

2019 Terrapin: Come on Angel, Come and Save Us

Packet 8

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Tossups

1. **In a novel titled for one of these systems, it is revealed that the protagonist's mother was bitten by a snake in a swamp while trying to return to her. In that novel, the news that black men and women employed at a Living History museum are, respectively, being injected with syphilis and sterilized prompts Cora to make use of one of these structures. Mr. Smooth-it away's nostrils begin emitting smoke at the end of a Pilgrim's Progress-inspired story by (\*) Nathaniel Hawthorne set on a "celestial" one of these structures. Carl Sandburg called Chicago the "Player with" these structures, which are built by a company that fights with farmers in the San Joaquin Valley in Frank Norris's *The Octopus*. For 10 points, what sort of structure literally takes slaves to freedom in a Colson Whitehead novel titled for the "Underground" one?**

ANSWER: **railroads** [or **train** tracks; or equivalents; accept *The Underground Railroad* or "The Celestial Railroad"]

<JH, American Literature>

2. **High-precision voltammetry can be done using a film electrode made from this metal prepared on a silver or platinum substrate. A cathode of this metal is used at the bottom of an apparatus that produces elemental sodium or sodium hydroxide from sodium chloride solution. Polarography experiments are analogous to voltammetry but have a working electrode made of this metal that periodically "drops." Though it's not silver, a chloride of this metal is a component of a (\*) "saturated" electrode used for measuring pH and as a reference electrode. This metal is commercially produced from the mineral cinnabar. Mixing this metal with other metals like gold or aluminum produces an amalgam. For 10 points, name this metal that is a silvery liquid at room temperature.**

ANSWER: **mercury** [or **Hg**]

<GR, Chemistry>

3. **This monarch's attempts to curtail "prophesyings," a kind of study meeting for the clergy, caused the archbishop Edmund Grindal to fall out of favor. This monarch's advisors entered into the Bond of Association, pledging that in the event of an assassination attempt, they would kill the assassin and the would-be claimant. Pius V excommunicated this monarch in the bull *Regnans in Excelsis*. This monarch was the target of the (\*) Throckmorton Plot to place a Catholic cousin on the throne. In the Tilbury Speech given during the invasion of the Spanish Armada, this monarch proclaimed that "I know I have the body of a weak and feeble woman, but I have the heart and stomach of a king." For 10 points, name this last Tudor monarch, who was called the "Virgin Queen."**

ANSWER: **Elizabeth I**

<AE, European History>

4. **A series of works by Liu Jianhua ("I'yoh j'yen-hwa") at the Tate Modern consists of trompe-l'œil ("tromp-LOY") imitations of this material made in porcelain. The work *Untitled (Monuments)* consists of stacks of this material that can be removed by the viewers and was created by an artist who also worked with piles of candy, Félix González-Torres. Robert Rauschenberg once glued 20 pieces of this material together for John Cage to drive over in his Model A car. The collection (\*) *Jazz* contains *The Snail* and other works in this material that a wheelchair-bound Henri Matisse made in his last years. Items cut out of this material are glued on a surface in**

découpage (“day-koo-PAHZH”) artworks. For 10 points, name this material on which etchings and lithographs are printed.

ANSWER: **paper** [accept anything indicating printing, drawing, or tire marks on (white) **paper**]

<GR, Painting & Sculpture>

5. **During a march that ends this play’s second act, a Euripides-quoting character gives the antagonist a trombone, telling him “blow, Machiavelli, blow.” That antagonist’s daughter compares him unfavorably to the whiskey distiller Bodger. In this play, the title character’s fiancée inherits the family business after revealing that, since his parents were married in Australia, he is technically a (\*) foundling.** In its second act, the ruffian Bill Walker strikes the volunteer Jenny Hill for refusing to return his newly-converted girlfriend, Mogg Abijam. In this play, Greek scholar Adolphus Cusins is engaged to the title daughter of arms manufacturer Andrew Undershaft. For 10 points, name this George Bernard Shaw play about a member of the Salvation Army.

ANSWER: **Major Barbara**

<CK, British Literature>

6. **The vaccinia-based MVA85A was a failed vaccine for this disease. Bromine-containing bedaquiline (“bed-ACK-wuh-lin”) can be used to treat drug-resistant forms of this disease. Similarly, the drug delamanid inhibits mycolic acid synthesis needed for the cell walls of the causative agent of this disease. Extensively drug-resistant forms of this disease are impervious to fluoroquinolone antibiotics and may require chemotherapy. In addition to discovering anthrax, Robert Koch (“cock”) used guinea pigs to prove that this disease was infectious rather than inherited. The (\*) BCG vaccine for this disease is based on a bovine strain of mycobacterium. This disease is often identified with a Mendel–Mantoux skin test or chest X-ray.** For 10 points, name this bacterial disease that often affects the lungs, which was historically called consumption.

ANSWER: **tuberculosis** [or **TB**]

<GR, Biology>

7. **This person was described as having a “personality that had vanished into the roles it had played” in a Bancroft and Pulitzer-winning two-volume biography by Louis Harlan. A speech delivered by this person argued that “we can be as separate as the fingers, yet one as the hand in all things essential to mutual progress,” earning him criticism as an accommodationist from members of the (\*) Niagara Movement.** Deborah Davis’s *Guest of Honor* examines this man’s dinner with Teddy Roosevelt as the first African-American to dine in the White House. This man advised African-Americans to “Cast down your buckets where you are” as part of his “Atlanta Compromise.” For 10 points, name this African-American educator who founded the Tuskegee Institute.

ANSWER: Booker T. **Washington** [or Booker Taliaferro **Washington**]

<AE, American History>

8. **This figure is called by the epithet *khannās* (“khun-NASS”), meaning “the one who withdraws,” in the final surah of the Quran, which also describes his “whispers.” In the Surah al-Araf, this figure declares that he will “sit in ambush on Your straight path” and assault people “in front and from behind, from their right and their left.” That takes place after this figure refuses to bow to (\*) Adam because this figure was made of fire, and Adam was made of mud. This figure was said to have inspired a namesake set of verses encouraging the worship of three pagan goddesses. This figure is called *rajīm*, or “stoned,” in the Quran, and is the subject of a ritual “stoning” during the *hajj*.** For 10 points, name this fallen, adversarial being in Islam who tempts people to do wrong.

ANSWER: **Satan** [or **Shaitan**; or **Iblis**; or the **Devil**]

<WC, Religion>

9. **This poet reflected “I need more grace than I thought” at the end of a poem that asks “the dissolver of sugar” to “do it suddenly like an execution.” This poet promised the reader “I’ll meet you there” in a poem**

about a field “out beyond ideas of wrongdoing and rightdoing.” This author reiterated his common metaphor of distinguishing the foam from the sea at the end of his version of the parable of men encountering an elephant in a dark room. The so-called translator Coleman Barks popularized a (\*) collection by this author that begins by instructing “Listen to the story told by the reed” in its “Song of the Reed Flute.” This author collected his ghazals (“GUZZ-alls”) in a “Great Divan (“dih-VAN”)” dedicated to his teacher Shams of Tabrizi. For 10 points, name this Sufi Persian poet, the author of the *Masnawi*, or “Spiritual Couplets.”

ANSWER: Rūmī [or Jalal ad-Din Muhammad Balkhi; or Jalal ad-Din Muhammad Rumi; or Mowlana]  
<JH, World/Other Literature>

10. The shear flow around a thin-walled structure is the product of this quantity and local wall thickness. The magnitude of cyclic variation in this quantity is plotted against the number of cycles on S–N curves, which are used to estimate the fatigue life of materials. Tresca and von Mises (“fon MEE-ziss”) name thresholds of this quantity used as criteria for determining plastic failure, during which high values of this quantity may (\*) [emphasize] induce “necking.” Components of this quantity are visualized on Mohr’s circle, and its “principal” types are eigenvalues of a tensor named for Cauchy (“koh-SHEE”). For a uniform rod, this quantity is tensile force over cross-sectional area. Inelastic deformation occurs when this quantity exceeds the yield strength. For 10 points, name this measure of internal forces for a material, the product of Young’s modulus and strain.

ANSWER: stress [or shear stress; or bending stress; or normal stress; or axial stress; prompt on sigma or tau; anti-prompt on fatigue strength or yield strength (until read) or endurance limit or fatigue limit by asking “which is a measure of what general quantity?”; do not accept “shear”]

<AP, Other Science: Engineering>

11. In this city, merchants developed a form of financial partnership called a *collegantia* in which partners jointly raised capital, then split the resulting profits. The first printed Greek text, a grammar called the *Erotemata* by Constantine Lascaris, was published in this city by Aldus Manutius. Glassmakers in this city were forbidden to leave in order to protect the secrets of its glass industry at (\*) Murano. An abandoned cannon foundry that housed this city’s Jewish population is sometimes thought to be the origin of the English word “ghetto.” This city had an early version of the assembly line at its namesake “Arsenal” that manufactured many galleys for this city’s navy. For 10 points, name this city-state that once dominated Mediterranean trade under the rule of its doges.

ANSWER: Venice [or Venezia]

<AE, European History>

12. This region names an orchestral triptych with popular appeal, later arranged for band, whose movements “When Jesus Wept” and “Chester” are based on William Billings hymns; that piece is by William Schuman. Walter Piston wrote 3 Sketches and Edward MacDowell wrote 10 Idyls (“idles”) titled for this region; he, Horatio Parker, and Amy Beach were composers of this region’s “second school.” This region titles a triptych whose second movement opens with loud falling chromatic scales over cymbals, quotes patriotic (\*) marching band tunes in different keys and meters, and ends with the “Star-Spangled Banner” resolving to a dissonant chord. “Putnam’s Camp” is the second movement of Charles Ives’s Orchestral Set No. 1, which is titled after “three places” in this region whose writers inspired Ives’s *Concord Sonata*. For 10 points, name this region home to Tanglewood Music Center and the Boston Symphony Orchestra.

ANSWER: New England [accept New England Triptych or Second New England School or Three Places in New England or New England Idyls or Three New England Sketches; prompt on United States or the Northeast]

<CK, Classical Music>

13. A paper titled as a question about these things states that they may have a positive value if the supplier of these things acts as a monopoly provider of liquidity services. That paper by Robert Barro, which examines the value of these assets in an overlapping-generations model with finite lives, is titled, “Are [these things] Net

**Wealth?” According to the theory of (\*) Ricardian equivalence, the issuing of these assets will cause consumers to immediately save more money, because they know that governments must raise taxes in the long run. Central banks buy and sell these financial assets on the open market in order to adjust the money supply as part of “open market operations.” For 10 points, name these securities sold by national governments to finance their spending.**

ANSWER: government **bonds** [or sovereign **bonds**; accept Treasury **bonds**; accept **government security** or **government securities** until “securities” is read; prompt on government debt, public debt, national debt, or sovereign debt]

<WC, Social Science>

**14. The Werthamer–Helfand–Hohenberg theory predicts the upper limit of one quantity for these materials. Andreev (“on-DRAY-eff”) bound states form at the boundary of these materials. Majorana (“ma-yo-RA-na”) zero modes that obey anyonic (“EN-ee-ON-ick”) statistics can arise in these systems thanks to electron-hole symmetry. Vortices in these materials enclose a quantized unit of magnetic flux in a theory developed by Abrikosov. One parameter that characterizes these materials is the ratio of lambda to the coherence length xi (“k’sigh”). Rare earth barium copper oxides including (\*) YBCO (“ib-co”) are examples of these materials. The type II variety of these materials admit magnetic fields above a critical value, and thus do not exhibit the Meissner effect like type I examples of these materials. For 10 points, name these materials that allow current to flow with no resistance below their critical temperature.**

ANSWER: **superconductors** [accept type II **superconductors** or type I **superconductors**]

<GR, Physics>

**15. It’s not Ireland, but a book from this country notes that “we are not always in time to satisfy the last wishes of the dying” in describing how an author from here died begging for his spectacles. A green blot covers one lens of the distinctive round glasses of that author from this country on the cover of the 2017 New Directions edition of his best-known book, in which an assistant bookkeeper frequents the cafés of this country’s capital. 83 percent of voters cast blank ballots in the (\*) sequel to a novel from this country. The author of *The Book of Disquiet* returns to this country in *The Year of the Death of Ricardo Reis*, a novel from this country whose author also wrote a book in which all the characters except the “doctor’s wife” are afflicted with the title ailment. For 10 points, Fernando Pessoa and the author of *Seeing* and *Blindness*, José Saramago, are from what Iberian country?**

ANSWER: **Portugal**

<JH, European Literature>

**16. It’s not in Russia, but this party seized power in the March 8 Revolution that established a 20-member junta called the National Council of the Revolutionary Command. In 1970, a leader from this party launched a “Corrective Movement” that overthrew his political mentor from the left-wing “neo-” branch of this party. This party’s regime carried out the 1982 Hama massacre against the (\*) Muslim Brotherhood during the presidency of Hafez al-Assad, a dictator from this party. A dictator from this party in a different country carried out the Halabja gas attack against Kurdish civilians and attempted an invasion of Kuwait. For 10 points, name this Arab nationalist political party that lost power in Iraq in 2003 following the deposition of Saddam Hussein.**

ANSWER: **Ba’ath** Party [or Arab Socialist **Ba’ath** Party or **Ba’athism** or **Ba’athists**; accept **Neo-Ba’athism**]

<AE, World History>

**17. During a performance of this opera, Maria Callas’s (“KAH-lahss’s”) hair caught on fire, leading Tito Gobbi to leap onto her to put it out. This opera opens with the recurring motif of three loud, spooky, brassy major chords on B-flat, A-flat, and E. A character in this opera trades his last possession of a ring to deliver a letter to the title character, leading him to sing about how “the Earth was scented” in the aria (\*) “E lucevan le stelle” (“ay loo-CHAY-von lay stell-ay”). This opera’s title character sings the aria “Vissi d’arte” (“vee-see DAR-tay”) after Baron Scarpia attempts to blackmail her, and in its finale, the title character kills herself by jumping off a**

parapet after the execution of her lover Mario Cavaradossi. For 10 points, name this opera about the title singer by Giacomo Puccini.

ANSWER: Tosca

<JL, Other Arts>

18. **This book argues that “external goods” are insufficient for *megalopsuchia*, or “greatness of soul.” The ninth section of this book divides friendships into those based on utility, pleasure, and goodness of character, arguing that only the latter lasts. It endorses Socrates’ claim that people ever knowingly choose evil, arguing that passions prevent unqualified knowledge in cases of *akrasia*. This work, whose last section promotes (\*) *theōria*, or the life of contemplation, argues that courage lies between cowardice and rashness. It argues that the goal of ethics is a state of fulfillment called *eudaimonia*. This book argues that each virtue is the average of two extremes in its Doctrine of the Mean. For 10 points, identify this ethical treatise that Aristotle named after his son.**

ANSWER: Nicomachean Ethics [prompt on Aristotle’s Ethics]

<GR, Philosophy>

19. **One account of this event describes the “three times 3,600” units of bitumen that its narrator poured into a kiln prior to it. The seven judges of the underworld signalled this event by setting the land on fire with their torches. This event occurred after the reign of a king who was credited with writing the Instructions of Shuruppak. A whisper through a reed wall informed Ziusudra (“zee-oo-SOO-druh”) of this event, a scene repeated in the (\*) *Epic of Atrahasis*. The protagonist of another epic sleeps for seven days in the house of a man who had used a 1200-cubit-tall structure to escape this event. In the *Epic of Gilgamesh*, Utnapishtim and his wife are granted immortality by Ea (“AY-uh”) after surviving this event. For 10 points, what event described in several Mesopotamian creation myths is often compared with the one survived by Noah?**

ANSWER: the Great **Flood** [accept equivalents of the Sumerian/Mesopotamian/Akkadian/Babylonian myth of a great **flood** or **deluge**]

<JS, Mythology>

20. **In the American West, members of this ethnic group’s diaspora established many sheep ranches like New Mexico’s Mocho Ranch. People from this ethnic group created the card game *mus*. Private “gastronomic societies” hosted by members of this ethnic group often cook a tuna and potato soup called *marmitako*. This ethnic group created a sport in which rubber balls are hurled at high speeds in a (\*) *fronton*; that sport, known as this ethnic group’s kind of *pelota*, is *jai alai* (“HYE uh-lye”). Members of this ethnic group speak a language called Euskara by its speakers, which is a language isolate not of Indo-European origin. For 10 points, the terrorist group ETA fought for the independence of what ethnic group found near the Bay of Biscay in southern France and northern Spain?**

ANSWER: **Basques** [or euskaldunak; or vascos]

<AP, Other>

## Bonuses

1. This polymer is synthesized by membrane-located rosette complexes. For 10 points each:

[10] Name this ubiquitous unbranched polymer of D-glucose, a major component of plant cell walls.

ANSWER: **cellulose**

[10] This other polysaccharide is similar to cellulose, but has a branched structure that helps it contribute to cell wall strength. Along with pectin, it is intertwined with microfibrils.

ANSWER: **hemicellulose**

[10] Unlike cellulose, hemicellulose includes many different sugar monomers, including one with this many carbon atoms. Sugars with this many carbon atoms are components of RNA and DNA nucleotides.

ANSWER: **five** [or **5**; accept **pentoses**]

<GR, Biology>

2. Adam Elga introduced this puzzle in a short 2000 paper that uses self-locating beliefs to argue for its “third” answer. For 10 points each:

[10] Identify this decision-theoretic puzzle concerning an individual who is put to sleep for two days and then is awakened one or twice depending on the flip of a coin.

ANSWER: **Sleeping Beauty** problem

[10] Since Beauty cannot learn the probability that she was awakened once by conditionalizing on her priors, many view the problem as an objection to this man’s namesake non-frequentist interpretation of probability.

ANSWER: Thomas **Bayes** [accept **Bayesianism**]

[10] Ian Hacking used Bayesian decision theory to analyze this argument from the *Pensées* (“pon-SAY”). It contends that you should live as though God exists since you are only risking a finite amount of utility for a potentially infinite amount.

ANSWER: **Pascal’s wager**

<CK, Philosophy>

3. After hearing this musician perform Mendelssohn’s Violin Concerto, Fritz Kreisler supposedly exclaimed “Well gentlemen, we might as well break our violins across our knees!” For 10 points each:

[10] Name this Lithuanian-born violin virtuoso whose debut at Carnegie Hall in 1917 as a teenager catapulted him to fame across America. This man’s transcription of *Hora staccato* has become a popular violin showpiece.

ANSWER: Jascha **Heifetz** (“YA-shah HIGH-fits”)

[10] Heifetz championed the Violin Concerto in D major by this Austrian composer who fled to Hollywood after his music and operas, like *Die tote Stadt* (“dee TOH-tuh SHTOTT”), were banned. The concerto quotes his classic film scores, of which *Robin Hood* and *Kings Row* later inspired John Williams.

ANSWER: Erich Wolfgang **Korngold**

[10] Both Heifetz and fellow Lithuanian Yehudi Menuhin (“yeh-HOO-dee MEN-yoo-in”) primarily used Guarneri (“gwar-NAIR-ee”) violins, though both owned violins created by a member of this family that are often associated with superior sound quality.

ANSWER: **Stradivari** [or **Stradivarius**; prompt on **Strad**]

<AE, Classical Music>

4. *Description acceptable*. Excerpts from these works intersperse a frame story called *Free Women* in the novel in which they appear. For 10 points each:

[10] Name this set of fictional works, the “black” one of which details their author’s time in Africa. Their author’s alter ego Ella is the focus of the “yellow” one, whereas the “red” one describes their author’s communist ideals.

ANSWER: **Anna’s notebooks** [or Anna **Wulf’s notebooks**; or **notebooks from *The Golden Notebook***; prompt on **notebooks** by asking “please also give the novel in which they appear or their fictional author”; accept **journals**, **diaries**, **memoirs**, **logs**, or **records** in place of “notebooks”]

[10] In this Iranian-born British author's novel *The Golden Notebook*, Anna Wulf attempts to combine her diaries into the title volume. This author also wrote the *Canopus in Argos* science fiction series.

ANSWER: Doris **Lessing**

[10] Lessing was a staunch defender of her friend and mentor Idries Shah, who came under fire for publishing an allegedly fake English translation of this collection of Farsi quatrains by Omar Khayyam.

ANSWER: the **Rubáiyát** [or **Ruba'iyāt**]

<AP, World/Other Literature>

5. The Thriae were three nymphs who had the heads of women and the bodies of these creatures. For 10 points each:

[10] Name these insects, which the nymph Melissa used to feed the infant Zeus. Because they were made with a certain substance produced by these insects, Icarus's wings melted when he flew too close to the Sun.

ANSWER: **bees** [or **honeybees**]

[10] In another story, this inventor of beekeeping sought help for his dying swarm of bees from the fountain Arethusa, who instructed him to obtain new bees from the carcasses of sacrificed cattle.

ANSWER: **Aristaeus**

[10] According to Pausanias, a trail of bees revealed the daimon Trophonius's hiding spot in one of these places, which then became an oracle dedicated to him. The Kouretes danced outside one of these places where the infant Zeus was nurtured by Amalthea.

ANSWER: **caves** [or **caverns**; prompt on **mountains**]

<JS, Mythology>

6. Answer the following about the report of the Bergier commission, a panel of historians who investigated the actions of Switzerland before, during, and after World War II, for 10 points each.

[10] The report found that Swiss insurers complied with a German demand that payments to the victims of this pogrom should go to the Nazi state and not the Jews, many of whom had their businesses' windows smashed.

ANSWER: **Kristallnacht** [or **Crystal Night** or **Night of Broken Glass** or **Reichskristallnacht** or **Pogromnacht** or **November Pogrom**]

[10] The report examined the role of the Swiss in purchasing confiscated art that had been given this name by the Nazis. This derogatory name was applied to Cubist and Expressionist works displayed in a namesake exhibition.

ANSWER: **degenerate** art [or **Entartete** Kunst]

[10] The report stated that Swiss participation at a conference on Jewish refugees held in this French town aimed to take in as few refugees as possible. This town also names a treaty that ended the Algerian War of Independence.

ANSWER: **Évian** ("ayv-YAWN") [accept the **Évian** conference or the **Évian** Accords]

<AP, European History>

7. For a polynomial  $x$ -to-the- $n$  minus one over a field, this field extension is given by the  $n$ th cyclotomic extension of that field. For 10 points each:

[10] Name this smallest field extension in which a polynomial can be decomposed into linear factors.

ANSWER: **splitting field**

[10] The cyclotomic extensions of a field are obtained by adjoining these values to that field. These values are the solutions to the equation  $z$ -to-the- $n$  equals one.

ANSWER: **roots of unity** [or  $n$ th **roots of unity**; or **de Moivre** numbers]

[10] The roots of unity lie on this conic section with unit radius. This figure is defined as all the points in the plane equidistant from a given point.

ANSWER: **circle** [accept unit **circle**]

<CK, Other Science: Mathematics>

8. An outlaw in this story roars "keep away from me!" when offered milk by the boy who betrayed him. For 10 points each:

[10] Name this Prosper Mérimée story set in the Corsican *maquis* (“ma-KEE”) in which the title man shoots his son Fortunato for revealing the hiding place of the wounded criminal Giannetto in exchange for a silver watch.

ANSWER: “**Mateo Falcone**”

[10] An essay in W. G. Sebald’s book *Campo Santo* discusses the violent history of the Corsican *maquis* in conjunction with this French author’s story “The Legend of Saint Julian the Hospitaller,” which this author collected with “A Simple Heart.”

ANSWER: Gustave **Flaubert** (“flow-BAIR”)

[10] Prosper Mérimée’s other work includes the novel *Carmen*, which is titled for a member of this nomadic ethnic group. In Victor Hugo’s *Hunchback of Notre Dame*, Esmeralda is raised by members of this group.

ANSWER: **gypsies** [or **gypsy** or **Romani**]

<CK, European Literature>

9. In 1925, the General Election Law was passed during the reign of this monarch, extending the right to vote to all males over the age of 25. For 10 points each:

[10] Name this Japanese emperor whose reign from 1912 to 1926 was a period of political liberalism known as his namesake “democracy.”

ANSWER: **Taishō** [or **Yoshihito**]

[10] During Taishō’s reign, this 1923 natural disaster leveled much of Tokyo, though not Frank Lloyd Wright’s Imperial Hotel. This natural disaster was followed by a massacre of over 6,000 Koreans.

ANSWER: Great **Kantō earthquake** [or **Kantō dai-jishin**; prompt on **earthquake**]

[10] Taishō was succeeded by this emperor, whose reign saw increasing militarism in Japan and the outbreak of World War II. He announced Japan’s surrender in the Jewel Voice Broadcast.

ANSWER: **Hirohito** [or **Shōwa**]

<AE, World History>

10. This artist appropriated magazine images, such as a woman with leaves over her eyes, in *We Won’t Play Nature to Your Culture*. For 10 points each:

[10] Name this feminist artist who used white-on-red lettering over a half-negative photo in *Your Body is Battleground*.

ANSWER: Barbara **Kruger**

[10] This artist addressed the role of mass media in the form of movies in a series of photographs modeled after movie clichés called *Untitled Film Stills*.

ANSWER: Cindy **Sherman**

[10] Like Kruger, anonymous art collective *The Guerilla Girls* used the visual language of advertisements in many poster works, such as one asking whether “women have to be naked to get into” this largest New York art museum.

ANSWER: The **Met** [or the **Metropolitan** Museum of Art]

<GR, Other Arts>

11. This quantity is larger for isotopes on “islands of stability.” For 10 points each:

[10] Name this quantity that corresponds to the binding energy of the constituent protons and neutrons divided by  $c$ -squared.

ANSWER: **mass defect** [prompt on partial answer]

[10] The mass defect is larger for nuclei with a magic number of protons or neutrons according to the nuclear shell model. This Nobel laureate developed the modern version of the nuclear shell model.

ANSWER: Maria Goeppert-**Mayer**

[10] The mass defect is predicted by this theory, which sets the rest energy of the nucleus equal to  $mc$ -squared. This theory also predicts time dilation and length contraction.

ANSWER: **special** theory of **relativity** [or **SR**; prompt on **relativity**; do not accept “general relativity” or “GR”]

<GR, Physics>

12. John Winterstraw describes a shipwrecked boating party encountering enormous crabs and human-shaped plants in this body of water in the novel *The Boats of the "Glen Carrig"*. For 10 points each:

[10] Name this body of water, the setting of many horror stories by William Hope Hodgson. A novel by Jean Rhys ("jeen reese") titled for this body of water describes the forced solitary confinement of Antoinette Cosway in an English estate by her unnamed husband.

ANSWER: **Sargasso Sea** [accept **Sargasso Sea Stories** or **Wide Sargasso Sea**]

[10] Jean Rhys wrote *Wide Sargasso Sea* as a prequel to Charlotte Brontë's novel titled for this character, a governess who discovers Bertha Mason in Edward Rochester's attic.

ANSWER: **Jane Eyre** [accept either underlined name]

[10] This Ezra Pound poem begins by noting "Your mind and you are our Sargasso Sea." Its title is the French translation of a T. S. Eliot poem whose title character repeats the refrain, "I shall sit here, serving tea to friends."

ANSWER: **"Portrait d'une Femme"** ("por-TRAY dune FAM") [do not accept or prompt on "Portrait of a Lady"]  
<AP, British Literature>

13. The British writer Edith Durham was known for her travelogues promoting this country's culture in the early 20th century, including one titled *High* [this country]. For 10 points each:

[10] Name this European country whose UNESCO World Heritage sites include the cities of Buthrotum and Gjirokastër ("jee-roh-KAH-ster"). Krujë ("KROO-yuh") Castle in this country houses its Skanderbeg Museum.

ANSWER: **Albania** [or **Shqipëria**; or Republika e **Shqipërisë**]

[10] Gjirokastër is notable for its large population of this ethnic group, which inhabits the historical region of Epirus. The two main ethnic groups of Cyprus are Turks in the north and this group in the south.

ANSWER: **Greeks** [or **Ellinas** or **Hellenes**]

[10] In 1914, Albania and Greece signed a protocol on this Greek island, giving autonomy to Albania's Greek minority. This Ionian island has a New Fortress that was built during its time as a Venetian colony.

ANSWER: **Corfu** [or **Kerkyra**; or **Korkyra**]

<AP, Other>

14. In the 1950s, Kenneth Oakley used fluorine dating to establish that this thing was a hoax. For 10 points each:

[10] Name this supposed fossil specimen that the amateur geologist Charles Dawson promoted as a missing link between apes and humans. This specimen really consisted of a human's cranium and an orangutan's jaw.

ANSWER: **Pitldown Man** [accept **Eoanthropus dawsoni** or Dawson's **dawn man**]

[10] A mistaken belief in the genuineness of the Pitldown Man led some scientists to dismiss this fossil of *Australopithecus africanus*, identified in 1924 by Raymond Dart as a primitive hominin, as a fake.

ANSWER: **Taung Child**

[10] Both Taung Child and Pitldown Man were used to support this theory that was originally proposed by Charles Darwin in *On the Origin of Species*. Thomas Huxley debated Samuel Wilberforce over this theory in 1860.

ANSWER: **evolution** [accept **natural selection**; accept human **evolution**]

<AE, European History>

15. *Two answers required.* These two foods are the subject of an annual humorous debate first held at the University of Chicago, which has featured such participants as Milton Friedman and Martha Nussbaum. For 10 points each:

[10] Name these two festive Jewish foods. One is a potato pancake eaten during Hanukkah, and the other is a triangular pastry eaten during Purim.

ANSWER: **latkes** ("LOT-kuhs") AND **hamantaschen** ("HOM-in-TAH-shin") [accept **Haman's ears** or **oznei haman** in place of "hamantaschen"]

[10] Hanukkah and the eating of latkes commemorate a miracle in which a small jar of this substance burned for eight days instead of one. Samuel anointed David's head with this substance when crowning David king.

ANSWER: **oil** [or **shemen**; accept any specific types of **oil**]

[10] Another Hanukkah tradition is playing with the dreidel, whose four letters *nun*, *gimmel*, *hey*, and *shin* can be interpreted numerically using this system to get 358, which is also the numerical interpretation of “Messiah.”

ANSWER: **gematria** (“geh-MAH-tree-uh”) [or **gematriot**; prompt on Kabbalah]

<WC, Religion>

16. This artist depicted the title figure standing in the prow of his boat, while a mother and child gather dandelions behind him, in his painting *The Poor Fisherman*. For 10 points each:

[10] Name this French artist who painted an enormous landscape in the Sorbonne depicting an ancient portico beside a woodland lake surrounded by conversing Muses, entitled *The Sacred Grove*.

ANSWER: Pierre **Puvis** de Chavannes (“pyoo-VEE duh sha-VAHN”)

[10] This artist depicted himself with his back turned to the viewer urinating in his parody of Puvis’s *The Sacred Grove*. A woman’s face appears greenish under a gaslight in his painting *At the Moulin Rouge*.

ANSWER: Henri de **Toulouse-Lautrec** (“too-LOOZ lo-TREK”)

[10] A red-haired woman in a tutu rides a horse in a Toulouse-Lautrec painting set at one of these places. Georges Seurat painted acrobats performing at one of these places.

ANSWER: **circuses** [or **Circus** Fernando]

<CK, Painting & Sculpture>

17. If you were a Union general in the Civil War, testifying before the Joint Committee on the Conduct of the War was pretty much your worst nightmare. Answer some questions about the Committee, for 10 points each.

[10] The committee was founded after this disastrous 1861 attempt to seize a strategic position on the Potomac. At this battle, Edward Baker became the only US Senator to ever die in combat.

ANSWER: Battle of **Ball’s Bluff**

[10] The committee leaked testimony from John C. Frémont to build support for his reappointment after Lincoln sacked him in 1861 for doing this action in Missouri. This action was accomplished nationwide with the passage of the Thirteenth Amendment.

ANSWER: **freeing slaves** [or **emancipation** or **emancipating** slaves or **emancipate** slaves; or anything that suggests **ending slavery** or **abolishing** slavery; accept **involuntary servitude** in place of “slaves” or “slavery”]

[10] The committee was chaired by Benjamin Wade, who co-sponsored a bill with Henry Davis that would have required a majority of citizens in Confederate states to perform this action before readmitting them into the Union.

ANSWER: take a loyalty **oath** [accept any answer that describes people **pledging loyalty** or **pledging allegiance**]

<CK, American History>

18. A queen whose husband dies during a lion hunt teaches this character about the *grun-tu-molani*, the inner desire to live. For 10 points each:

[10] Name this character who builds a bomb to kill all the frogs in a reservoir that ends up also destroying the reservoir itself. He later earns his title nickname, “the Rain King,” after he carries and whips a huge statue.

ANSWER: Eugene **Henderson** [accept **Henderson the Rain King**; prompt on Sungu]

[10] Saul Bellow’s novel *Henderson the Rain King* often attracts comparisons to this Miguel Cervantes novel, whose character of Sancho Panzo resembles Henderson’s guide Romilayu.

ANSWER: *Don Quixote*

[10] More explicit references to Don Quixote, such as a Scottish terrier named Dulcinea, appear in this Puerto Rican author’s Spanglish novel *Yo-Yo Boing!*

ANSWER: Giannina **Braschi**

<AP, American Literature>

19. Answer the following about molecular machines. For 10 points each:

[10] Although its first iteration did not include molecular motors, a “nano car” developed at Rice University includes these groups consisting of 60 carbon atoms. These roughly spherical molecules make contact with a gold surface in the “car” design.

ANSWER: **fullerenes** [or Buckminster**fullerenes**; or **Buckyballs**]

[10] J.-P. Sauvage characterized these molecules, which can act as switches when they include viologens groups. NMR measures the relative rotation of these interlocked macrocyclic molecules, which are distinct from knotanes and molecular borromean rings.

ANSWER: **catenanes**

[10] This scientist developed a synthetic route to catenanes using ring-closing metathesis. He also developed a ruthenium-based catalyst for olefin metathesis.

ANSWER: Robert H. **Grubbs** [accept **Grubbs** catalyst]

<GR, Chemistry>

20. Amartya Sen argued that this sort of event in Bengal was caused by a combination of a lack of democratic governance and inefficiencies in distribution, rather than “absolute scarcity.” For 10 points each:

[10] Name these shortages of food, one of which took place in Bengal in 1943. Olivier Rubin re-examined the evidence in his book titled after democracy and these events.

ANSWER: **famines** [accept **hunger** or **starvation**]

[10] Arturo Escobar wrote the need for “pluriverses” in a book titled after “encountering” this concept. Life expectancy, education, and per capita income are factors used to calculate a namesake index for this concept.

ANSWER: human **development** [accept human **development** index]

[10] This anthropologist critiqued the “development discourse fantasy” for making political decisions appear to be as if they were “technical solutions to technical problems” in his book *The Anti-Politics Machine*.

ANSWER: James **Ferguson**

<CK, Social Science>