

ANSWER: Dizzy **Gillespie** [or John Birks **Gillespie**]

[10h] Lateef’s album *Into Something* features the signature triplet fills of this drummer. This drummer strikes a gong to open the track “Acknowledgement” on John Coltrane’s album *A Love Supreme*.

ANSWER: Elvin **Jones** [or Elvin Ray **Jones**]

<Other Fine Arts (Jazz)>

13. The widespread use of these components in cryptocurrency mining has caused a rapid rise in the prices of models such as the RTX 3090 (“thirty-ninety”). For 10 points each:

[10e] NVIDIA’s (“en-VID-ee-uh’s”) GeForce (“G-force”) is a popular type of what “processing units,” which are intended to aid the creation of their eponymous images?

ANSWER: **graphic**s processing units [or **GPU**s; accept **graphic**s cards]

[10h] Since 2007, NVIDIA’s GPUs have used this parallel computing platform with a language based on C++ (“C plus plus”), which only has one-way interoperability with competitors like OpenGL.

ANSWER: **CUDA** (“COO-dah”) [or **Complete Unified Device Architecture**]

[10m] NVIDIA has recently supplied GPU firmware updates to ensure compatibility with this video interface, whose standards were designed by VESA (“VEE-sah”) to provide higher resolution than VGA.

ANSWER: **DisplayPort** [or **DP**]

<Other Science>

14. Examples of these objects called Śarīra (“shuh-REE-ruh”) are often placed in hemispherical buildings so that pilgrims can walk around them. For 10 points each:

[10m] Name these items that Ashoka the Great supposedly housed in 84 thousand newly constructed stupas.

ANSWER: **relic**s of the Buddha [accept **hair**, **nail**s, **teeth**, or **ash**es of the Buddha; accept **bucket** or **vessel** used to hold the ashes of the Buddha]

[10e] Relics of the Buddha include hair, nails, teeth, and bodily remains that were left after his body was disposed of in this way, which involved a funeral pyre.

ANSWER: **cremation** [or being **cremate**d; or **burn**ing bodies or by **fire** or equivalents]

[10h] Many stupas have reliefs or paintings of these stories whose name literally means “birth story.” Animals often feature in these stories of the previous lives of the Buddha that illustrate various virtues.

ANSWER: **Jātaka** tales [or **Jātaka**s or **Jātaka** stories]

<Religion>

15. This author wrote *The Crime of the Congo* to publicize Belgian atrocities in the Congo Free State. For 10 points each:

[10m] Name this British author and political advocate who fictionalized Roger Casement and other petitioners for Congo reform as characters in his science fiction novel *The Lost World*, which introduced Professor Challenger.

ANSWER: Arthur Conan **Doyle** [or Arthur Ignatius Conan **Doyle**]

[10e] Doyle frequently imbued themes of social justice into his stories about this consulting detective, who solves mysteries with the help of John Watson.

ANSWER: **Sherlock** Holmes [or Sherlock **Holmes**]

[10h] This author’s novel *Arthur & George* retells Doyle’s efforts to clear a half-Indian lawyer’s name from false accusations of pony abuse. In another novel by this author, a retired doctor searches for the source of a character from the story “A Simple Heart.”

ANSWER: Julian **Barnes** [or Julian Patrick **Barnes**] (The other novel is *Flaubert’s Parrot*.)

<British Literature>

16. Robert Hughes’s history *The Fatal Shore* describes the many lesbians who were imprisoned at this island’s Cascades Female Factory in the 1840s. For 10 points each:

[10m] Name this island where the explorer John Franklin’s wife Jane founded apple orchards and a Royal Society. The novel *English Passengers* fictionalizes Manx settlers of this island’s colony of Van Diemen’s Land.

ANSWER: **Tasmania** [or **lutruwita**; accept Royal Society of **Tasmania**; reject “Australia”] (Matthew Kneale wrote *English Passengers*.)

[10h] Fanny Cochrane Smith recorded the last Native Tasmanian songs after its Palawa people largely died in this event instigated by George Arthur around 1830. Keith Windschuttle denied this event’s genocide status in the “history wars.”

ANSWER: **Black** War [accept **Black** Line; prompt on Australian frontier wars]

[10e] T. C. Winegard compared the Black War with this ethnic group’s genocide of the Chatham Islands Moriori (“mor-ee-OR-ee”). This ethnic group gave the name “Aotearoa” (“OW-tay-ah-ROH-ah”) to New Zealand.

ANSWER: **Māori** people [prompt on Polynesians]

<Other History>

17. Auguste Comte (“KAHMT”) coined the term for this ethical doctrine, calling it “the definitive formula of human morality.” For 10 points each:

[10m] Name this ethical doctrine that partly names a modern movement that prioritizes actions that benefit as many people as possible, such as buying malaria nets.

ANSWER: **altruism** [or word forms like **altruist**; or **altruisme**; accept ethical **altruism** or moralistic **altruism**; accept effective **altruism**; prompt on, but DO NOT OTHERWISE REVEAL, utilitarianism]

[10h] Effective altruism is often connected to this thinker’s argument that humanity’s priority should be to “reduce existential risk.” This author of the 2014 book *Superintelligence* popularized the idea that our world is a simulation.

ANSWER: Nick **Bostrom** [or Niklas **Boström**]

[10e] Altruism is rooted in the doctrines of this moral philosophy developed by Jeremy Bentham, which supports maximizing happiness for all individuals.

ANSWER: **utilitarian**ism [or **utilitarian** thought]

<Philosophy>

18. A marble sculpture of this figure by Michelangelo was first installed at the entrance of the Palazzo Vecchio (“pah-LOT-zoh VECK-yoh”), while another artist’s bronze version of this figure was first displayed inside the building. For 10 points each:

[10e] Name this figure whom a bronze Donatello sculpture depicts atop the head of Goliath.

ANSWER: **David** [or **Davide**; or King **David**]  
[10h] The Palazzo Vecchio houses this other artist’s bronze statue of David wearing a leather tunic and standing on Goliath’s head. This artist also sculpted *Christ and St. Thomas* for the Orsanmichele (“or-sahm-mee-KEH-lay”).

ANSWER: Andrea del **Verrocchio** (“veh-ROH-kyoh”) [or Andrea di Michele di Francesco de’ **Cioni**]

[10m] Donatello, Verrocchio, and Michelangelo’s statues of David all make use of this pose with an Italian name. In this pose, a figure’s weight rests on one foot, which tilts the hips and creates a relaxed appearance.

ANSWER: **contrapposto**

<Painting & Sculpture>

19. A character in this memoir struggles to recite the “Canto of Ulysses” from Dante’s *Inferno* to Jean (“zhahn”). For 10 points each:

[10h] Name this memoir whose final section, “The Story of Ten Days,” describes the author’s friend Alberto leaving on a forced march that results in his death.

ANSWER: ***If This is a Man*** [or ***Survival in Auschwitz***; or ***Se questo è un uomo***]

[10e] Primo Levi’s memoir *If This is a Man* and Elie Wiesel’s memoir *Night* recount their experiences surviving this event. Anne Frank’s diary describes her time hiding in an attic until she was killed due to this event.

ANSWER: **Holocaust** [or ha**Shoah**; prompt on World War II]

[10m] A series of sentences in *Night* that begin with this word describe “flames that consumed my faith forever” and “moments that murdered my God.” Wiesel and other survivors promoted the use of a phrase from a Hebrew poem beginning with this word for Holocaust remembrance.

ANSWER: **never** [or **keynmol**; or **le-olam lo**; accept “**never** forget” or “**never** again”]

<European Literature>

20. Referencing his self-created nickname “Mr. Unlimmmmited,” critics called a quarterback for a team in this city “Mr. Limmmmited” after a grisly 12-9 loss to the Colts. For 10 points each:

[10e] Name this city whose NFL team, the Broncos, has been criticized for the underperformance of its new quarterback Russell Wilson. This city is also home to the Rockies in the MLB.

ANSWER: **Denver**, Colorado [accept **Denver** Broncos]

[10h] Before the 2022 season, the Broncos released a promo video in which Wilson tells “Broncos country” this two-word phrase in front of a green screen in increasingly awkward tones and cadences.

ANSWER: **let’s ride** [or “Broncos country, **let’s ride**”]

[10m] Wilson claimed that his “dangerwich” was “daaaangerously good” in an ad for a new line of Subway sandwiches that also features this player’s “Meatball Marksman.” This player used his “night night” celebration against the Celtics in the 2022 NBA Finals.

ANSWER: Steph **Curry** [or Wardell Stephen **Curry** II]

<Popular Culture>

TB. In a play, this activity is initiated after a character is mocked for a story about a matricidal schoolboy who orders “bergin and water.” For 10 points each:

[10h] Name this activity in which a man describes the plot of a novel about a blonde professor and his “mousie” wife, who has a hysterical pregnancy after “tooting brandy immodestly,” in the section “Walpurgisnacht.”

ANSWER: “**Get the Guests**” [prompt on, but DO NOT OTHERWISE REVEAL, George’s game or the game from *Who’s Afraid of Virginia Woolf?*]

[10m] This dramatic character makes up “Get the Guests” in order to belittle Nick and Honey, who eventually learn that this character and his wife Martha have been lying about the existence of their own son.

ANSWER: **George**

[10e] This American playwright created the dysfunctional couple George and Martha in his play *Who’s Afraid of Virginia Woolf?*

ANSWER: Edward **Albee** [or Edward Franklin **Albee** III]

<TB (American Literature)>