

2021 ACF Winter

Packet H by Cornell B, Kentucky A, Stanford A

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Tossups

1. During this conflict, freed Chinese slaves nicknamed a general of Irish descent the “Red Prince.” During a battle in this conflict, an admiral known as the “Gentleman of the Seas” saved sinking crewmen. One country celebrates Navy Day on May 21st to commemorate a battle during this conflict in which the *Esmeralda* was sunk. The CSFA’s refusal to pay a ten cent tax catalyzed this conflict, which ended one country’s Guano era. During this conflict, Admiral Miguel Grau commanded the *Huáscar* to victory at the naval Battle of Iquique while he tried to secure the port of Antofagasta. After this conflict, one country became landlocked since it lost campaigns in the Atacama Desert. For 10 points, name this conflict in which Chile fought Bolivia and Peru near an eponymous ocean.

ANSWER: War of the **Pacific** [or Guerra del **Pacífico**, accept **Saltpetre** War or Guerra del **salitre**]

<World History>

2. John MacMurray rejected this claim in favor of a philosophical system based on action. In *The History of Madness*, Michel Foucault argued that this claim necessarily denies the possibility of madness by its formulator; that reading was attacked in an essay by Jacques Derrida partially titled for this claim. This claim is the first to be adopted “when we philosophize in order” according to the book that contains the most famous statement of this claim, *Principles of Philosophy*. This claim’s formulator compares its implications to a “clear and distinct idea” of the substance of wax. The formulator of this claim uses it as a starting point in the philosophy of radical doubt presented in *Discourse on Method*. For 10 points, recite this claim that asserts one’s own existence, initially made by René Descartes.

ANSWER: “**Cogito**, ergo sum” [or “**I think, therefore I am**”; or “**je pense, donc je suis**”; accept the **Cogito**; accept “**Cogito** and the History of Madness”; prompt on “**I think**” or “**je pense**”]

<Philosophy>

3. This phenomenon causes orbits to circularize over time, which along with the Kozai mechanism can be used to explain the migration of hot Jupiters. The distance at which this phenomenon dominates is proportional to the cube root of the ratio of two densities. To first order, the strength of this phenomenon is inversely proportional to the cube of distance. Heating caused by this phenomenon explains Io's volcanic activity. This phenomenon is the primary cause of leap seconds. Objects are destroyed by this phenomenon when they pass within the Roche limit. The same side of the Moon always faces the Earth because this phenomenon causes “locking.” For 10 points, name this phenomenon that, on Earth, is observed twice a day with the rise and fall of water levels.

ANSWER: **tidal** force [or **tides**; accept **tidal** circularization or **tidal** heating or **tidal** friction or **tidal** lock or **tidal** locking; prompt on **gravity** or equivalent]

<Other Science>

4. Fraud investigations into this country's prime minister led to the anti-government "It is up to us!" protests organized by Million Moments for Democracy. That prime minister of this country funneled European Union subsidies into his own Stork's Nest Farm and convention center. That owner of the Agrofert conglomerate led this country's populist ANO party. Because of health concerns, this country's president Miloš ("mee-lohsh") Zeman may be removed from office. In this country's 2021 legislative elections, Petr Fiala's Civic Democratic Party ousted the minority government of Andrej Babiš ("bah-bish"). This is the westernmost country in the Visegrád Group, which also includes Poland, Hungary, and Slovakia. For 10 points, the replacement of the koruna with the euro has been postponed in what country, whose capital is Prague?

ANSWER: Czech Republic [or Czechia; or Česká republika]

<CE/Geo/Other/Pop Culture>

5. A character in this play says "Sirius himself shall fall to dust" during a monologue in front of a lake that is interrupted when a man takes off his hat. Characters shout out numbers during a bingo-like game in an act of this play that ends after a doctor claims that one of his medicine bottles has blown up. In this play, a medallion that reads "If you ever need my life, come and take it" is gifted by an aspiring actress to her object of affection. Two red dots and the smell of sulfur represent Satan in a play [emphasize] *within* this play that is watched by characters like the doctor Dorn. In this play, Masha is in love with a writer who shoots himself in the head after he realizes that Nina will not love him. For 10 points, Konstantin Treplev symbolically shoots the title bird in what play by Anton Chekhov?

ANSWER: *The Seagull* [or Chayka]

<European Literature>

6. *Note to moderator: Read the answerline carefully.* Pierre Toubert argued that a transition toward these places entrenched the "seigneurie ("sen-yuh-ree") banale" in Lazio. Under Hungary's Árpád dynasty, these places named a class of warriors called iobagiones ("yo-bah-jee-oh-nace"). The Zwinger and enceinte ("ahn-sent") made some of these places "concentric." These places could receive embrasures, merlons, and machicolations. Over 100 of these places were created by Count Fulk Nerra of Anjou, who influenced later examples like Corfe and Gaillard ("gay-yar"). Bishops granted these places "licenses to crenellate." The Normans built "timber" and "enclosure" types of these structures, which gained donjons, portcullises, shell keeps, and battlements to elaborate on their basic motte-and-bailey design. For 10 points, name these fortified residences of medieval royalty.

ANSWER: castles [or châteaux forts; accept keeps or donjons or motte-and-bailey before read; accept rocks or roches; accept timber castles or enclosure castles or castle warriors; accept encastellation or incastellamento; prompt on fortifications or fortresses or citadels or bastions or garrisons or royal residences or palaces or similar; prompt on battlements or towers or walls or barbicans or gatehouses by asking "in what larger structure?"]

<European History>

7. A "scene and storm trio" from this opera, which Julian Budden described as being "without antecedent," includes an offstage male chorus that wordlessly hums to imitate the wind. A character introduces himself as Gualtier Maldè to another character in this opera, prompting her to sing about his "dearest name" in the aria "Caro Nome." The elderly Count Monterone's warning at the start of this opera prompts the title character to cry "La maledizione!" as his last words. In this opera, Gilda sacrifices herself to save a character from the assassin Sparafucile, which the title character discovers upon hearing a distant reprise of the aria "La donna è mobile." For 10 points, name this Giuseppe Verdi opera titled for a vengeful court jester who works for the Duke of Mantua.

ANSWER: Rigoletto

<Other Arts>

8. The product of two carrier densities is given in terms of an exponential of this quantity according to the law of the junction. A value of this quantity that is proportional to temperature is multiplied by the ideality factor in the Shockley equation. Zener diodes can be used as shunts to regulate this quantity since, unlike other diodes, they allow for reverse conduction at lower values of this quantity. Diodes and insulators both fail to exhibit their characteristic properties at this quantity's "breakdown" values. The sum of the changes in this quantity across the components of a circuit loop is zero by one of Kirchhoff's rules. For 10 points, name this quantity that, for a resistor, equals current times resistance by Ohm's law.

ANSWER: **voltage** [accept thermal **voltage** or Zener **voltage** or breakdown **voltage**; accept electric **potential** difference, but do not accept or prompt on "potential energy" or similar]  
<Physics>

9. *Description acceptable.* A fragmentary poem by Corinna bizarrely attributes proficiency in this skill to Mount Cithaeron. A man who was renowned for this skill had his eyes gouged out after he turned down nine straight nights of intercourse. A figure acquired this skill using an object cursed by Athena after she saw herself with puffed-up cheeks in a mirror. For his proficiency in this skill, the Scythians made Thamyris their king. While trying to teach this skill, Linus was killed by Heracles. This skill was represented by Euterpe, one of the nine Muses. A satyr renowned for this skill was hung upside-down and flayed alive after he lost a contest; that satyr was Marsyas. For 10 points, contests of what skill were often won by Pan using his reed pipes?

ANSWER: **music** [or **singing**; accept **instrument** playing; accept anything that suggests being good at **music** or **instrumental performance**; accept proficiency in specific instruments such as the **lyre** or **flute** or **aulos**; prompt on **performance**; prompt on **storytelling** or **narration**; prompt on **poetry**]  
<Mythology>

10. While discussing this play, a character in a different work labels this play's author a "Gommorahist" ("guh-MOR-uh-ist") and only concerns himself with this play's many outfits and costume changes. A character in this play who states that "sugar is not fashionable" is enraged when she is given cake instead of bread and butter. Another character in this play writes letters to herself and has an imaginary engagement unbeknownst to her fiancé. In this play, the "curiously bad health" of an "invalid friend" conveniently allows one character to miss social obligations. That character plans to be rechristened by Dr. Chasuble in order to please Cecily Cardew. For 10 points, name this comedy about the Bunburyists Jack Worthing and Algernon Moncrieff, who both claim to have the same name, a play by Oscar Wilde.

ANSWER: *The **Importance of Being Earnest*** (The first sentence is from *Travesties* by Tom Stoppard.)  
<British Literature>

11. One of these devices with a bulge near the distal end is named for Ostwald and Folin. A pump is attached to a graduated polystyrene cylinder with a cotton plug in these devices' "serological" type. Multichannel types of these devices handle 8, 12, or 16 samples at once. A novice mistake when using these devices is pushing past the first stop during sample acquisition. "Transfer" examples of these devices are made of a single piece of plastic, while glass ones named for Pasteur are used with a rubber bulb. Fischer and Eppendorf manufacture air displacement types of these devices, which use disposable plastic tips that are ejected into a waste beaker after use. It is generally not recommended to operate these devices by using your mouth to provide the vacuum. For 10 points, name these devices that transfer small amounts of liquid.

ANSWER: **pipettes** [or **pipettor**; accept specific types such as microp**pipettes** or serological **pipettes** or multichannel **pipettes** or transfer **pipettes** or Pasteur **pipettes**; prompt on **syringes**]  
<Chemistry>

12. Many historians believe the earliest evidence of this activity was unearthed from digs at the Jebel Sahaba site in Sudan. Lawrence Keeley argued that this activity occurred in 90 to 95 percent of hunter-gatherer societies, citing the Crow Creek site. For one book, Bill Buford infiltrated and investigated the development of this activity among football fans in England. An “escalator of reason” is one of the forces that has driven the historical decline in this activity according to Steven Pinker’s *The Better Angels of Our Nature*. Napoleon Chagnon reported high levels of this activity among the Yanomami people of the Amazon, and thus claimed to have disproven the notion of a “noble savage.” For 10 points, sectarian tensions can erupt into what aggressive interpersonal activity involving clubs or knives?

ANSWER: **violence** [accept **warfare** or **raiding** or **murder** or **massacres** or **assault** or **violent** crime or **fighting** or word forms; prompt on **crime**]

<Social Science>

13. In a poem, the speaker compares this person’s name to his own and laments that “I am a wandering, bitter shade” and “Closed to me are the portals of fame.” That Helen F. Moore parody was written in response to a poem titled for this person, which describes the dead lying “wrapped in silence so deep and still” while the “watchful night-wind” whispers “All is well!” This person gives “a cry of defiance and not of fear” that echoes “in the hour of darkness and peril and need.” A poem about this man is narrated by the landlord of the Wayside Inn and is set “on the Eighteenth of April in Seventy-Five.” For 10 points, “Listen, my children, and you shall hear” begins a Henry Wadsworth Longfellow poem about what American revolutionary’s “midnight ride?”

ANSWER: Paul **Revere** [or **Paul** Revere; accept “Paul **Revere**’s Ride”]

<American Literature>

14. This good was supplied for export by the penestai, who were viewed as the natives of Thessaly. Athenian women could not enter a contract worth more than one medimnos of this good, which was processed at a special emporion in Piraeus. By 480 BCE, this good was the main export of Tauris, Pontus, and other Greek colonies on the Black Sea. This good and its associated darnel may have given psychoactive properties to kykeon. From 58 BCE, populares like Clodius Pulcher provided this good as a free “cura” or “dole” personified by the goddess Annona. By volume, this was the main good stored in horrea after its production by the class that led the first two Servile Wars on Sicilian latifundia. This was the main product grown by Spartan helots. For 10 points, ancient Greek and Roman diets relied on what staple crops, like durum and barley?

ANSWER: **grain** [or **cereals** or **corn**; accept bread **wheat** or **durum** wheat or **emmer** wheat or **Triticum** or **barley** or **Hordeum vulgare** before any are read; accept **grain** dole or Cura **Annonae** before read; or **sitos** or **frumentum** or **fruges**; prompt on **food** or **alimenta** or similar; prompt on **bread** or **panem** or **porridge** or similar by asking “made from what crop?”; prompt on **ergot** or **Claviceps** or **fungus** by asking “infecting what ingredient?”]

<Other History>

15. Ethel Smyth wrote a piece of this type as an anthem for the WSPU to replace the “Women’s Marseillaise.” A piece of this type features the melody “E flat, E flat, D flat-C-C, B-C-C,” which is accompanied by *obbligato* piccolo trills in its last rendition; that piece is the basis for a virtuosic piano transcription by Vladimir Horowitz. In pieces of this type, a soft *trio* section is typically followed by a “break strain.” Czech composer Julius Fučík (“YOO-lee-ooos FOO-cheek”) is best-known for a piece of this type that ostensibly depicts gladiators. A piece of this type was written for the ceremony of an essay contest sponsored by the *Washington Post*. For 10 points, *Semper Fidelis* and *The Stars and Stripes Forever* are examples of what type of piece, whose “king” was John Philip Sousa?

ANSWER: **march** [accept *Women’s* **March**]

<Classical Music>

16. One pathway that occurs exclusively within this complex relies on both PGR5 and PGRL1 and is sensitive to antimycin A. A threonine phosphorylation event on LHCII (“L-H-C-2”) causes it to begin to interact with this complex in order to offset an imbalance in input. Ycf3 and Ycf4 are required for the assembly of this complex, which is homologous to a P840-containing complex found in green sulfur bacteria. In this complex, FX, FA, and FB shuttle electrons to ferredoxin, which in turn shuttles them to an oxidoreductase (“oxido-reductase”) to form NADPH in the noncyclic pathway. This complex contains a P700 center, which is a dimer of chlorophyll-*a* molecules. For 10 points, name this complex in the thylakoid membrane, which receives electrons from a later-discovered complex during the light reactions of photosynthesis.

ANSWER: **photosystem I** [or **PSI**; do not accept or prompt on “photosystem II”]

<Biology>

17. Eugene Bullard practiced this occupation with his monkey Jimmy after he won a bet that France would allow him to train for it as a Black man. The statistician Abraham Wald used this occupation to study survivorship bias. “Close support” may be provided by this occupation, which Henry Post taught to a section of the Signal Corps at Fort Sill. John C. Robinson founded the training program for this occupation’s “Red Tails.” It’s not baseball, but Bessie Coleman performed in this occupation’s “barnstorming” shows. A facility in Milwaukee is named for Billy Mitchell, the “father” of this career path’s branch of the U.S. military. This occupation’s Black Tuskegee unit operated fighters like Thunderbolts and Warhawks. For 10 points, craft like B-52s are central to what occupation of Amelia Earhart?

ANSWER: **aviator**s [or fighter **pilots** or **flyboys** or **aeronautics** or equivalents; accept Tuskegee **Airmen**; accept **air**craft or United States **Air** Force or **USAF**; accept close **air** support or **air** shows; accept **Aviation** Section; prompt on **soldiers** or **military** or **generals** or similar; prompt on strategic **bombers**; prompt on **Signal** Corps before read] (John C. Robinson was the “Brown Condor” who founded the Tuskegee aviation program.)

<American History>

18. This painting was displayed at the Royal Academy alongside a painting of the same subject, subtitled “And He Will Not Come Back Again,” by Arthur Hughes. This painting was created at the same time and place that its artist’s friend painted *The Hireling Shepherd*. A botany professor allegedly instructed students with the detailed depictions of the Hogsmill River in this painting, including some poppies that symbolize death. A 50-pound doctor’s bill was demanded from this painting’s artist after Elizabeth Siddal became ill while modeling for it in a cold bathtub. The title woman holds her hands face-up and looks upward out of a Danish river in this painting by a Pre-Raphaelite. For 10 points, name this John Everett Millais painting titled for a female character from *Hamlet* who drowns.

ANSWER: **Ophelia**

<Painting/Sculpture>

19. Likely-forged memoirs claimed that this religion was founded with help from the diplomat Dimitri Dolgorukov. Laura Clifford Barney’s conversations with a leader of this religion are recorded in the book *Some Answered Questions*. The history of this religion is described in the book *God Passes By*. The book *The Dawn-Breakers* describes this religion’s eighteen “Letters of the Living.” A [emphasize] *predecessor* of this religion predicted “He whom God shall make manifest” in a set of two books called the *Bayán*. The holy scripture of this religion includes the *Book of Certitude* and the *Kitab-i-Aqdas*, which was written in Acre, near this religion’s center in Haifa. For 10 points, name this religion based on Bábism, which was founded by Bahá’u’lláh (“buh-HAH-oo-lah”).

ANSWER: **Bahá’í** Faith [or **Baha’ism**]

<Religion>

20. An author from this country wrote about a medicine man who disfigures a rich emigrant farmer in the novel *The Promised Land*. An author from this country recommended describing “rainbows or renaissances” in a *Granta* essay titled “How to Write About [his continent].” An author from this home country of Grace Ogot described a “cultural bomb” in a book that reproduces part of his play about a shoe factory owner’s son’s wedding with Gathoni, *I Will Marry When I Want*. An author from this country, who wrote a novel about Mugo’s betrayal of the revolutionary Kihika, described his abandonment of English in his book *Decolonizing the Mind*. For 10 points, name this home country of the author of *A Grain of Wheat*, Ngũgĩ wa Thiong’o (“GOO-ghee wah thee-ON-go”), who now writes in Kikuyu.

ANSWER: **Kenya** [or Republic of **Kenya**; or Jamhuri ya **Kenya**] (The unmentioned author is Binyavanga Wainaina.)

<World Literature>

21. In a novel titled for this event, a man standing by a grave muses: “men’s courses will foreshadow certain ends... but if the courses be departed from, the ends will change.” A set of five novels named for this event were fan favorites at their author’s 1858 reading tour and include *The Haunted Man* and *The Cricket on the Hearth*. In a novel titled for this event, a man quips “there’s more of gravy than of grave about you” while talking to his guilt-stricken former business partner. That man asks “are there no prisons? Are there no workhouses?” in the first “stave” of a novella titled for this event, which ends by quoting the prayer “God bless Us, Every One!” made by Tiny Tim. For 10 points, three ghosts show past, present, and future instances of what event to Scrooge in a Charles Dickens novella?

ANSWER: **Christmas** [or **December 25th**; accept *A **Christmas** Carol*; accept **Christmas** Eve; prompt on winter holidays or Yule]

<British Literature>

## Bonuses

1. A poem by this author exclaims “Let them weep! let them weep!” and describes children who are “binding up their hearts away from breaking, / With a cerement from the grave.” For 10 points each:

[10h] Name this poet who criticized child labor conditions in the poem “The Cry of the Children.” This poet also wrote the abolitionist dramatic monologue “The Runaway Slave at Pilgrim’s Point.”

ANSWER: **Elizabeth Barrett Browning** [or Elizabeth **Barrett** Browning or Elizabeth **Barrett** Moulton-Barrett; prompt on **Browning**]

[10e] “A little black thing among the snow” cries “weep! 'weep!” in this poet’s “The Chimney Sweeper” which is collected in his *Songs of Innocence and of Experience*.

ANSWER: William **Blake**

[10m] An author with this surname wrote about a boy who escapes from an industrial mill in the novel *Michael Armstrong, the Factory Boy*. Another author with this surname wrote the *Chronicles of Barsetshire* series.

ANSWER: **Trollope** [accept Frances Milton **Trollope**; accept Anthony **Trollope**]

<British Literature>

2. Lorentz boosts can be parameterized with an angle described by this adjective. For 10 points each:

[10m] Give this adjective that also describes the rotations of Minkowski space that Lorentz boosts represent.

Functions described by this adjective are notated by adding the letter “h” to the shortened names of trig functions.

ANSWER: **hyperbolic** [accept word forms such as **hyperbola**]

[10h] This quantity is the hyperbolic angle associated with a particular Lorentz boost. This quantity is equal to the inverse hyperbolic cosine of the Lorentz gamma factor and, unlike velocity, is additive between reference frames.

ANSWER: **rapidity**

[10e] In hyperbolic motion, a form of this quantity equal to the proper time derivative of rapidity is constant. That form of this quantity is the same for all observers, in contrast to its usual definition as the time derivative of velocity.

ANSWER: **acceleration** [accept proper **acceleration** or coordinate **acceleration**; prompt on *a*]

<Physics>

3. A book titled for the “Social Life” of this good in China reports that the Chénghuà (“chung-hwah”) Emperor launched an expedition to acquire it in 1483. For 10 points each:

[10h] Name this good used in traditional Chinese medicine that was said to be equal in worth to gold, according to Xú Bólíng. China imported variants of this good named for Indian regions such as Malwa and Patna.

ANSWER: **opium** [or **af-yong**; or **yingsu**; or **jǐsù**; prompt on **poppies**; do not accept or prompt on “opiates”]

[10m] *The Social Life of Opium in China* recounts how people would use opium with prostitutes on “flower boats” in this city. Trade that took place in this city’s Thirteen Factories was regulated by a system named for this city.

ANSWER: **Canton** [or **Guǎngzhōu** or **Kwangchow**; accept **Canton** system]

[10e] The Chénghuà Emperor sent one of these people, referred to as “Zhōng Guì,” to procure opium from western provinces. Many court officials, such as Zhèng Hé (“jung huh”), were these people who underwent castration.

ANSWER: **eunuchs** [or **tài jiàn**]

<World History>

4. This dialogue contains some arguments of its real-life title character, such as the distinction between the propositions “the one is” and “the one is not.” For 10 points each:

[10h] Name this dialogue whose title character debates with Aristoteles and a young Socrates. In a famous argument, this dialogue draws an infinite regress from applying the one-over-many principle to largeness.

ANSWER: **Parmenides** (The argument in the second line is the Third Man Argument.)

[10m] The real-life Parmenides founded a school of philosophy named for this city. A philosopher from this city conceived of supertasks in a thought experiment that concerns a race between Achilles and a tortoise.

ANSWER: **Elea** [or the **Eleatic School**; accept Zeno of **Elea**]

[10e] Parmenides uses the Third Man Argument to contradict Socrates’s explanation of these things. These Platonic essences include “The Good,” which is represented by the Sun in the Allegory of the Cave.

ANSWER: **Forms** [or **eidos** or **eide**; accept **Ideas**]

<Philosophy>

5. Answer the following about the Atlantic Seaboard fall line, where rivers that flow to the Atlantic Ocean form rapids, for 10 points each.

[10h] The Atlantic Seaboard fall line separates this plateau region of the Eastern United States from the coastal plain to its east. This region stretches from around New York to Alabama.

ANSWER: **Piedmont** region [accept specific states before “Piedmont” such as North Carolina **Piedmont**; accept **Appalachian Plateau**; prompt on **Appalachia**; do not accept or prompt on “Appalachians”]

[10e] These structures were often built to circumvent the navigational difficulties produced by the fall line. One of these structures named for Lake Erie connects Albany to Buffalo.

ANSWER: **canals** [accept Erie **Canal**; prompt on artificial **waterways** or **channels**]

[10m] This city also lies on the fall line of the Schuylkill (“SKOO-kill”) River, which along with the Delaware River bounds the grid plan of this city.

ANSWER: **Philadelphia** [or **Philly**]

<CE/Geo/Other/Pop Culture>

6. Refractory cases of this condition may be treated by hypoglossal (“hypo-glossal”) nerve stimulation, in which tongue muscle movement can be synchronized with a patient’s breathing. For 10 points each:

[10e] Name this sleep-related breathing disorder characterized by recurrent episodes of obstruction in the upper airway that prevent breathing during sleep. CPAP (“C-pap”) machines are an effective treatment for this condition.

ANSWER: obstructive sleep **apnea** [or **OSA**]

[10h] If untreated, chronic obstructive sleep apnea may cause this arrhythmia that can be treated by rate or rhythm control. The CHA2DS2-VASc score is used to determine if people with this arrhythmia should be anticoagulated.

ANSWER: **atrial fibrillation** [or **A-fib** or **AF**]

[10m] OSA occurs in 50 percent of patients with this disorder, whose sufferers often have a single transverse palmar crease. Patients with this disease have a high incidence of Alzheimer’s due to having an extra copy of APP.

ANSWER: **Down**’s Syndrome [or **trisomy 21**; prompt on **trisomy**]

<Biology>

7. The Agra Famine motivated the Ganges Canal built under this leader, who connected India by telegraph and rail, followed “Wood's despatch” to implement English education, and names a square in Calcutta. For 10 points each:

[10h] Name this 1848–1856 Governor-General of India whose “non-regulation system” tolerated local laws. Despite Rani Kittur Chennamma’s 1824 rebellion, this later leader formalized the doctrine of lapse to annex princely states.

ANSWER: Lord **Dalhousie** [or James Broun-**Ramsay**; or 1st Marquess of **Dalhousie**; or Lord **Ramsay**; or Earl of **Dalhousie**; accept **Dalhousie** Square]

[10m] Lord Dalhousie annexed Jhansi, whose Rani Lakshmbai refused to perform this act after her defeat. Maratha sardars and Ram Mohan Roy pressured Lord Bentinck to ban this self-immolation practiced by Rajput women.

ANSWER: **sati** [or **suttee**; accept **jauhar** or **juhar**; prompt on widow-**burning**]

[10e] Sati became a cause célèbre in Britain due to sensational accounts from people in this profession, like William Carey and James Peggs. These people converted many Adivasi in Odisha and Manipur to Christianity.

ANSWER: Christian **missionaries** [accept specific denominations like Baptist **missionaries**; prompt on **preachers** or **clergy** or **evangelists** or similar answers]

<Other History>

8. This scholar was inspired by the *Annales* school’s emphasis on long-term historical processes to develop his best-known analytical framework. For 10 points each,

[10h] Name this historical sociologist who posited a contrast between core, semi-periphery, and periphery in his multi-volume work *The Modern World-System*.

ANSWER: Immanuel **Wallerstein** [or Immanuel Maurice **Wallerstein**]

[10m] Wallerstein claimed that the collapse of feudalism precipitated the rise of the modern world-system during a “long” definition of this century. Two years in the century that [emphasize] *preceded* this one are the subject of books by Charles C. Mann.

ANSWER: **16th** century [or **1500s** CE] (Those Charles C. Mann books are *1491* and *1493*.)

[10e] This phenomenon, in which workers specialize in aspects of the production process, is a key force in world systems theory. In *The Wealth of Nations*, Adam Smith explained this concept with the example of a pin factory.

ANSWER: **division** of **labor**

<Social Science>

9. In a novel by this author, a woman who translates the poetry of William Blake takes revenge on local hunters who killed her dogs. For 10 points each:

[10m] Name this Polish author who received the Nobel Prize in Literature in 2018. 116 unrelated vignettes make up her 2017 novel *Flights*.

ANSWER: Olga **Tokarczuk** (“taw-CART-shook”) [or Olga Nawoja **Tokarczuk**]

[10h] In this novel by Tokarczuk, Janina (“ya-NEE-na”) kills five local men for hunting around her village. This novel takes its title from one of William Blake’s “Proverbs of Hell.”

ANSWER: ***Drive Your Plow Over the Bones of the Dead*** [or ***Prowadź swój plug przez kości umarłych***]

[10e] In *Drive Your Plow Over the Bones of the Dead*, Janina’s dead neighbor shares his name with this creature. Wisława Szymborska’s (“vee-SWAH-vah shim-BOR-skah’s”) collection *Calling Out to Yeti* is titled for a creature similar to this North American cryptid.

ANSWER: **Bigfoot** [or **wielka stopa**; accept **Sasquatch**]

<European Literature>

10. Answer the following about Leonard Bernstein's breakthrough performance in November 1943, when he conducted the New York Philharmonic after the scheduled conductor, Bruno Walter, became ill. For 10 points each:  
[10h] Before the concert, Walter briefly explained a few difficult passages of this set of "fantastic variations" to Bernstein from his sickbed. Bleating sheep are represented using flutter-tongued horns in this tone poem.

ANSWER: **Don Quixote** (by Richard Strauss) [or **Don Quixote: Fantastic Variations on a Theme of Knightly Character**; or **Don Quixote: Phantastische Variationen über ein Thema ritterlichen Charakters**]

[10e] The concert took place at this famous venue in Midtown Manhattan. Originally called "Music Hall," this venue was later named after its benefactor, a steel industry titan and philanthropist.

ANSWER: **Carnegie** Hall

[10m] The first piece on the program was this German composer's *Manfred* overture. Bernstein made numerous recordings of this composer's four symphonies, the first of which is nicknamed "Spring."

ANSWER: **Robert Schumann** [prompt on **Schumann**]

<Classical Music>

11. One work from this group of paintings shows the title animal staring up out of a muddy mass in which it is buried up to its neck. For 10 points each:

[10m] Name this group of paintings, which includes *The Dog* as well as murky works like *Witches' Sabbath*. These paintings originally adorned the walls of the "House of the Deaf Man."

ANSWER: The **Black Paintings** [or Las **pinturas negras**]

[10e] Muddy colours characterize the *Black Paintings*, which were secretly painted by this Spanish artist of *The Third of May, 1808*.

ANSWER: Francisco **Goya** [or Francisco José de **Goya** y Lucientes]

[10h] Another of the *Black Paintings* shows two men up to their knees in mud who, according to the painting's conventional title, are having a "Fight" with these specific weapons.

ANSWER: **cudgels** [or **clubs** or **garrotazos**; accept *Fight with Cudgels* or *Duel with Cudgels* or *Fight to the Death with Clubs* or *Rina a garrotazos*]

<Painting/Sculpture>

12. This people's women, like the Ottoman consort Bedrifelek Kadın and the Safavid ambassador Teresa Sampsonia, were stereotyped as "beauties" in 19th-century cosmetics ads. For 10 points each:

[10h] Name this confederation of twelve Muslim tribes whose homeland is now a republic within Krasnodar Krai. After a century of conflict, the Russian Empire massacred and expelled over a million of these people in a genocide.

ANSWER: **Circassians** [or **Cherkessians**; accept **Circassian** genocide; or **Adyghe** or **Adyghe** Autonomous Oblast or Republic of **Adygea** or similar; accept **Abzakh**s or **Besleney** or **Bzhedug** or **Chemirgoy** or **Hatuqwai** or **Kabardians** or **Mamkhegh** or **Natukhaj** or **Shapsug** or **Ubykh** or **Yegeruqwai** or **Zhaney** or variants of those names; accept the related **Abkhazians** or **Abazins** or variants]

[10m] The Circassian and Murid Wars took place along the "military road" from Vladikavkaz, Ossetia to this former Bagrationi ("buh-gruh-tee-AH-nee") Kingdom. Lavrentiy Beria and the leader who ordered the Katyń massacre were born in this country.

ANSWER: **Georgia** [or **Sakartvelo**; or **Kartvelia**; accept **Georgia**-Imeretia Governorate; prompt on **Caucasus** Viceroyalty or **Russian Empire** or **Rossiyskaya Imperiya**] (The leader was Joseph Stalin.)

[10e] The book *Borderlands Orientalism* argues that Russians held Georgians from Kakheti in high esteem for resisting a Caucasian state led by Avars with this title, like Shamil. These religious authorities lead Islamic worship.

ANSWER: **imams** [accept the Caucasian **Imamate**; accept **Imam** Shamil; accept **divān**]

<European History>

13. An essay in this collection criticizes the “sterile and distressing eroticism” of Otto Preminger’s film *Carmen Jones*, an adaptation of Georges Bizet’s *Carmen* with an all-Black cast. For 10 points each:

[10m] Name this collection that is partly titled for a Richard Wright novel about Bigger Thomas. This collection’s essay “Everybody’s Protest Novel” argues that Wright’s novel is “trapped by the American image of Negro life.”

ANSWER: **Notes of a Native Son**

[10e] This author of *Notes of a Native Son* wrote about John Grimes’s relationship with the church in his novel *Go Tell It on the Mountain*.

ANSWER: James **Baldwin** [or James Arthur **Baldwin**; accept Jimmy **Baldwin**]

[10h] Baldwin’s collection *The Fire Next Time* contains “My Dungeon Shook” and this other essay about Baldwin’s dinner with Elijah Muhammed, where Muhammed spoke of his mission “to return ‘the so-called Negro’ to Islam.”

ANSWER: **“Down at the Cross”** [or **“Letter from a Region in My Mind”**]

<American Literature>

14. A common example of this class of reactions alters 1,5-dienes and is named after Arthur Cope. For 10 points each:

[10h] Name this subclass of pericyclic reactions, in which the pi bonds in the ring are translocated and one sigma bond is formed at the expense of another.

ANSWER: **sigmatropic** rearrangements [or **sigmatropic** reactions; prompt on Cope rearrangement]

[10m] This scientist names a [3,3]-sigmatropic rearrangement that forms an unsaturated carbonyl from an allyl (“uh-LEEL”) vinyl ether. He also names a condensation which combines two esters into a beta-ketoester.

ANSWER: Rainer Ludwig **Claisen** [accept **Claisen** condensation or **Claisen** rearrangement]

[10e] The product of the Claisen condensation can be treated with heat, which causes it to decarboxylate and release this gas. Humans exchange this gas for oxygen.

ANSWER: **carbon dioxide** [or **CO<sub>2</sub>** (“C-O-2”)]

<Chemistry>

15. At the beginning of creation, this god is described flying over the waters as a white goose. For 10 points each:

[10h] Name this sky god who is sometimes worshipped alongside Umay. A blue scarf that represents this god is often part of a shrine called an *ovoo* (“aw-waw”).

ANSWER: **Tengri** [or Kök **Tengri**; or **Tenger** or **Tänri**; accept **Tengrism**]

[10e] The *ovoo* in Tengrism is usually made from a heap of these objects. Jesus referred to Saint Peter as one of these objects when he claimed that he would build his church on one of them.

ANSWER: **rocks** [or **stones** or equivalents; or **petra** or **petros**]

[10m] Many shamans in Tengrism used one of these objects in their rituals to help enter a trance state. The *Batá* kind of this object is used during Santería services, while the *damaru* kind is said to have been created by Shiva.

ANSWER: **drums** [accept **tuur**; prompt on musical instruments or percussion instruments]

<Religion>

16. Michael F. Conlin argued that antebellum sectional debates often drew on legal arguments in *The Constitutional Origins of the American Civil War*. For 10 points each:

[10e] In 1846, the *National Anti-Slavery Standard* singled out this clause as the Constitution's worst. This infamous "compromise" ignored Native Americans and counted the enslaved as fractional people to apportion representatives.

ANSWER: **three-fifths** compromise [or **three-fifths** clause; or **3/5**; accept **Article One, Section 2, Clause 3**]

[10m] The Fugitive Slave Act led northern states to pass personal liberty laws to protect this right. After riots in Baltimore, Justice Taney ruled that President Lincoln could not suspend this right in *Ex parte Merryman*.

ANSWER: **habeas corpus** [or writ of **habeas corpus**; prompt on "great writ"]

[10h] After he escaped slavery to Ontario, Henry Bibb argued that South Carolina violated this clause by imprisoning free Black sailors. This clause in Article Four prohibits interstate discrimination and affords the right to travel.

ANSWER: **privileges and immunities** clause [or **comity** clause; do not accept or prompt on "privileges or immunities clause"] (Bibb published this argument in the newspaper he founded, *Voice of the Fugitive*.)

<American History>

17. A collection by this mythographer organizes its contents by "Common Songs," "Special Songs," and "Hymns," all of which are arranged in trochaic tetrameter. For 10 points each:

[10h] Name this mythographer. A different work compiled by this mythographer follows a "steadfast old" hero's conflict with the evil Maiden of the North.

ANSWER: Elias **Lönnrot** (The works are the *Kanteletar* and the *Kalevala*.)

[10e] Lönnrot ("LEARN-root") lived in this modern-day Nordic country and collected its traditional folktales and songs in the *Kanteletar* and the *Kalevala*.

ANSWER: **Finland** [or Republic of **Finland** or Republiken **Finland**; or **Suomi** or **Suomen** tasavalta]

[10m] In the *Kalevala*, this hero crafts the first kantele from a giant pike's jawbone. The *Kalevala* ends with this legendary bard sailing away from Finland.

ANSWER: **Väinämöinen**

<Mythology>

18. The Wallis product introduces a coefficient of the square root of two pi in this formula. For 10 points each:

[10h] Name this formula that can be derived by applying the trapezoid rule to the integral of the natural logarithm and bounding the error with the Euler–Maclaurin formula.

ANSWER: **Stirling's** approximation [or **Stirling's** formula]

[10e] Stirling's formula is an approximation of this function. This function, which gives the number of permutations of  $n$  objects, equals the product of the integers from 1 to  $n$  and is symbolized with an exclamation point.

ANSWER: **factorial**

[10m] Stirling's formula can also be derived by applying a change of variables to this function. This function is a generalization of the factorial to the complex numbers, outputting the factorial of  $n$  minus one for integer inputs  $n$ .

ANSWER: **gamma** function

<Other Science>

19. This novel's sections, including "Dog Ways," were serialized in the magazine *October*, facilitating its adaptation into a film that was released almost simultaneously with this novel in 1987. For 10 points each:

[10h] Name this five-volume novel, which non-chronologically relays the story of the wine-producing family between 1923 and 1976.

ANSWER: **Red Sorghum** *Clan* [or **Red Sorghum**: *A Novel of China*; or **Red Sorghum** *Family* or **Hóng Gāoliáng Jiāzú**]

[10m] *Red Sorghum* was written by this Chinese novelist, who was widely criticized for a lack of solidarity with oppressed Chinese authors after he won the 2012 Nobel Prize for Literature.

ANSWER: **Mò** Yán [or **Guǎn** Móyè]

[10e] Mò was also criticized for making a hand-written commemorative edition of this man's *Yán'ān* ("yen ahn") *Talks on Literature and Art*. *Red Sorghum* depicts the devastating impact of this leader's Cultural Revolution.

ANSWER: **Máo** Zédōng [or Chairman **Máo**; or **Mao** Tse-tung]

<World Literature>

20. Thelonious Monk dedicated "In Walked Bud" to Bud Powell after the latter defended him during a police raid at this venue. For 10 points each:

[10h] Name this venue. A notoriously inconclusive "battle of the bands" at this venue in 1938 was one of several involving this place's house band, which was led by Chick Webb.

ANSWER: **Savoy** Ballroom

[10m] That infamous battle of the bands pitted Webb's house band against a band led by this Kansas City pianist, whose Orchestra had hits with "Jumpin' at the Woodside" and a version of "April in Paris."

ANSWER: "Count" **Basie** [or William James "Count" **Basie**]

[10e] Basie's band included Jimmy Rushing and Billie Holiday, who were outclassed in the battle by this teenage singer in Webb's band. Louis Armstrong often collaborated with this scat singer nicknamed the "First Lady of Song."

ANSWER: Ella **Fitzgerald** [or Ella Jane **Fitzgerald**]

<Other Arts>

21. Women drank bulls' blood before they became priestesses at the Sanctuary of Gaia in this region, which may have inspired the Hittite exonym for Mycenae, Ahhiyawa. For 10 points each:

[10m] Name this region that Homer used as a collective demonym for Hellenic Greeks, like Danaans and Argives. The historian Polybius joined a "league" named for this area of the Peloponnese, which fought Rome and Aetolia.

ANSWER: **Achaea** [accept **Achaean**s or **Akhaioi**; accept Second **Achaean** League or League of the **Achaean**s or Koinon ton **Achaion**; accept **Achaean** War]

[10h] In the 220s BCE-era Cleomenean War, the Achaean League fought Sparta and this allied polis that expanded into perioikic Margana and Amphidolis. Circa 400 BCE, Sparta fought this polis for banning it from a temple of Zeus.

ANSWER: **Elis** [or **Iliia** or **Eleia** or **Elida**; prompt on, but do not otherwise reveal, **Olympiá** by asking "what polis was that sanctuary controlled by?"]

[10e] By the 6th century BCE, Elis displaced Pisatis for control over these events held at a nearby Panhellenic sanctuary. Cynisca of Sparta was the first woman to train the winning chariot team at these games in honor of Zeus.

ANSWER: **Olympic** Games [or **Olympics** or **Olympiad** or **Olympiás**; prompt on Panhellenic **Games**]

<Other History>