ACADEMIC COMPETITION FEDERATION

2023 ACF NATIONALS

Emergency 1

Packet By

JHU B, South Carolina A, UMN A

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TOSSUPS

1. A collection titled for this poem was translated by British folk singer A. L. Lloyd, who preceded Stephen Spender to become its author's first published English translator. The third section of this poem compares stone to a "forehead where dreams groan" and a "shoulder for carrying away time." This poem describes how "the wind carried away the cottonwool / and the oxide-scattered crystal and nickel" and "the dove and the leopard wrestle" during an event that requires a basket of lime. This poem ends with the speaker remembering "a sad breeze among the olive trees," an example of what its author called "deep sound," or *duende*. This poem's section "Spilled Blood," which repeats the line "I don't want to see it!", comes after the refrain "at five in the afternoon." For 10 points, name this poem in honor of a matador who was a friend of its author Federico García Lorca.
ANSWER: "**Lament for the Death of a Bullfighter**" [or "**Lament for a Bullfighter**"; or "**Lament for Ignacio Sánchez Mejías**"; or "**Weeping for Ignacio Sánchez Mejías**"; or "**Llanto por Ignacio Sánchez Mejías**"]
<European Literature>

2. This person popularized the phrase "lock and load" by changing the original ordering derived from flintlock weapons. This person's close relationship with Omar Torrijos through his first wife Josephine Saenz was used to negotiate the Panama Canal Treaty. Kristin Du Mez studied how evangelicals reconciled this man's masculinity and Jesus's love. Paraplegic anti-war activist Ron Kovic lamented giving his "dead dick for … Howdy Doody" and this man, who had inspired him to join the Marines. During the Korean War, military issued can openers were nicknamed for this man due to their durability. This man claimed to "believe in white supremacy" during a 1971 *Playboy* interview that went viral in 2019. This man had to be restrained from storming the stage to end an Oscars speech given by Sacheen Littlefeather. For 10 points, name this lead actor in *The Searchers* and many other Westerns.
ANSWER: John **Wayne** [or Marion **Morrison** or Marion Robert **Morrison**; accept "the **Duke**"; accept *Jesus and John **Wayne***; accept John **Wayning**]
<American History>

3. An ode by this author imagines that "beside some water's rushy brink / With me the Muse shall sit"; that ode by this poet concludes "Thy sun is set, thy spring is gone — / We frolic, while 'tis May." In a Pindaric ode that is considered an early work of the Celtic Revival, this author wrote about a poet who curses Edward I as his army marches through Snowdonia. This author of "Ode on the Spring" and "The Bard" wrote a Horatian ode that opens by describing a "watery glade" crowned by "distant spires" and "antique towers." That ode by this poet, which declares "where ignorance is bliss, / 'Tis folly to be wise," is about an institution on the "hoary Thames ("temz")." For 10 points, name this poet of "Ode on a Distant Prospect of Eton College" and "Elegy Written in a Country Churchyard."
ANSWER: Thomas **Gray**
<British Literature>

4. This quantity can take on negative values when transverse motions shorten rigid metal-anion bonds in the so-called "guitar string" effect. Methods for measuring this quantity include zero force TMA and dilatometry with vitreous silica push-rods. This quantity is negative for scandium trifluoride and zirconium tungstate. For many materials, this quantity is inversely proportional to melting temperature. Precision mechanical systems, especially opto-mechanical systems, require materials with a low value for this quantity, such as the iron-nickel alloy Invar. For isotropic materials, multiplying the linear form of this quantity by three gives its volumetric form. For ideal gasses, the volumetric form of this quantity equals one over temperature. For 10 points, name this quantity denoted alpha that relates changes in size to changes in temperature.
ANSWER: **coefficient** of **thermal expansion** [or **CTE**; or **thermal expansion coefficient**; accept **coefficient** of linear **thermal expansion**; accept isobaric **thermal expansivity**; prompt on alpha; prompt on coefficient of expansion or (volume) expansion coefficient; reject "thermal expansion"] (TMA stands for thermomechanical analysis.)
<Physics>

5. One of these people painted two small black goats in front of a larger white one in a scene set at New Years and depicted a family of three monkeys in *Gibbons at Play*. In a 1689 artwork, one of these people is shown from above on a slightly larger scale than everyone else in a crowd of people all wearing blue during a "Southern Tour." A painter who was also one of these people painted an "auspicious" group of 21 cranes above a gate; that 11th-to-12th century one of these people was a major painter of the bird-and-flower tradition. One of these people wears yellow robes and a black and red hat in a characteristic style of seated, flattened-perspective portrait by Giuseppe Castiglione ("joo-ZEP-pay kah-steel-YO-nay"), who served under them. Examples of these people stand in the center of a river barges in a typical scene painted on silk handscrolls. For 10 points, name this type of ruler, one of whom commissioned the Terracotta Army.
ANSWER: Chinese **emperor**s [or **H**uáng**dì**; or **Tiānzǐ**; prompt on monarchs; prompt on rulers until read; prompt on Manchus or Mǎnzú or Jurchens; prompt on Chinese people, Hànzú, Zhōngguórén, or Huárén] (The paintings in the first line are by the Míng Xuāndé Emperor. The "Auspicious Cranes" painting is by Emperor Huīzōng of Sòng. Castiglione painted the Qiánlóng Emperor. Qín Shǐ Huáng commissioned the Terracotta Army.)
<Painting & Sculpture>

6. Small examples of these places are called "the Dots" in a 1994 working paper by James R. Hines and Eric M. Rice that lists 41 of them. A 2013 book about these places discusses the failure of the "qualified intermediary" program and proposes the creation of a register that would be fed by companies like Euroclear and Clearstream. These places are often classified as either "conduit OFCs" or "sink OFCs." These places are the destinations of so-called "inversions," which began in the early 1980s and became particularly popular in the late '90s. Gabriel Zucman has shown how nominally OECD-compliant firms often use BEPS ("beps") tools to shift profits to these places. For 10 points, Ireland and several Caribbean countries are prominent examples of what jurisdictions that offer very low rates of levies for foreign businesses?
ANSWER: **tax haven**s [accept corporate **tax haven**s or **corporate haven**s; accept **offshore financial center**s or **OFC**s until "OFCs" is read] (The 2013 book is *The Hidden Wealth of Nations*.)
<Social Science>

7. In 1985, the first international conference about this person was hosted by Helen Rand Parish, who devoted her later life to campaigning for this person's canonization. While translating a work by this person, Jacques de Miggrode ("zhahk deh mih-grode") inserted watercolor illustrations that would form the basis for a set of Theodor de Bry engravings. This author of the treatise *The Only Way* resettled a "land of war" as "true peace" and was an early proponent of a "high count" later estimated by Henry Dobyns to be around 100 million. This person led the failed Cumaná colonization scheme in Venezuela. This member of the School of Salamanca contributed to the "Black Legend" in a debate against Juan Ginés de Sepúlveda ("hwan hee-NESS day seh-POOL-veh-dah"); that debate in Valladolid ("vah-yah-doh-LEED") caused Charles V to pass the New Laws. For 10 points, name this Dominican friar and author of *A Short Account of the Destruction of the Indies*.
ANSWER: Bartolomé de las **Casas** (The "land of war" was pacified as Verapaz. The "high count" and 100 million estimated the pre-Columbian population of the Americas.)
<World History>

8. The largest instances of this activity in America were named after the first American horse to win the Epson Derby, Iroquois. This activity grew in popularity after Robert Bakewell met with Hugo Meynell at Quorn Hall. If participants in this activity become distressed or lost, the "clean boot" technique is used to guide them back to safety. The leader of this activity is assisted by "Whippers-in" during so-called "runs." Punch magazine cartoons criticizing this activity depicted Mr. Briggs. This activity was the focus of the Jack Straw-led Burns Inquiry that led to bans on this activity under Tony Blair. During World War II, RAF pilots used a phrase from this activity before engaging a target. Paintings of this activity often depict a man on horseback with a black cap and red coat leading a group tracking urine. For 10 points, name this cruel activity once popular in the UK, in which dogs are used to catch vulpines.
ANSWER: **fox hunt**ing [accept **hunt**ing **vulpine**s until "vulpines" is read; accept red **fox**es, **vixen**s, **tod**s, or **reynard**s in place of "fox"; prompt on hunting or equivalents; prompt on trail hunting or hunting with dogs or equivalents by asking "the dogs are used to hunt what type of animal?"; prompt on equestrianism or riding horses or similar answers by asking "what activity that often takes place on horseback?"] (The phrase RAF pilots used was "tally-ho.")
<Other Academic>

9. This person supposedly created a prayer named for "joy after sadness" that ends in repeated pleas to them to "Help," "Reach me," and "Hasten." This person inspires the feeling of *intizar*. A massacre of pilgrims designed to attract this person only ended up attracting a boy from Isfahan who turned out to be a book-burning Zoroastrian. Four deputies facilitated this person's minor *ghaybah*, a doctrine that has been defended by analogy to the long-lived Khidr. In some traditions, this person avenges Ḥusayn and the other Muslims slain at Karbala on Āshūrāʾ. The word *kafir* will be visible on the forehead of a being defeated by either 'Isa, this person, or both, and this person will then establish one last rightly guided caliphate before the Day of Judgment. For 10 points, name this slayer of the Masīḥ ad-Dajjāl whom Twelver Shias consider the twelfth imam.
ANSWER: the **Mahdī** [accept Muhammad al-**Mahdī**; prompt on the Hidden Imam by asking "according to Twelver Shias, he will also fulfill the role of what other figure?"; prompt on the Twelfth imam until "Twelver" is read by asking "according to Twelver Shias, he will also fulfill the role of what other figure?"; prompt on the Messiah; reject "'Isa" or "Jesus"]
<Religion>

10. James Wilkinson's discovery that the results of this task are highly sensitive to small perturbations of a "perfidious" input was the "most traumatic experience [of his] career." Polishing the results of this task when using forward or backward deflation minimizes the impact of increasing errors. The basins of convergence for an algorithm for this task form a fractal, as shown by interpreting the algorithm as a meromorphic function and looking at its Julia set. A superlinear algorithm for this task has an order of convergence equal to the golden ratio. Ridders's method for this task makes the false position method more robust. Bracketing methods for this task rely on the intermediate value theorem. An algorithm for this task subtracts the input function over its derivative at every iteration. For 10 points, the Newton–Raphson method performs what task of determining where a function crosses the x-axis?
ANSWER: **find**ing the **root**s of a function [or **find**ing the **zero**s of a function; or **find**ing the **root**s of a polynomial; or **find**ing the **zero**s of a polynomial; accept equivalents, such as **computing** or **identify**ing in place of "finding"; accept **root-finding** algorithms; prompt on solving equations or equation solvers or solving systems of (linear or nonlinear) equations] (The first sentence is discussed in Wilkinson's article "The Perfidious Polynomial," although he notes that the polynomial is in fact not so special, and many real polynomials exhibit such behavior when used as the input for root-finding algorithms. The fractal is the Newton fractal.)
<Other Science>

11. In this film, a girl's profile is illuminated by lightning during a movie about the origin of life on earth; that girl, a hall monitor, earlier tried to chase a boy who dropped a water balloon on her. During a meeting in this film, a pigeon perches on the shoulder of an executive at a video game company who discusses classical music with one of the protagonists at a karaoke bar. After being given a camera, a young boy in this film photographs the back of people's heads in order to show them what they do not see. In this film, the engineer NJ considers having an affair with an old girlfriend, paralleling Fatty's relationship with NJ's daughter Tíng-Tíng. This 2000 film was its director's last, following his film *A Brighter Summer Day*, which is also set in Taiwan. For 10 points, name this Edward Yang film with a repetitive Mandarin title.
ANSWER: *Yī Yī* [or *One One*; or *A One and A Two*]
<Other Fine Arts>

12. This substance is catabolized by the dye-decolorizing enzyme DypB ("D-Y-P-B") and the "versatile" peroxidase from *Pleurotus ostreatus* ("plur-OH-tuss oh-stree-AH-tuss"). The beta-ketoadipate pathway mainly transforms breakdown products of this substance into adipic ("ah-dip-ick") acid. This hydrophobic material is extracted into aqueous alcohols called organosolvs. Either this substance or its catabolite ("kah-TAA-bo-lite") guaiacol ("GWAI-uh-call") is the starting material for synthesis of commercial vanillin. This substance is a mix of three compounds labeled G, S, and H that are linked by beta-O-4-aryl ether bonds. Refineries valorize this energy-rich substance by pre-treating it with deep eutectic solvents or enzymes from white rot fungi, then pry it away from a mixture of carbohydrates. The kraft process separates this highly variable mixture of aromatic alcohols from a pulp that is rich in cellulose. For 10 points, name this major component of plant biomass that provides strength to wood.
ANSWER: **lignin** [prompt on lignocellulose or lignocellulosic biomass or LB until "cellulose" is read; prompt on biomass until read; prompt on wood or straw until "wood" is read; prompt on bagasse or corn stover; prompt on polyphenols or phenolics]
<Chemistry>

13. *Note to players: exact key required.* The *adagio* of a symphony in this key opens with a horn solo on the notes

"G-up to C-D-C, long C," quoting the song "The Little Field of Barley." A symphony in this key opens with bassoons playing a syncopated, slurred rhythm under a static violin tremolo ("TREM-oh-loh"). A symphony in this key prominently features a tin whistle and African drums in its third movement juba dance. Florence Price's first symphony in this key was inspired by another piece in this key whose fourth movement begins with the strings repeatedly playing a sinister B-C figure. This is the key of Amy Beach's *Gaelic Symphony*. This key was used for another symphony whose *largo* second movement, which features a prominent English horn solo, was later arranged into the song "Goin' Home." For 10 points, name this key with one sharp, which was used by Antonín Dvořák for his *New World Symphony*.
ANSWER: **E minor** [or **e moll**; accept Symphony No. 9 in **E minor** or Symfonie č. 9 **e moll**; accept Symphony in **E minor**, Op. 32; reject "E" or "E major" or "G major"] (The first line refers to the *Gaelic Symphony*.)
<Classical Music>

14. In this decade, an astronomer in Bologna ("bo-LOH-nyah") dubbed "the mad Italian prophet" unsuccessfully predicted that the world would end on July 18th. In this decade, protesters in Ely ("EE-lee") and Littleport rioted over high grain prices. A lack of horses in this decade may have inspired the invention of the velocipede by Karl Drais ("DRICE"). This decade is the focus of the book *When the Mississippi Ran Backwards*. In this decade, the Maison Chapuis ("may-ZOH shah-PWEE") and the Villa Diodati on Lake Geneva were rented by a group that read the collection *Fantasmagoriana* for entertainment in bad weather. In this decade, Honoré Flaugergues ("oh-no-RAY flow-JAIRG") discovered a comet with the second-longest recorded period of visibility, behind the Hale-Bopp Comet. The New Madrid earthquakes occurred in this decade, which included the "Year Without A Summer." For 10 points, name this decade when a cold winter hampered Napoleon's invasion of Russia.
ANSWER: **1810s** [prompt on 10s] (The group on Lake Geneva included the Shelleys, Lord Byron, and John Polidori. Flaugergues discovered the Great Comet of 1811.)
<Other History>

15. The narrator of a short story by this author claims his grandchildren are spoiled brats after they change their names to Matt and Flora and complain about a teacher misreading their surname as "Eleven." In another story by this author, a man is horrified to see a bucket of water being poured over his lawyer, who is handcuffed to a tree in the backyard. A woman in a novel by this author bursts into tears after seeing on the television that a man who had raped her years ago has become a successful entrepreneur. After a policeman throws tea over his feet and wrongly arrests him, the protagonist of a story by this author intentionally starts a hepatitis epidemic in retaliation. In a novel by this author, a doctor spends 18 years doing the title action so he can divorce his wife Shuyu and marry Manna Wu. For 10 points, name this Chinese-American author of the short story "Saboteur" and the novel *Waiting*.
ANSWER: Ha **Jin** [or Hā **Jīn**; or **Jīn** Xuěfēi] (The story in the first sentence is "Children as Enemies.")
<World Literature>

16. This book's praise of "easy and pleasant" books like *Aesop's Fables* influenced a businessman based in Reading ("redding") who published a 1744 "pocket-book" that was sold with either a ball or a pincushion. This book states that "the principle of all virtue and excellency lies in a power of denying ourselves the satisfaction of our own desires, where reason does not authorize them." Out of a Juvenalian concern with "a sound mind in a sound body," this book begins with health-related advice such as saying that children should wear thin shoes so that they get used to having wet feet. This book grew out of a series of letters giving advice to Mary and Edward Clarke about their son, and was published with the encouragement of William Molyneux ("moll-ih-new"). For 10 points, the author's previously published idea of the mind as a *tabula rasa* influenced what treatise on pedagogy by John Locke?
ANSWER: *Some Thoughts Concerning Education* [or *Some Thoughts on Education*] (The first sentence is about Locke's influence on the children's book publisher John Newbery.)
<Philosophy>

17. Mary Edmonds first purified the enzyme responsible for creating these structures from thymus nuclei. Mtr4p and Trf4p's opposing functions allow the TRAMP complex to non-canonically synthesize versions of these structures that target substrates for degradation. The splicing protein U1's relative overabundance may be due to its role in suppressing signals that induce these structures at "cryptic" sites. These structures' namesake binding protein protects them by associating with eIF4G to inhibit the action of PARN. B cells use alternative sites for adding these structures to switch from membrane-bound to secreted antibodies. After CPSF cleaves its substrate, PAP synthesizes these structures, which are later shortened over time in the cytoplasm, decreasing transcript stability. For 10 points, name these long strings of a single nucleotide added to the 3-prime end of pre-mRNA.
ANSWER: **poly-A** tails [accept **polyadenylation**; accept **polyadenylate** polymerase; accept (cryptic) **poly-A** sites or (cryptic) **polyadenylation** sites]
<Biology>

18. A character in a novel by this author is guided by a secret code found in the CIA's library: "GET RID OF MEANING. YOUR MIND IS A NIGHTMARE THAT HAS BEEN EATING YOU: NOW EAT YOUR MIND." A novel by this author switches between the perspectives of the pirate Thivai and a half-robot, half-human named Abhor. This author wrote a novel in which an Italian filmmaker solves his own murder with the help of Romeo, Juliet, and the Brontë sisters. Black Tarantula is the pseudonym of this author of *My Death My Life by Pier Paolo Pasolini,* who rewrote Don Quixote as an American woman who searches for love alongside a dog named Saint Simeon. In a metafictional novel by this author, Janey Smith has an incestuous relationship with her father until she is sent to a school in New York City. For 10 points, name this Punk author of *Blood and Guts in High School*.
ANSWER: Kathy **Acker** [or Karen **Lehman**] (The first novel is *Empire of the Senseless.*)
<American Literature>

19. In this city, Paul Sinoir ("sih-nwar") designed a blue Cubist villa that was restored by Yves Saint-Laurent, who had his ashes scattered in its rose garden. Winston Churchill's only painting created during World War II depicts this city's Kutubiyya Mosque. Juan Goytisolo ("goy-tee-SO-loh") lived the last two decades of his life in this city and praised a gathering space from an unfinished mosque that became UNESCO's ("yoo-NESS-ko's") first Masterpiece site for oral tradition. Abdullah al-Ghalib rebuilt this city's Ben Youssef Madrasa, which is one of the few remaining buildings in the Saadian style. Visitors can enjoy this city's signature lamb soup *tangia* and listen to Berber performers in its Jemaa el-Fnaa marketplace. The Almoravids built this city's signature red walls while it was their capital, but it was later eclipsed by Fez and Rabat. For 10 points, name this central Moroccan city in the shadow of the Atlas Mountains.
ANSWER: **Marrakesh** [or **Marrakech** or **Murrākush** or **Mṛṛakc**]
<Geography>

20. This conflict was the main focus of the *Historia Novella* ("hiss-TOH-ree-ah noh-VELL-uh"), which breaks off due to its author's death. In a system similar to the Italian *carroccio* ("car-ROACH-cho"), a force in this conflict fought a battle around a cart-mounted cross that carried the consecrated host and was surrounded by saints' banners. During this conflict, "men said openly that Christ and his saints slept: we suffered for 19 winters for our sins" according to the "Second Continuation" of the *Peterborough Chronicle*. Thurstan led one side's forces at this conflict's Battle of the Standard. During this conflict, a white-clad woman hid against the snow as she crossed the frozen Thames ("temz") to flee Oxford Castle. The Treaty of Wallingford ended this conflict, which was sparked by a succession crisis after the sinking of the *White Ship* killed William Adelin. For 10 points, what civil war was fought between Stephen of Blois ("BWAH") and Empress Matilda?
ANSWER: the **Anarchy**
<European History>

BONUSES

1. A Syriac poem about this character states that an impenetrable gate commonly attributed to him was used to keep out Gog and Magog. For 10 points each:
[10m] Name this character whose exploits, such as sleeping with the queen of the Amazons, were the focus of a medieval genre inspired by an epic attributed to Pseudo-Callisthenes ("kah-LISS-theh-neez").
ANSWER: **Alexander** the Great [or **Alexander** III of Macedon; or **Alexandros** III; accept ***Alexander** Romance*; accept *Syriac **Alexander** Legend*]
[10h] A Scots version of the *Alexander Romance* has been dubiously attributed to this early Scottish poet. This 14th-century poet used Scots for a narrative poem about Robert the Bruce called the *Brus*.
ANSWER: John **Barbour**
[10e] The influential *Roman d'Alexandre* ("roh-mawn dah-lex-and-reh") tells the Alexander story in this genre of French poetry. In another poem in this genre, the protagonist's head explodes after he blows his oliphant horn.
ANSWER: **chanson**s de geste ("shawn-sohn deh guest") [or **song**s of heroic deeds; accept the ***Song** of Roland* or *Le **Chanson** de Roland* ("shawn-sohn deh ro-lawn"); prompt on epics]
<European Literature>

2. These programs generate control-flow graphs, or CFGs, from an intermediate representation, and then use program execution paths in the CFGs to inform code optimization choices. For 10 points each:
[10e] Name these programs that scan source code, parse it, and then translate it into a lower-level language such as assembly language or machine code.
ANSWER: **compiler**s
[10h] Compilers transform code into this intermediate representation by computing dominance frontiers on a CFG. Redundancy elimination optimizations are simplified by this intermediate representation in which every variable is given a value exactly once.
ANSWER: **static single assignment** form [or **SSA** form or minimal **SSA** form]
[10m] Compilers can allocate these resources by computing live ranges on a CFG, and then building and coloring an interference graph. Spilling occurs when there are not enough of these resources to store all live variables.
ANSWER: **register**s [prompt on memory]
<Other Science>

3. The protagonist of a play claims he unrolled his welcome mat for this animal, in contrast with a fearless hunter and a crying schoolboy who avoid this animal. For 10 points each:
[10m] Name this animal whose arrival is signaled by a "rasp of reeds" and "whisper in the leaves" in a play in which the protagonist dances and chants the story of this animal in front of the women of the marketplace.
ANSWER: **Not-I bird** [prompt on the bird from *Death and the King's Horseman*; prompt on Death]
[10e] Elesin uses the Not-I bird's story to reassure the women he will do his duty in this Nigerian author's play *Death and the King's Horseman*.
ANSWER: Wole **Soyinka** [or Akínwándé Olúwọlé Babátúndé **Ṣóyíinká**]
[10h] The Bird of the Wayside calls itself "a pair of women chatting" as it presents the prologue to a play by this author. The title woman drowns herself after discovering her husband's infertility in this author's play *Anowa*.
ANSWER: Ama Ata **Aidoo** [or Christina Ama **Aidoo**] (The first play is *The Dilemma of a Ghost.*)
<World Literature>

4. An explicit aqueous acid workup is required after reactions using these compounds since they are incompatible with water. For 10 points each:
[10e] Name these strong nucleophiles composed of organomagnesium halides.
ANSWER: **Grignard** ("grin-yar") reagents
[10m] Grignard reagents react with ketones to form what specific products? Your answer [emphasize] *must* include a substitution pattern.
ANSWER: **tertiary alcohol**s [or **3° alcohol**s; prompt on alcohols]
[10h] *Description acceptable*. Grignard reagents also form tertiary alcohols when they react with esters or nitriles, but only if they are provided to the reaction in this way. *N*-butyl-lithium must also be supplied to the Shapiro reaction in this way.
ANSWER: at least **two**-fold stoichiometric **excess** [or at least **two** stoichiometric **equivalent**s of Grignard reagent must be added; or descriptions of adding at least **twice** as much or adding **double**; accept any number greater than or equal to two, such as **three**-fold, in place of "two"; prompt on molar excess or stoichiometric excess by asking "how much?"] (The first Grignard equivalent reduces the ester or nitrile to a ketone.)
<Chemistry>

5. In 2017, use of these locations was criminalized after the death of multiple girls from smoke inhalation and snake bites. For 10 points each:
[10h] Name these cattle sheds and huts where women are isolated during menstruation in Nepal.
ANSWER: **chhaupadi** ("chow-pah-dee")
[10e] To reduce the incidence of these medical conditions, the Kerala ("CARE-uh-luh") government began mass distribution of menstrual cups in 2023. These conditions, which include pyelonephritis, are common in women due to their shorter urethras.
ANSWER: **urinary tract infection**s [or **UTI**s; accept **bladder infection**s or **cystitis**; prompt on urinary infections; prompt on urethritis by asking "what condition is the typical cause?"]
[10m] This company's Indian-American CEO Miki Agrawal left in 2017 after sexually harassing employees. This company recently settled a multi-million-dollar lawsuit over toxic chemicals in its absorbent menstrual underwear.
ANSWER: **Thinx** ("thinks")
<Current Events>

6. Beginner classical players of this instrument often have trouble adopting footstools to elevate the left leg and the need to grow out the fingernails of their right hand. For 10 points each:
[10e] Name this instrument whose classical form uses six nylon strings that produce a warmer tone than their steel-stringed cousins.
ANSWER: **guitar** [accept classical **guitar** or Spanish **guitar** or nylon-stringed **guitar**]
[10h] *Two answers required*. Beginner classical guitars must learn the difference between these two right-hand techniques. In one, the player stops their finger on the next string up following the pluck, while in the other the plucking motion continues away from the string.
ANSWER: **rest** stroke AND **free** stroke [accept **apoyando** in place of "rest stroke"; accept **tirando** in place of "free stroke"]
[10m] Novice classical guitars may play Carcassi's études to master this technique that allows for moveable chord shapes down the neck. This left-hand technique involves using the first finger to depress all six strings.
ANSWER: **barre** chords [or **bar** chords; accept **barr**ing]
<Classical Music>

7. The extremely low-gradient Yoda Ela was constructed to transport this resource between Tissa Wewa and Kala Wewa near the capital city of Anuradhapura. For 10 points each:
[10e] Name this resource that was organized in tanks as part of a "cascade" system used in medieval Sri Lanka to supply paddy fields.
ANSWER: **water** [accept **rainwater**]
[10h] The "cascade" system was maintained as part of this Sri Lankan system of compulsory labor on public works in exchange for land tenure, which was nominally outlawed, but actually exploited, in the 19th century by the British.
ANSWER: **rājākariya** [prompt on king's work or king's labor]
[10m] The "cascade" system began to fall into disrepair when the Dutch East India Company neglected inland areas in favor of coastal regions that could easily export the "true" variety of this crop grown in namesake "gardens" or gathered by the Salagama caste.
ANSWER: **cinnamon** [or **Cinnamomum**; accept true **cinnamon** or **Cinnamomum** verum; accept **cinnamon** gardens or **kaneel** tuinen; accept **cinnamon** peelers]
<World History>

8. In 2016, the International Commission on Stratigraphy began the process of finding a "golden spike" to characterize the beginning of this time period. For 10 points each:
[10e] Name this proposed geological epoch defined as the period during which humans have made a significant impact on the Earth.
ANSWER: **Anthropocene** ("an-THRAH-poh-seen") epoch
[10h] Zoe Todd's criticism of the concept of the Anthropocene from an indigenous perspective draws on the work of this self-described "feminist killjoy" who wrote *Queer Phenomenology* and *The Cultural Politics of Emotion*.
ANSWER: Sara **Ahmed**
[10m] Anna Tsing and Donna Haraway suggested renaming the Anthropocene after these establishments. A Gilberto Freyre ("zheew-BAIR-too FRAY-ree") book is titled in Portuguese for the *casa-grande* ("KAH-zah GRAN-jee") and *senzala* ("sen-ZAH-lah"), two types of dwelling on these establishments.
ANSWER: **plantation**s [accept **Plantation**ocene; accept sugarcane **plantation**s; accept *fazenda*s; prompt on estates]
<Social Science>

9. The War of Saint Sabas was fought between Genoa and Venice for control of this city. For 10 points each:
[10m] Name this city in the Kingdom of Jerusalem where an epidemic killed Sibylla during a siege by her husband, Guy de Lusignan ("GHEE deh LOO-zin-yon"). The Knights Hospitallers relocated from this city to Cyprus after it fell to the Mamluks in 1291.
ANSWER: **Acre** [or '**Akkā** or '**Akō**; or Saint-Jean d'**Acre**; accept Siege of **Acre** or Fall of **Acre**]
[10h] The War of Saint Sabas was focused on Acre's harbor, which was guarded by a structure called the "Tower of" these animals. The Crusaders so named the tower because they mistook Acre for Ekron, where a god apparently named for these animals was once worshiped.
ANSWER: **flies** [or **fly** or **musca**e or **mouche**s; accept "Tower of the **Flies**" or Turris **Muscarum**; accept **flea**s or"Tower of the **Fleas**"; prompt on Beelzebub, Beelzebul, Belzebuth, Baal Zevuv, or Ba'al-zəbûl by asking "he and the god of Ekron he has been linked to were ascribed power over what animals?"] ("Beelzebub" may derive from a name meaning "lord of the flies.")
[10e] Participants in the Third Crusade, who were at that point principally led by this king of England, helped Guy de Lusignan take Acre.
ANSWER: **Richard I** [or **Richard** the **Lionheart**ed; or **Richard Coeur de Lion**; prompt on Richard or Plantagenet]
<Other History>

10. *Description acceptable.* In a Tulu legend, the demon Dhumasura was defeated by Jumadi, a deity with this characteristic formed when one god tried to swallow another. For 10 points each:
[10h] Identify this unusual characteristic possessed by the main deity in Manipuri Vaishnavism as well as Ardhanārīshvara, who was often depicted with a bull and a tiger.
ANSWER: **androgynous** [or **gynandrous**; or **androgyny**; accept **bigender**; accept **half man**, **half woman**, **half male**, or **half female**; accept descriptions of a deity with **male** and **female** aspects; prompt on composite, compound, fused, consisting of two deities, or equivalents] (The Manipuri deity is Rādhā Krishna.)
[10m] This goddess makes up the female half of the bigender deity Ardhanārīshvara. This ascetic daughter of the mountain king Himavat came about from the self-immolation of her predecessor Sati.
ANSWER: **Pārvatī** [accept **Gaurī**, **Umā**, **Aparnā**, **Girijā**, **Girirajaputri**, **Shailaja**, or **Shailaputri**; prompt on Devī or Mahādevī; prompt on Adi Shakti or Adi Para Shakti; prompt on Haimavati]
[10e] Another instance of Hindu deities fusing into one is Hariahara, who is made up of Vishnu and this husband of Pārvatī.
ANSWER: **Shiv**a [or **Śiv**a, **Mahādev**a, **Rudra**, **Parameshwar**a, **Shankar**a, **Samkar**a, **Naṭarāj**a, **Sabesan**, **Adalvallaan**, **Koothan**, **Annamalai**, **Mulsthanewswar**a, **Someswar**a, **Rameswar**a, **Mallikarjun**a, **Iswar**a, **Nandiswar**a, **Lingeswar**a, **Sambhu**, Sadā**shiv**a, Para**shiv**a, or Parama**shiv**a]
<Mythology>

11. In 1855, Fanny Fern was one of the highest-paid authors in America due to the pay she received writing for this industry. For 10 points each:
[10e] Name this industry that employed people such as Ida B. Wells and Nellie Bly.
ANSWER: **news**papers [or **journalism**; or **periodical**s; accept newspaper **columnist**s; prompt on publishing or publications or journals or word forms; reject "magazines"]
[10h] Like every other female author, Fanny Fern was barely mentioned in this 1941 book, which established the standard canon of mid-19th century American literature. This book focused extensively on the work of Emerson, Thoreau, Melville, Hawthorne, and Whitman.
ANSWER: ***American Renaissance*** [or ***American Renaissance***: *Art and Expression in the Age of Emerson and Whitman*] (by F. O. Matthiessen)
[10m] *American Renaissance* also ignored this 1845 book by Margaret Fuller, which argues that marriage should be an alliance between equal partners. It was expanded from Fuller's article "The Great Lawsuit" in *The Dial*.
ANSWER: ***Woman in the Nineteenth Century***
<American Literature>

12. One cell type described by this term, the chromaffin cells, gives rise to pheochromocytomas. For 10 points each:
[10m] Name these cells that integrate two major systems. Tumors of these cells, particularly those arising from the GI tract and pancreas, are *graded* based on the Ki-67 index instead of cellular polymorphisms.
ANSWER: **neuroendocrine** cells [accept **neuroendocrine** tumors; prompt on NETs]
[10e] Pheochromocytomas arise in the chromaffin cells of these glands that produce cortisol. Sympathetic signaling causes these glands to release epinephrine into the blood, integrating the nervous and endocrine systems.
ANSWER: **adrenal** glands
[10h] Non-pheochromocytoma neuroendocrine tumors may cause this paraneoplastic syndrome associated with serotonin overproduction. This condition results in flushing, diarrhea, and more rarely, heart complications.
ANSWER: **carcinoid** syndrome
<Biology>

13. In 2014, Danish filmmaker Lasse Spang Olsen recorded this ritual and underwent it himself, while Ruben Enaje ("eh-NAH-hay") has undergone this action 33 times after he survived falling from a billboard. For 10 points each:
[10h] Name this action that *magdarame*s ("mahg-dah-RAH-mezz") willingly undergo during the San Pedro Cutud Lenten rites in Pampanga, Luzon, though church officials like Archbishop Socrates Villegas ("SOH-cra-tess VEE-yay-gass") have condemned it.
ANSWER: ritual **crucifixion** [or being **crucified**; prompt on, BUT DO NOT REVEAL, mortification of the flesh or self-mortification or penitence]
[10e] Philippine ritual crucifixion is a particularly extreme form of this devotional practice, in which the faithful inflict suffering upon themselves in penance. This practice may include the wearing of sackcloth or self-flagellation.
ANSWER: **mortification** of the flesh [prompt on penitence]
[10m] Some participants in ritual crucifixion claim to be possessed by a version of Jesus known as the "Nazarene" with this quality. Our Lady of the Hermits is among the hundreds of devotional images of the Madonna with this quality.
ANSWER: **black** skin [accept being **dark skin**ned or equivalents; accept **Black** Madonna; accept **Black** Nazarene or El Nazareno Negro]
<Religion>

14. Answer the following about operators in quantum mechanics, for 10 points each.

[10m] In the language of quantum mechanics, operators act on these representations of state vectors. The exterior product of one of these things with its dual gives a projection operator.
ANSWER: **ket**s [reject "bra-ket" or "bra-ket notation"]
[10e] Quantum mechanical operators possess this property that means an operator acting on a sum of kets equals the sum of the operator acting on each ket. Functional analysis and a branch of algebra named for this property are the foundation for studying wave functions as vectors in Hilbert spaces.
ANSWER: **linear**ity [accept **linear** algebra]
[10h] This result states that any Hermitian operator's expectation value can be expressed as the integral of a real parameter lambda with respect to a projection-valued measure.
ANSWER: **spectral** theorem
<Physics>

15. William V wrote the Kew Letters to rally support against this republic. For 10 points each:
[10m] Name this Dutch republic that was proclaimed in 1795 after intervention by the French First Republic. This republic was named for a Germanic tribe whose soldiers largely made up the bodyguards of Rome's early emperors.
ANSWER: **Batavian** Republic [or **Bataafse** Republiek; or République **Batave**; accept **Batavian** Commonwealth or **Bataafs** Gemenebest]
[10e] William V was a member of this Dutch house, just like another William who invaded England in the Glorious Revolution.
ANSWER: House of **Orange**-Nassau [or Huis van **Oranje**-Nassau; accept William of **Orange**; accept William V, Prince of **Orange**]
[10h] During the French intervention in 1795, French hussars captured an iced-in fleet at this city's port in a rare instance of cavalry encountering ships. French sources describe the capture of the fleet at this city as a courageous cross-ice cavalry charge, but Dutch sources describe it as a peaceful armistice.
ANSWER: **Den Helder**
< European History>

16. This opera house's *loggionisti* ("load-joh-NEEST-ee") sit in the upper gallery and have a tendency to loudly talk over performers and sometimes boo them. For 10 points each:
[10e] Name this renowned opera house in Milan.
ANSWER: La **Scala** ("ska-lah") [or Teatro alla **Scala**]
[10m] After receiving boos from the *loggionisti*, tenor Roberto Alagna walked off stage while performing as this character. This army captain is in a love triangle with the princess Amneris before he is buried alive.
ANSWER: **Radamès** ("rah-dah-MESS") (He appears in *Aida*.)
[10h] The audience at La Scala booed during this opera after Luciano ("loo-CHA-no") Pavarotti's voice cracked during the auto-da-fé scene. This opera's "Milan version" cuts the first of its five acts, which contains a hunting scene at Fontainebleau.
ANSWER: *Don Carlos* [or *Don Carlo*]
<Other Fine Arts>

17. After experimenting with mescaline, this philosopher started to imagine that crabs were following him everywhere. For 10 points each:
[10e] Name this author of *Being and Nothingness*.

ANSWER: Jean-Paul **Sartre** ("sar-truh") [or Jean-Paul Charles Aymard **Sartre**]
[10h] Around the same time, this philosopher experimented with mescaline and hashish. His posthumously published collection of writings about hashish describes the drug as a vehicle for "profane illumination."
ANSWER: Walter **Benjamin** ("BEN-yah-meen") [or Walter Bendix Schönflies **Benjamin**]
[10m] Aldous Huxley's claims to have had mystical experiences with mescaline were criticized by this Jewish philosopher who wrote *I and Thou*.
ANSWER: Martin **Buber**
<Philosophy>

18. Answer the following about the first modern passenger liner service, the Black Ball Line, for 10 points each.
[10m] The Black Ball Line was founded by a group of Quakers led by Jeremiah Thompson, who wanted to develop a more reliable service to export this good. The Stalybridge Riots were caused by this good's namesake "famine" in Lancashire.
ANSWER: **cotton** [or *Gossypium*; accept "**cotton** famine"; prompt on fibers; reject "textiles" or "clothing"]
[10h] The line popularized the use of these mid-size ships built for fast travel and information delivery. The consistent schedule of these ships made them the preferred choice for postal services before steamships.
ANSWER: **packet** ships [or **packet** boats; accept **packet** service or **packet** business; accept **packet** trade; prompt on paquebots]
[10e] The line's first transatlantic service was run with a boat named for this president, who earlier mobilized the Navy during the War of 1812 while serving as Secretary of State to James Madison.
ANSWER: James **Monroe**
<American History>

19. This aesthetic is exemplified by the dense, colorful paintings of Angelbert Metoyer and the high-contrast black-and-gold portraits of Lina Iris Viktor. For 10 points each:
[10e] Name this widespread cultural aesthetic that depicts Black people among advanced technology and in fantastic speculative settings.
ANSWER: **Afrofuturism** [accept **Afrofuturist**; accept **Africanfuturism** or **Africanfuturist**]
[10h] This Afrofuturist artist sculpted a reclining Black woman with her back half turning into a mass of wires in *She's got the whole world in her hands* and depicted a seated woman covered in snakelike coils in *The NewOnes, will free Us*.
ANSWER: Wangechi **Mutu**
[10m] This acronym is prefixed by "Afri" in the name of a 1960s art collective seen as precursor of Afrofuturism, which was founded by Chicago artists Jeff Donaldson and Wadsworth Jarrell. An unrelated European avant-garde movement named for this acronym included Karel Appel and Asger Jorn.
ANSWER: **COBRA** [accept Afri**COBRA** or **CoBrA**]
<Painting & Sculpture>

20. Rabbi Julia Neuberger distanced herself from this choice, calling it a "disgrace." For 10 points each:
[10h] Describe this decision whose many critics included Simon Jenkins, who called this decision an act of "literary vandalism" that unjustly celebrated "the rambling thoughts of a blind Glaswegian drunk."

ANSWER: awarding the 1994 **Booker** Prize for Fiction to ***How late it was, how late*** [or awarding the 1994 **Booker** Prize for Fiction to James **Kelman**; prompt on 1994 Booker Prize for Fiction controversy; prompt on honoring James Kelman or *How late it was, how late* or similar answers]
[10e] The extremely frequent use of the word "fuck" in *How late it was, how late* is criticized in *The King's English*, a book on usage by this author of *Lucky Jim*.
ANSWER: Kingsley **Amis** [or Kingsley William **Amis**]
[10m] This 2020 novel by Douglas Stuart was influenced by the vernacular Scottish dialogue of *How late it was, how late*. For this novel, Stuart became the second Scot to win the Booker.
ANSWER: ***Shuggie Bain***
<British Literature>