Packet 15 (Finals 2)<br>Editors: Jaimie Carlson, Jordan Brownstein, Eric Mukherjee, JinAh Kim<br>Writers: Jaimie Carlson, Nitin Rao, Margaret Tebbe, Ayush Parikh, Antonio Jimenez, Paul Lee, Lorenza Colagrossi, Will DiGrande, Eric Mukherjee, Sam Claypoole, Jacob Dubner, JinAh Kim, Gabe Ajzenman, Lam Tran, Joe Jun, Alex Quinn

Tossups

1. The author of one work titled for this concept apologized for not doing complete enough research, since he didn't know Turkish; that work examines how the phrase "early in the morning" is used for ethical significance rather than to mark time in a book where "everything remains unexpressed." Northrop Frye contrasted "high" and "low" forms of this concept, which titles a work with sections like "The Brown Stocking." That book contrasts the styles of Homer and the Old Testament in a section which examines a description of Eurycleia recognizing Odysseus's scar. An author inspired by (*) Platonic ideals contrasted this idea with diegesis, or narration. "The Representation of Reality in Western Literature" is the subtitle of an Eric Auerbach work named for this word. For 10 points, Aristotle's Poetics defines what concept as the imitation of nature by art?
ANSWER: mimesis
$<\mathrm{JC}$, European Literature>
2. These concepts are applied to Alvin Plantinga's theory of "warrant" in a paper on their "inevitability" by Linda Zagzebski, who also rebuts Plantinga's assertion that they arise due to a mismatch between cognitive faculties and the environment. These concepts often rely on luck and deviant causal chains and were originally meant to attack arguments like those of Chisholm and Ayer. These (*) thought experiments first appeared in a massively influential three-page paper that discussed beliefs like "The man who will get the job has ten coins in his pocket" and "Either Jones owns a Ford, or Brown is in Boston," to argue against a theory laid out in Plato's Theaetetus. For 10 points, name these epistemological thought experiments named for the author of "Is Justified True Belief Knowledge?"
ANSWER: Gettier problems [accept Gettierology or Gettier cases; prompt on more general answers like thought experiments or paradoxes]
$<$ JK, Philosophy>
3. Soegaard wrote about how this idea informs modern user interface design. A theory that sprung from this idea divides memories into "verbatim" and "gist" and is called fuzzy-trace theory. The founder of a school named for this idea outlined "productive thinking," or solving a problem with insight, and "reproductive thinking," or solving a problem by experiences. Edgar Rubin studied that school's (*) figure-ground phenomenon. A school named for this idea posited laws of proximity, similarity, and closure. It studied the appearance of motion in still images in the phi phenomenon and stated that humans tend to place perceptions in the simplest order in its law of Prägnanz ("PRAYG-nonts"). For 10 points, name this German psychological school founded by Wolfgang Köhler and Max Wertheimer, which focuses on how the brain constructs a whole greater than the sum of its parts.
ANSWER: Gestalt ("guh-SHTALT") psychology
$<\mathrm{JC}$, Social Science (Psychology)>
4. A bicyclic one of these compounds commonly used as a precursor for making steroids can be synthesized using the Hajos-Parrish reaction. Tohru Fukuyama created a method to produce these compounds from
thioesters and organozinc halides. A rearrangement that can produce a hydroxyl aryl one of these compounds from an aryl ester is a modification of the Friedel-Crafts reaction named for (*) Fries. A common method for testing methyl versions of these compounds involves solid iodoform formation, and they produce a negative result in the Tollens test. They can be produced by the oxidation of secondary alcohols. For 10 points, name these compounds contrasted with aldehydes in which two R groups flank a carbonyl.
ANSWER: ketones [prompt on carbonyl until read; do not accept "aldehydes"]
<AP, Chemistry>
5. This composer depicted a fight between St. Michael the Archangel and the dragon in the second movement of his piece subtitled "Four Impressions for Orchestra," an orchestration of his Three Preludes on Gregorian Melodies for piano. This composer used the Christmas carol "O Come, Emmanuel" in a painting-inspired orchestral piece that depicts the birth of a goddess. This composer quoted Renaissance lute music attributed to Vincenzo Galilei and Marin Mersenne in (*) Ancient Airs and Dances. French horns depict gods blowing on their conch shells as naiads dance near a Bernini-designed structure named for Triton in a symphonic work by this composer. The finale of a work by this composer introduces six buccine ("boo-CHEE-nay") to represent a military march down the Appian Way, along which the title greenery grows. For 10 points, name this Italian composer of Roman Festivals and Pines of Rome.
ANSWER: Ottorino Respighi
$<$ JD, Music>
6. Mutations in C19MC microRNAs can lead to this disease, which is associated with antibodies to type I angiotensin II receptor. Glomeruloendotheliosis ("glom-AIR-yoo-lo-endo-thee-lee-oh-sis") is a characteristic lesion of this disease. Patients with this condition often have high soluble endoglin, and it can be screened for using the ratio of soluble FLT-1 ("flit-one") to PIGF. While being treated for it, patients are assessed every four hours for respiratory depression, headache, and ankle reflexes. A severe variant of this condition, which is caused by imbalanced angiogenesis and incomplete spiral artery transformation, occurs with hemolysis, liver damage, and low platelets and is called (*) HELLP ("help") syndrome. Magnesium sulfate treats this condition, which is diagnosed when there is significant proteinuria and hypertension after 20 weeks. For 10 points, name this pregnancy disorder that can cause seizures when untreated.
ANSWER: preeclampsia [accept HELLP syndrome or hemolysis, elevated liver enzymes, low platelet syndrome until "HELLP" is read; prompt on gestational hypertension or chronic hypertension]
$<$ LC, Biology>
7. Philippe-Jean Pelletan smuggled the heart of one holder of this title in an urn of wine. Guigues IV ("GEEG the fourth") was the first to take this title, which was held by the Counts of Albon until it was transferred away by Humbert II of Viennois. Tremors upon seeing a portrait of Antoine Simon led the Iroquois priest Eleazar Williams to believe that he was the "Lost" holder of this title, while a 1999 DNA test disproved the claim that Karl Wilhelm Naundorff had made two hundred years prior. (*) Henry V of England legendarily received a mocking gift of tennis balls from one holder of this title. "Le Grand" and "Le Petit" holders of this title died of disease, leading the great-grandson of Louis XIV to succeed him. For 10 points, name this title granted to heirs apparent to the French throne, named for the dolphin on its coat of arms.
ANSWER: Dauphin ("DOFF-in" or "doh-FAN") of France [or Dauphin of Viennois; prompt on heir to the French throne or equivalents]
$<$ NR, European History>
8. The stability of this mineral in igneous rocks is limited by sphene, and lavas containing both sphene and this mineral are known as etindites. The Aurivillius phases of this mineral consist of alternating layers of bismuth oxides, while the Ruddlesden-Popper phases of this mineral consist of strontium silicate and
strontium oxide. The Dion-Jacobson phase of this mineral has intruding layers composed of an alkali metal every $n$ layers. A layer of magnesium silicate at the core-mantle boundary is thought to exist in the (*) "post" form of these minerals. This mineral lends its name to a general class of crystal structures with formula ABO3 that are being used for solar cells and lasers. For 10 points, name this mineral consisting of calcium titanium oxide that is named after a Russian mineralogist.
ANSWER: perovskite
<AP, Other Science (Earth Science)>
9. This painting was called a "terrifying hymn in honor of doom and irremediable suffering" by Charles Baudelaire. The artist subverted the usual arrangement of the pyramidal groupings in this scene by placing the villains at their apexes. Two figures between those groupings are completely shadowed, and the sky of this painting was repainted after its artist saw The Haywain, which was also exhibited at the $\mathbf{1 8 2 4}$ Salon. This painting's artist was inspired by (*) Gericault and Gros, the latter of whom was offended by this painting's borrowing from The Plague of Jaffa. In the lower right corner, an old woman looks at the sky and an infant clutches its dead mother's breast while a standing woman writhes against ropes tying her to a horse. For 10 points, name this painting depicting Ottoman soldiers killing Greek civilians on the title island, a work by Eugène Delacroix.
ANSWER: The Massacre at Chios [or The Massacre of Chios]
$<$ MT, Painting>
10. Modern historiography of this period divides it into the statutory state, the early royal court state, and the late royal court state. One account of life during this period written by a female royal is translated as The Gossamer Years. A poem containing every syllable in the alphabet, the Iroha, was attributed to a religious leader from this period; that religious figure's mentor, Huiguo ("HWAY-gwoh"), described teaching him being like "one vase filling another." The [emphasize] decay of the ritsuryō system and the unfolding of the (*) Taika reforms during this period led to the proliferation of shōen ("SHO-en") estates. The rival Tendai and Shingon schools were formed during this period, during which intermarriage with the Imperial family and a monopoly on the positions of sesshō ("SESH-sho") and kampaku made the Fujiwara clan de facto rulers. For 10 points, identify this classical period of flourishing Japanese art and literature ended by the Genpei War.
ANSWER: Heian period
<NR, World History>
11. Poets in this language compete in American Idol-style reality TV shows called Prince of Poets and Million's Poet. A poet in this language wrote that "a time between ashes and roses is coming" and analyzed this language's literature in The Static and The Dynamic. Another author wrote "Coffee... is the sister of time" in a prose poem describing worms consuming a corpse on Hiroshima Day and described the "pride of the sun." In another poem in this language of the translator Adonis, that author of Memory for Forgetfulness states "I have eight children" and "I have a name without a title" and repeatedly asks (*) "Will you be angry?" That poem repeats "Write down!" and ends "beware of my hunger and my anger!" It is titled for an object numbered 50,000 . For 10 points, name this language used to write the poem "Identity Card" by Mahmoud Darwish. ANSWER: Arabic
$<\mathrm{JC}$, World Literature>
12. This book claims that "the faithful shall never be struck across the face" and observes that even by "thinking hundreds of thousands of times," one cannot reduce religion to mere thought. This book, which was translated into English by Ernest Trumpp and Max Arthur Macauliffe, contains $\mathbf{1 2 3}$ hymns written by the Sufi saint Sheikh Farid. The Sohila hymns in this text are recited at bedtime, while another section states that "to be purified, one must abide in love of the divine." A (*) chaur sahib is waved above this text, which rests on a manji sahib under a rumala and is placed on a takht platform. This text is written in the Gurmukhī script in various
languages including Khariboli, Sindhi, and Persian. The Mul Mantar begins this text, and after the death of Guru Gobind Singh, this text was accepted as the final, eternal guru. For 10 points, name this holiest text in Sikhism. ANSWER: Adi Granth [or Guru Granth Sahib] <AP, Religion>
13. One of these objects that makes the lines in a woman's face go into "a fierce and different radiation" is picked up with the same "grace and care" as an egg from underneath a hen, and that woman cries "Look at that dog!" to distract a man from seeing one of these objects. In another story, a woman explodes "like a piece of machinery that had been given one ounce of pressure too much" after a woman with an identical hat (*) proffers one of these objects. In another story, an elderly woman steals one of these things that fell out of a hunter's pocket. A racist woman ignores her son Julian's urgings and offers a "bright new" one of these things to a black child on the bus in Flannery O'Connor's "Everything that Rises Must Converge." For 10 points, name this object that Phoenix Jackson finds in the road in Eudora Welty's "A Worn Path," which she uses to pay for medicine. ANSWER: coins [accept specific types of coins like nickel or penny; prompt on money] $<\mathrm{JK}$, American Literature>
14. A variant of this device with a ring on the end was developed by du Noüy ("noo-ee") to replace "oscillating jet" and "capillary tube" techniques. In one experiment, a mirror attached to one of these devices reflected light into a telescope to measure position; that experiment's creator created a "horizontal variometer" by modifying one of these devices to measure two-dimensional forces. Loránd (*) Eötvös ("URT-vursh") used that device to test the weak equivalence principle. This device invented by John Michell was used to determine Coulomb's law. Henry Cavendish used this device to measure the Earth's density and thus the big-G gravitational constant. For 10 points, name this device used to measure very weak forces, which often consists of two masses on a rod suspended from a string.
ANSWER: torsion balance [or torsion pendulum; accept ring tensiometer until "light" is read]
$<\mathrm{JC}$, Physics>
15. The founder of the Female Reform Society, birth control advocate Mary Fildes, was one of the targets of this event. This event inspired a group of businessmen called the Little Circle to found a new publication after James Wroe, who coined the name of this event, was forced to close his newspaper, The Observer, because of it. A unit formed in response to the earlier Blanketeers March, the Yeomanry, instigated this event under the possibly inebriated Hugh Birley. The (*) Cato Street conspiracy targeted Lord Sidmouth and his colleagues for responding to this event by passing the Six Acts. Victims of this event were gathered by the Manchester Political Union to hear Henry Hunt denounce the Corn Laws. For 10 points, give this 1819 event where cavalry charged down a large crowd of protesters on St. Peter's Field, named for a victory over Napoleon four years prior. ANSWER: Peterloo massacre [or Battle of Peterloo]
<NR, European History>
16. It's not Thoth, but this deity used his form as a god with a giant cow ear on his head, Sedjem, to detect the false oath of a draughtsman ("drafts-man"), whom he struck blind. In the eleventh chapter of the Book of the Dead, the deceased proclaims that he will "stand up like Horus and sit down" like this god. This deity's Tatenen form is represented as a young man wearing a two-plumed crown, and he was depicted in the Ptolemaic era with female breasts. This deity, who was described in the Shabaka Scroll, was the [emphasize] first god to be incarnated as the sacred bull (*) Apis. This alleged father of Imhotep is often depicted as a green-skinned mummy holding the ankh, the was, and the djed. He was syncretized with Hephaestus and worshipped with his spouse, Sekhmet. For 10 points, name this Egyptian creator deity and god of craftsmen, the founder of Memphis.
ANSWER: Ptah [or Peteh]
<LC, Mythology>
17. In August 2018, Amnesty International claimed that one of its staff members had been the victim of a spying attack targeted at this product. The Israeli-based NSO group, which creates a spyware program known as "Pegasus," has been accused of helping target activists using this product in countries like Saudi Arabia. This product's parent company took out several full-page newspaper ads after criticisms that "fake news" on this product had facilitated a surge of (*) lynch mobs in India. After the Cambridge Analytica scandal broke, this company's co-founder Jan Koum left Facebook, which acquired this company in 2014. This product has been used to corroborate a timeline of Jamal Khashoggi's ("kha-SHOOK-chee's") potential murder, since after leaving the Saudi embassy in Turkey, his friend's messages on this program were left unread. For 10 points, name this popular messaging app.
ANSWER: WhatsApp [prompt on Facebook]
$<\mathrm{JK}$, Current Events>
18. People with this profession grab a mule to get it to stand still while being sketched in a Stephen Crane article which observes that "Man is in the implacable grasp of nature." The grandmother of a man with this profession says in "sibilant ecstasy" that he is "white as milk" and repeats "bless him!" while his wife "winced with fear and shame" "from death, her ultimate master" after reflecting that "she had felt familiar with him" erroneously. That man is thought to be drinking in the "Prince of Wales," but has to be (*) lain out "in the parlour" instead by his wife Elizabeth. One of these people, Maheu ("mah-OO"), meets the socialist Étienne Lantier ("ay-tee-EN lont-YAY"), who harangues these people in the Rougon-Macquart ("roo-GON mah-CAR") cycle. One of these laborers is killed in D. H. Lawrence's "Odour of Chrysanthemums." For 10 points, name these underground workers who go on strike in Émile Zola's Germinal.
ANSWER: coal miners [prompt on miners]
$<\mathrm{JC}$, British Literature>
19. In a work by this man, characters dance what they call "the Madison dance," which was totally unrelated to the actual Madison dance, in a piece that inspired the disco scene in Pulp Fiction. Those three characters try to steal money from a rich uncle and break the world record for running through the (*) Louvre. Another work by this man begins with a continuous four-minute take of the protagonist taking an elevator to his hotel room and ends with Natacha von Braun telling the protagonist that she loves him after that man, Lemmy Caution, destroys a supercomputer. This collaborator with Anna Karina directed a work that ends with Patricia asking, "What's that mean, 'puke'?" after she betrays her Humphrey Bogart-obsessed lover, the criminal Michel. For 10 points, name this French New Wave director of Alphaville and Breathless.
ANSWER: Jean-Luc Godard
$<\mathrm{JC}$, Other Arts (Film)>
20. During this battle, Norman J. Hall and Henry Baxter led a voluntary amphibious assault to clear Confederate sharpshooters from Water Street. At this battle, Robert E. Lee remarked, "It is glorious to see such courage in one so young!" after "Gallant" John Pelham stalled the lines of the Left Grand Division with horse artillery. After George Meade broke through a gap in Stonewall Jackson's lines, Jubal Early saved the Confederate right flank at this battle with his counterattack. Joseph Hooker was (*) promoted after the losers of this battle attempted to cross the Rappahannock again in the Mud March. The bloodiest event of this battle occurred when four Union divisions were cut down crossing Telegraph Road to wrest Marye's Heights from James Longstreet. For 10 points, name this decisive late 1862 defeat for Ambrose Burnside's Army of the Potomac in Northern Virginia.
ANSWER: Battle of Fredericksburg
$<$ NR, American History>

## Bonuses

1. This woman is often considered to be "the poet of the Risorgimento" largely because of her poem about a "little child so singing 'neath Casa Guidi windows... O bella liberta, O bella!' For 10 points each:
[10] Name this poet who lived in Florence after writing "How do I love thee? Let me count the ways" in Sonnets from the Portuguese.
ANSWER: Elizabeth Barrett Browning [prompt on Browning]
[10] In Sonnets from the Portuguese, Browning says that "the soul's" type of this Italian place "hath its merchandise" and describes "bartering curl for curl" and receiving a lock of hair here, which she lays on her chest.
ANSWER: Rialto [or the soul's Rialto]
[10] Browning wrote this verse novel in which the title character travels from Florence to London to become a poet and falls in love with Romney, who goes blind after failed romances with Marian Earle and Lady Waldemar.
ANSWER: Aurora Leigh
$<\mathrm{JC}$, British Literature>
2. This man's ancestors ruled as kings of Benin's port city of Allada. For 10 points each:
[10] Name this leader of the Haitian Revolution who was captured by deception and deported to France before independence was achieved.
ANSWER: Toussaint Louverture
[10] This successor of Louverture officially declared the independence of Haiti and crowned himself emperor. He ordered the massacre of all white French who remained on the island in 1804.
ANSWER: Jean-Jacques Dessalines
[10] This leader of the free coloreds supported André Rigaud and Jean-Pierre Boyer in the War of the Knives against Louverture. After Dessalines' murder, this man split with Henri Christophe and ruled the southern Republic of Haiti.
ANSWER: Alexandre Pétion
<AJ, World History>
3. One work by this author states that "every man who has suffered misfortunes prefers to be himself, even with his misfortunes, than to be someone else without them." For 10 points each:
[10] Name this Spanish author who included pieces like "The Man of Flesh and Bone" and "In the Depths of the Abyss" in his essay collection The Tragic Sense of Life.
ANSWER: Miguel de Unamuno y Jugo
[10] In Unamuno's novel Mist, the character Augusto is rejected by Eugenia and before killing himself, decides to consult this type of character, who tells him that he can't die since he isn't real. This type of character also notably makes an appearance in Vonnegut's Slaughterhouse-Five.
ANSWER: the author [or Miguel de Unamuno y Jugo; or Kurt Vonnegut; accept descriptions such as himself] [10] After the author kills him off, Augusto's funeral oration is given by one of these creatures. The high-born Diana's love for her secretary Teodoro titles a Lope de Vega play named for one of these animals "in the Manger."
ANSWER: $\underline{\text { dog [or perro] }}$
$<\mathrm{JC}$, European Literature>
4. Though this treaty laid out provisions for amnesty, thousands of harkis were murdered in its wake. For 10 points each:
[10] Name this agreement between France and the FLN that granted independence to Algeria. It was fiercely opposed by the OAS.
ANSWER: Évian Accords
[10] The Algerian War brought down the Fourth Republic and led to this man's election as President. Though he had led Free France during World War II, he was the target of assassination attempts by French soldiers in the OAS.

ANSWER: Charles André Joseph Marie de Gaulle
[10] De Gaulle sought to maintain French control over this naval base near Oran, which included underground facilities for atomic testing. It was the site of a controversial World War II British attack on the Vichy French fleet. ANSWER: Mers EI Kébir
$<$ NR, European History>
5. Japanese parents sometimes tell their kids to hide their belly buttons from this deity, who is believed to eat the navels or abdomens of children. For 10 points each:
[10] Name this this Shinto god of lightning and thunder.
ANSWER: Raijin ("RYE-jeen") [or Raiden]
[10] Raijin is often paired with Fujin ("FOO-jeen"), a god of this substance, which he stores inside a bag. According to legend, Fujin protected Japan from a Mongol invasion by using the "divine" form of this substance, or kamikaze. ANSWER: wind
[10] John Brownlee's Japanese Historians and the National Myths argues that the Japanese imperial state used mythical history such as Fujin's military aid to support its legitimacy. Japan's semi-legendary history is laid out in works like the Nihon Shogi and this oldest extant work of Japanese history compiled by O no Yasumaro.
ANSWER: the Kojiki [or Records of Ancient Matters; accept $\underline{\text { Furukotofumi] }}$
<LC, Mythology>
6. An inverse will exist only if the determinant of one of these objects is nonzero. For 10 points each: [10] Name these two-dimensional arrays of numbers central to the field of linear algebra.
ANSWER: matrices [or matrix]
[10] This type of matrix contains all first-order partial derivatives of a vector-valued function. The determinant of this matrix can be used to change coordinates, making it easier to solve certain differential equations.
ANSWER: Jacobian matrix
[10] Factoring a matrix via this method results in two triangular matrices and sometimes a permutation matrix as factors. This technique was introduced by Polish mathematician Tadeusz Banachiewicz ("tah-DAY-oosh bah-nakh-YEV-itch") in 1938.

<AP, Other Science (Math)>
7. This man is known as the "Master of the Use of Paradise" and he led his family to Kufa from his hometown of Medina. For 10 points each:
[10] Name this grandson of Muhammad and brother of Hasan.
ANSWER: Husayn Ibn-Ali ibn Ali Talib [or Hussein; or Hosayn]
[10] On this holiday, Shi'a Muslims commemorate the martyrdom of Husayn. Many religious leaders have banned extreme forms of tatbir, or mourning that can result in self-harm, that are traditionally part of this holiday.
ANSWER: Day of Ashura
[10] Husayn was beheaded at this battle along with 72 of his companions. The Day of Ashura often features reenactments of this battle.
ANSWER: Battle of Karbala
<AP, Religion>
8. This process is defined as a change in the gene pool of a population due to chance. For 10 points each: [10] Name this process, a fluctuation in the frequency of alleles from one generation to another, an example of which is the bottleneck effect.
ANSWER: genetic drift
[10] The high rate of this disease among Eastern European Jews is attributed to a population bottleneck in the Middle Ages. This disease is similar to Sandhoff's disease.
ANSWER: Tay-Sachs disease [or GM2 gangliosidosis]
[10] Another population affected by Tay-Sachs disease is this one, who carry a completely different mutation than Ashkenazim and Cajuns. Some members of this population with Tay-Sachs have a 7.6-kilobase deletion in the first exon.
ANSWER: French Canadians [or Quebecois; or Franco-Canadians; prompt on Canadians or French] <AP, Biology>
9. A proverb states that a gentleman does not part with this instrument without good reason. For 10 points each: [10] Name this zither-like Chinese instrument. Unlike the similar guzheng ("goo-jung"), it does not have any movable bridges to change pitch. Korean or Japanese equivalents are also acceptable.
ANSWER: guqin ("goo-cheen") [or qin; or qixianqin; or go-geum; or ko-kin]
[10] The guqin used to have fewer strings, but two more were added during the Zhou ("joe") dynasty, giving it this many strings. This is the number of notes in a major scale.

## ANSWER: seven [or 7]

[10] This Chinese composer imitated the sounds of guqin in his piano concerto subtitled "The Fire," which he dedicated to Lang Lang. This man wrote Internet Symphony No. 1 and the score for Crouching Tiger, Hidden Dragon.
ANSWER: Tan Dun [prompt on Dun]
<PL, Music>
10. This artist was notorious for his aggression and brawling, and he was eventually exiled from Rome after killing Ranuccio Tomassoni, possibly over a tennis game. For 10 points each:
[10] Name this artist of The Seven Works of Mercy who pioneered tenebrism, a form of chiaroscuro.
ANSWER: Michael Merisi da Caravaggio
[10] This chapel, part of the church of San Luigi dei Francesi, is the location of Caravaggio's most famous painting, The Calling of St. Matthew.
ANSWER: Contarelli Chapel
[10] Caravaggio painted two versions of this scene, one of which depicts a red-robed Jesus and a man with a scallop shell pin.
ANSWER: Supper at Emmaus
<MT, Painting>
11. Armed only with a sgian dubh ("skee-un DOO") and his bagpipes, Bill Millin participated in the D-Day landings in this garment. For 10 points each:
[10] Name this Highland wool pleated garment with tartan patterns.
ANSWER: kilts
[10] Hugh Trevor-Roper analyzed the "Highland myth" of clan tartans in The Invention of Tradition, a book edited by this historian with Terence Ranger. This Marxist historian wrote a trilogy on the ages of "Revolution,"
"Capitalism," and "Empire."
ANSWER: Eric Hobsbawm
[10] This monarch revived the kilt and other Highland dress traditions on a visit to Scotland organized by Walter Scott, the first visit by a British monarch since Charles I.
ANSWER: George IV [prompt on George]
$<$ NR, European History>
12. A paper that founded a sub-discipline of this field states that this field has moved from "noble innocence" to "critical self-consciousness" and declares that it needs to be "anthropology or... nothing." For 10 points each: [10] Name this discipline that often excavates and studies artifacts from ancient cultures.
ANSWER: archaeology [accept, but DO NOT REVEAL, New Archaeology or processual archaeology]
[10] This aforementioned theory, also called New Archaeology, is framed upon cultural evolutionism and emphasizes the scientific method. It is rooted in Wiley and Phillips' Method and Theory in American Archaeology. ANSWER: processual archaeology
[10] This American archaeologist, a proponent of processual archaeology, is known for incorporating middle range theory into the field.
ANSWER: Lewis Binford
<AP, Social Science (Archaeology)>
13. This play ends with the housekeeper Johanna repeating "This is the way the world ends" after Violet reveals that she knew about the incestuous affair of Ivy and Charles. For 10 points each:
[10] Name this Tracy Letts play which shows the breakdown of the Southern Weston family after the suicide of Beverly and the heavy drug use of the matriarch Violet.

## ANSWER: August: Osage County

[10] The morphine-addicted mother Mary appears in this author's play about the similarly ugly conflicts among the Tyrones over alcoholism and Edmund's consumption, A Long Day's Journey into Night.
ANSWER: Eugene O'Neill
[10] In the final scene of A Long Day's Journey into Night, Mary comes downstairs in a trance to perform this activity, which she practiced as a girl in the convent and can no longer do because of her maimed fingers.
ANSWER: play the piano [accept equivalents]
$<\mathrm{JC}$, American Literature>
14. For the Earth, this effect leads to the Milankovitch cycles. For 10 points each:
[10] Name this process defined as the slow movement of the axis of a spinning body around another axis. When this process is perturbed, nutation occurs.

## ANSWER: precession

[10] The precession of this portion of Mercury's orbit was an early confirmatory test of general relativity. For an object orbiting the sun, this position is the point at which the object is closest to the sun.
ANSWER: perihelion
[10] This ancient Greek astronomer discovered the precession of the equinoxes. He names an ESA satellite that measured the parallax and proper motion of 118,200 stars for its namesake catalogue.
ANSWER: Hipparchus of Nicaea
<AP, Physics>
15. In the first episode of this show, the main character fights with a leprechaun after his wife and best friend die in a car accident and he is released from prison. For 10 points each:
[10] Name this show broadcast on Starz that follows Shadow Moon as he works for a modern-day Odin. It is based on a novel of the same name by Neil Gaiman.

## ANSWER: American Gods

[10] This other Starz series, which follows characters like James Flint, Anne Bonny, Eleanor Guthrie, and Jack Rackham, is a prequel to Stevenson's Treasure Island set during the Golden Age of Piracy.
ANSWER: Black Sails
[10] Claire Randall, a nurse in World War II, is transported back in time to 18th-century Scotland in this other Starz series based on a book series by Diana Gabaldon.
ANSWER: Outlander
$<$ MT, Trash (TV)>
16. This view's namesake argued that a town could still be called "Dartmouth" even if it did not lie at the mouth of the Dart River. For 10 points each:
[10] Name this view that holds that the semantic contribution of a name is only its referent. This view was detailed in its namesake's 1843 work A System of Logic, which distinguished between denotation and connotation.
ANSWER: Millianism [or John Stuart Mill's theory of names]
[10] Saul Kripke's causal theory of reference claims that a name's referent is initially fixed by this action, which he alternatively terms an "initial baptism."
ANSWER: dubbing [accept word forms; prompt on naming or equivalents like giving a name]
[10] This philosopher argued that names were disguised definite descriptions and analyzed the sentence "the present King of France is not bald" in his essay "On Denoting."
ANSWER: Bertrand Russell
<NR, Philosophy>
17. This piece opens with a recitative section that is followed by a repeated chromatic descending fourth line in the bass that continues throughout the song. For 10 points each:
[10] Name this aria in which a Queen of Carthage asks Belinda to remember her, but to forget her fate as she kills herself.
ANSWER: "When I am Laid in Earth" [accept, but DO NOT REVEAL, "Dido's Lament"]
[10] "When I am Laid in Earth" is the climax of this opera written by Henry Purcell ("PUR-sull").
ANSWER: Dido and Aeneas
[10] Britten's Young Person's Guide to the Orchestra featured variations on the theme of this other composition by Henry Purcell, a collection of incidental music.
ANSWER: Abdelazer suite
$<\mathrm{MT}$, Other Arts (Opera) $>$
18. One type of this reaction with a carbanion intermediate is referred to as "[this reaction] conjugate base." For 10 points each:
[10] Name this set of reactions that involves the removal of two substituents to form an alkene product. The deuterium isotope effect can be used to experimentally differentiate between E1 and E2 variants of this reaction.
ANSWER: elimination reactions
[10] In Grieco elimination of aliphatic alcohols, this element is reduced as an intermediate prior to its oxidation by hydrogen peroxide to yield terminal alkenes.
ANSWER: selenium [ $\mathrm{or} \underline{\underline{\mathbf{S e}} \text { ] }] ~}$
[10] In this other elimination reaction, a quaternary ammonium reacts with excess methyl iodide prior to treatment with silver oxide, water, and heat to yield tertiary amines.
ANSWER: Hofmann elimination [or exhaustive methylation]
$<$ PL, Chemistry>
19. With a law enforcement officer from this state, Frederick Russell Burnham saved William Howard Taft and Porfirio Díaz from assassination during one summit. For 10 points each:
[10] Name this state where Stephen F. Austin formed a Ranger Division that took down Bonnie and Clyde.
ANSWER: Texas
[10] Texas Rangers captain Samuel Walker helped develop one of these weapons, with which he equipped his Texas Rangers. The inventor of these weapons displayed them at the Crystal Palace Exhibition.
ANSWER: Walker Colt revolver [do not accept "pistol"; prompt on partial answer]
[10] The Texas Rangers fought the Bandit War over the border against radical followers of this Mexican president, who led the Constitutionalist Army.
ANSWER: Venustiano Carranza
<NR, American History>
20. A version of this play translated by André Gide ("zheed") was read on the radio the night before Paris fell to the Nazis. For 10 points each:
[10] Name this play in which Amal, a boy who is sick and confined to his uncle's house, converses with passers-by and dreams of receiving letters from the king.
ANSWER: The Post Office [or Dak Ghar]
[10] This author of The Post Office also wrote Red Oleanders, which describes a revolt against the king of Yakshapuri, and a poetry collection where he says "let my country awake" into a world "where knowledge is free." ANSWER: Rabindranath Tagore
[10] Tagore is most well-known for this poetry collection of Bengali "Song Offerings," which discusses a place "where the mind is without fear" and opens with the line "thou hast made me endless, such is thy pleasure."
ANSWER: Gitanjali
<MT, World Literature>

