

Bulldog High School Academic Tournament 2019 (XXVIII): Description acceptable.

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Packet 4 Tossups

1. **The beginning of this occasion is celebrated with a group of eight psalms with other poems, named for its Kabbalic origins. On this occasion, the silent *Amidah* is followed by the summary *Magen Avot*. The injunctions *shamor* and *zachor* are given in a song that compares this occasion to a bride, called *Lekhah dodi*. This holiday is ended with spices and a (*) braided candle in the *Havdalah* ceremony. The first three verses of Genesis 2 is recited as part of this holiday's *kiddush*. On the evening of this holiday, two loaves of braided *challah* bread are baked and two candles are lit. For 10 points, name this day of rest that Jews observe every Saturday.**
ANSWER: **Shabbat** [or **Sabbath**; or **Shabbos**; accept **Kabbalat Shabbat**; prompt on Friday night, Saturday or equivalents] <JR>

2. **This character repeatedly asks “Did you marry the wrong woman?” after psychoanalyzing a paint-by-numbers painting of a boat. The camera shakes due to laughter when this character is told an improvised story about his friend’s wife passing gas in her sleep. While sitting on a park bench, this man is reminded “I bet you can't tell me what it (*) smells like in the Sistine Chapel.” This character leaves for Stanford to “see about a girl,” a line he steals from a man who repeatedly tells him “It’s not your fault.” Sean Maguire, played by Robin Williams, is the therapist of—for 10 points—what Matt Damon-played self-taught genius who’s called “good” in the title of a 1997 film?**
ANSWER: **Will Hunting** [accept either underlined part; accept **Good Will Hunting**] <BY>

3. **The word for “look-alike” in this author’s native tongue originates from his adaptation of Plautus’ play *Amphitryon*. The protagonist of a play by this author hires tutors for disciplines including fencing and philosophy. A character created by this author mocks a bailiff delivering their eviction note for being named “Loyal.” The title man of that play by this author (*) steals a box of incriminating letters. In that play by this author, Damis sees the title man seduce his sister Elmire, but is disbelieved until another attempt is seen from under a table by his father Orgon. For 10 points, name this 17th-century French playwright who wrote comedies like *The Bourgeois Gentleman* and *Tartuffe*.**
ANSWER: **Molière** [or Jean-Baptiste **Poquelin**] <MK>

4. **Materials that react with this substance are often distilled using a Perkin triangle. This is the substance that most commonly undergoes the Linde cycle. Microporous zeolites are used to separate the components of this substance in one application of pressure swing adsorption. A Schlenk line is a dual manifold that helps avoid reactions with this substance by providing a counterflow of an inert material while (*) pumping out this substance. This substance is almost 1 percent argon, and its water vapor content is measured as humidity. For 10 points, name this gas that’s roughly 78 percent nitrogen and 21 percent oxygen, and whose weight creates atmospheric pressure.**
ANSWER: **air** [prompt on oxygen by asking “What substance is that part of?”] <SE>

5. This figure is depicted in blue on the wall-tiles behind the footwarmer in Vermeer's *The Milkmaid*. This figure reaches into a pool between two women in a painting commissioned by Niccolo Aurelio to celebrate his marriage to Laura Bagarotto. A statue of this figure holds a finger to his lips on the left side of Fragonard's *The (*) Swing*. This figure has a twisted back and kisses his mother in a Bronzino painting that also depicts Folly and Time. At the top of Botticelli's *Primavera*, this god is depicted as a *putto* with a blindfold. For 10 points, name this arrow-wielding Roman love-god often depicted as a chubby winged baby.

ANSWER: Cupid [accept Amor or Eros] <AH>

6. Pindar and Nicander stated that the gods escaped to *this* region in the form of animals while retreating from Typhon. The namesake of this region was a son of Belus who had 50 sons, 49 of whom were murdered by their wives. Some accounts state that Helen was replaced by an *eidolon* and actually spent the entire Trojan War in this region under the protection of King Proteus. Deities from this region were converted to Greek equivalents like (*) Serapis and Harpocrates. After the Trojan War, Menelaus was stuck in this region until he wrestled the Old Man of the Sea, who lived in Pharos. For 10 points, name this region where the cult of Serapis derived from its worship of Osiris.

ANSWER: Egypt [or Aegyptus] <AW>

7. This ruler admitted that “his book was my breviary,” after copying thinkers like Cesare Beccaria verbatim for a law code also known as *Instructions to the Legislative Commission*. This ruler was inspired by Montesquieu to implement the *Nakaz* law code, which was criticized by Denis Diderot. This ruler's private art collection led to the founding of the (*) Hermitage Museum. Fake Crimean villages were built by Grigory Potemkin to impress this “Enlightened Despot,” who, like Frederick the Great, exchanged letters with French philosophers such as Voltaire. For 10 points, name this Romanov empress of Russia.

ANSWER: Catherine the Great [or Catherine II of Russia; accept Yekaterina Velikaya or Yekaterina II; accept Sophie Friederike Auguste von Anhalt-Zerbst-Dornburg; prompt on Catherine or Yekaterina] <WJ>

8. This director was the first to shoot the sun directly. One of this director's films was ripped off by Sergio Leone as *A Fistful of Dollars*. One of this director's protagonists tends to shrug or twitch his shoulders while walking, and often chews a toothpick. This director, who popularized the use of wipes, edited almost all of his own films. He ended one film with a rainy battle, in which (*) musket fire kills two of the title people, who were hired by farmers to protect a village from bandits. Another of his films gives four different versions of the same story and stars Toshiro Mifune as a wood-cutter. *Yojimbo*, *Rashomon*, and *Seven Samurai* were films by—for 10 points—what Japanese director?

ANSWER: Akira Kurosawa [accept names in either order] <JR>

9. In this country's native language, “the beast” is the colloquial term for freight trains that are used as an illegal means of transportation. The governor of a state in this country accused its president of treating a January 2019 gasoline shortage as a “matter of publicity.” A coalition led by the MORENA party won this country's most recent presidential elections, leading to the December 2018 (*) inauguration of a man known by the initials AMLO. In January 2019, this country announced that it would offer fast-track visas to people who leave caravans crossing it on foot. For 10 points, name this country on whose border Donald Trump wants to build a wall.

ANSWER: Mexico [or United Mexican States or Estados Unidos Mexicanos] <HK>

10. A character in this novel is accused of collecting “elf-bolts” to “hurt our heifers” at the Penistone Crag. Another character in this novel, which is set in a place described as a “perfect misanthropist’s heaven,” dreams of a ghost’s hand breaking through a window after being hidden in that room by the housekeeper (*) Zillah. Frances dies after giving birth to Hareton in this novel, the frame narrative of which is set at Thrushcross Grange. Mr. Lockwood and the maid Nelly Dean are the narrators of this novel, which features Edgar and Isabella Linton. The love between Catherine Earnshaw and Heathcliff is the central theme of—for 10 points—what Emily Brontë novel?

ANSWER: Wuthering Heights <WJ>

11. A future monarch with this name was called as a witness when his friend William Gordon-Cumming was accused of cheating at baccarat. Barbara Tuchman’s *The Guns of August* opens with the funeral of a king of this name, which was attended by nearly every ruler in Europe. A king of this name popularized the Homburg hat and the Norfolk jacket as the second-longest-serving (*) Prince of Wales after Charles. The most recent British king of this name married the American divorcee Wallis Simpson, a scandal that led to his abdication. George V’s father and eldest son both took—for 10 points—what name taken by Queen Victoria’s son?

ANSWER: Edward [accept Edward VII or Edward VIII] <SE>

12. This region of the spectrum can be studied by computing differences in arrival times to simulate having a giant telescope, in the technique of Very Long Baseline Interferometry. An electron spin-flip creates the “hydrogen line” in this region of the spectrum. The “Wow!” signal was detected in this region. Telescopes operating in this region include the (*) Very Large Array and the Arecibo Observatory, and are usually made up of large parabolic dishes. The first device for producing waves in this region of the spectrum was invented by Guglielmo Marconi. Microwaves are high-frequency examples of—for 10 points—what electromagnetic waves with the lowest frequency?

ANSWER: radio waves [accept radio telescopes; accept microwaves until mentioned] <BY/AF>

13. Early in this event, one party called for a renunciation of the Anti-Spiritual Pollution Campaign and a reduction of censorship in the “Seven Demands.” This event occurred in the same location as the April Fifth Movement and the main action of the May Fourth Movement. This event is euphemistically referred to as the (*) “June Fourth Incident” in the country where it occurred. This event, which began as a hunger strike by university students, ended the career of Deng Xiaoping. The photograph “Tank Man” depicts—for 10 points—what 1989 massacre of over 1,000 civilians in a Beijing square?

ANSWER: 1989 Tiananmen Square massacre [accept obvious equivalents indicating protests or mass slaughter at Tiananmen Square; accept June Fourth Incident or Liu Si Shi jian until it’s mentioned] <JW>

14. In a short story by this author, Jack Brennan bets the title amount against himself in his fight with Jimmy Walcott. In a novel by this author, the protagonist goes to the Irati River to fish with Bill Gorton. This author of “Fifty Grand” ended that novel with the lines “We could have had such a...good time together” and the protagonist’s reply “Isn’t it (*) pretty to think so?” In that novel by this man, Mike Campbell ends up with Lady Brett Ashley. Catherine Barkley serves as nurse for a protagonist inspired by this man’s service as an ambulance driver in World War I, named Frederic Henry. For 10 points, name this American author of *The Sun Also Rises* and *A Farewell to Arms*.

ANSWER: Ernest (Miller) Hemingway <CK>

15. **This philosopher wrote a chapter whose title was later adopted by G.E. Moore for his “Refutation of Idealism.” This philosopher conducted one deduction by contrasting “Axioms of intuition” with “Analogies of experience” and two other types of principles. This philosopher updated Aristotle by deriving twelve categories in a book that contrasts phenomena with the (*) *noumenon*, or the “thing in itself.” This man distinguished between analytic and synthetic propositions in order to prove that synthetic *a priori* truths are possible. This man’s moral philosophy centers on the categorical imperative. For 10 points, name this German philosopher who wrote *Critique of Pure Reason*.**

ANSWER: Immanuel **Kant** <AH>

16. **A collection of six pieces for this instrument includes a B-minor *Prelude, Fugue, and Variation*. This instrument typically uses diapasons or “principals” and often has a *Voix céleste*. Marcel Dupré played this instrument, and his predecessor Charles-Marie Widor [vee-DOR] ended his Fifth Symphony with an F-major (*) “Toccata” for it. Large examples of this instrument usually have three or more manuals, and include an enclosed “swell” division. Baroque composers for this instrument often wrote Voluntaries and Chorale Preludes. This instrument plays a solo in Camille Saint-Saëns’s Third Symphony. Pedals are used to play—for 10 points—what keyboard instrument made of pipes?**

ANSWER: pipe **organs** <JR>

17. **These systems can be solved by the complementary methods of nodal and mesh analysis. These systems can be replaced by an equivalent one by applying a Y-delta transform, or reduced to a simpler two-component system by applying Thevenin’s theorem. Phase differences in these systems can be remembered with the mnemonic “ELI the ICE man.” To analyze the resonance observed in the (*) RLC type of this system, one would first write down a series of voltage drops and apply Kirchoff’s loop rule. Capacitors and resistors are common components in—for 10 points—what closed electrical networks?**

ANSWER: electrical **circuits** [prompt on electrical networks before “networks”] <SE>

18. **During these events, one newspaper hired the stenographer Robert Hitt to provide coverage after deeming its rival’s stenographer too partisan. Two of these events took place at Jonesboro and Charleston. A participant in these events claimed that states could simply decide not to enforce the Dred Scott decision. One participant in these events later lost an election to the other because John C. (*) Breckinridge cannibalized his votes. The Freeport Doctrine was outlined during these events, whose challenger had just given a speech saying “A house divided against itself, cannot stand.” For 10 points, what debates pitted a sitting Illinois senator against the future President during the Civil War?**

ANSWER: **Lincoln–Douglas** debates [accept any answer describing Abraham **Lincoln** debating Stephen **Douglas**] <SPQR>

19. **Mutations in the NTRK1 gene cause insensitivity to this phenomenon and an inability to sweat, a condition known as CIPA. Groups of one kind of nerve that transmit this phenomenon are known as Remak bundles. This phenomenon’s namesake “wind-up” is caused by repeated stimulation of group C fibers. A-delta fibers quickly carry the (*) “acute” sensation of this phenomenon. Inflammation and this phenomenon are mediated by Substance P. This phenomenon is suppressed by COX-2 inhibitors and other NSAIDs. This phenomenon is sensed by nociceptors. Analgesics reduce—for 10 points—what unpleasant sensation that’s treated with ibuprofen or aspirin?**

ANSWER: **pain** [accept **nociception** until “nociceptors”] <HK>

20. In a short story about this event, an asylum inmate who doesn't know what country his hometown is in ends up trapped between two barbed wire fences. The aftermath of this event is depicted in the last short story by Saadat Hasan Manto. In a novel set in this event's aftermath, The Widow forcibly sterilizes children and a silver spittoon hits the protagonist on the head, giving him amnesia. In that novel, the (*) protagonist is switched just after this event with Shiva of the Knees, and has a telepathy-granting nose. Saleem Sinai and the other title characters of Salman Rushdie's *Midnight's Children* are born just after—for 10 points—what historical event? ANSWER: **Indian Independence** [accept reasonable equivalents; accept **Partition of India** or descriptions of the **division of India and Pakistan**; accept **Pakistani independence** or equivalents] <HK>

Tiebreaker

21. Similarly to a Vasari story about Filippo Brunelleschi, this man supposedly crushed an egg to make it stand upright. The world before and after this man's most famous action was surveyed in two books by Charles C. Mann. This man, who enslaved many native Taíno and Arawak people, was condemned for his sale and rape of underaged sex slaves by (*) Bartolomé de las Casas. This man names the "exchange" by which the potato and tobacco reached Europe, in return for smallpox. This man originated the use of the term "Indians" for Native Americans. For 10 points, name this Genoese explorer who reached the Caribbean in 1492. ANSWER: Christopher **Columbus** [or Cristóbal **Colón** or Cristoforo **Colombo**] <AH>

Bonuses

1. A collection of poems originally in this language was translated into English by Edward Fitzgerald. For 10 points each,

[10] Name this language of Omar Khayyam's *Rubaiyat*, as well as Saadi's *Gulistan* and Rumi's *Spiritual Couplets*.

ANSWER: **Farsi** [or **Persian**]

[10] The author of this Persian epic attempted to keep the Persian language *ajam*, or "pure" from Arabic loan-words. This epic tells the stories of heroes like Rustam and Sohrab.

ANSWER: **Shahnameh** [accept **Book of Kings**] (by Ferdowsi.)

[10] In the *Shahnameh*, a bird called the simurgh teaches Rustam's father, Zal, how to perform *this* action in order to save the life of his wife Tahmina.

ANSWER: performing a **Cesarean section** [accept reasonable equivalents; prompt on **surgery** or equivalents; prompt on **delivery** of a child] <HK>

2. Amplification of HER-2 plays a role in the aggressiveness of certain forms of *this* condition. For 10 points each:

[10] Name this disease, which, despite mostly affecting women, can affect men as well, especially those with Klinefelter's syndrome. Both self-exams and mammograms are used to screen for this condition in women.

ANSWER: **breast cancer** [prompt on partial answer]

[10] Mutations in *these* genes, which code for tumor suppressor proteins, increase the risk of developing breast and ovarian cancer by up to 70%. Women with mutations in these genes often elect for prophylactic mastectomies.

ANSWER: **BRCA** genes [accept **BRCA1** or **BRCA2**]

[5+5] *Two answers required*. For 5 points each: breast cancer staging depends on tumor responsiveness to *these* two female sex hormones. Cancers positive for receptors for these *two* hormones are treated with tamoxifen and generally have a better prognosis.

ANSWER: **estrogen** AND **progesterone** <HK>

3. For 10 points each—answer the following about the three branches of government set up by the Constitution:

[10] The three branches were designed to exert *this* pair of controls on each other. One refers to each branch's ability to limit the power of the others, while the other refers to the equal distribution of power amongst the branches.

ANSWER: **checks** AND **balances**

[10] The ideas of separation of powers and checks and balances are both generally attributed to *this* legal thinker, who inspired Founding Fathers like James Madison.

ANSWER: **Montesquieu** [or Charles-Louis de Secondat, Baron de La Brède et de **Montesquieu**]

[10] The ideas of checks and balances and separation of powers were defended in *this* 1788 essay, which notes that "If men were angels, no government would be necessary."

ANSWER: **Federalist** No. **51** [accept any answer indicating the **51st Federalist** Paper; prompt on just *The Federalist Papers*] <JR>

4. In general, this term refers to a signal that sweeps either up or down in frequency over a short time interval. For 10 points each:

[10] Name this type of signal. Donna Strickland and Gerard Mourou shared part of the 2018 Nobel Prize in Physics for a technique that compresses petawatts of power via this type of "pulse amplification."

ANSWER: **chirp** [accept **chirped** pulse amplification]

[10] Chirped pulse amplification can produce high-power instances of *this* type of coherent light. It is produced by stimulated emission from a resonant gain medium.

ANSWER: **laser** [accept **light amplification by stimulated emission of radiation**]

[10] In Strickland and Mourou's work, the frequency components of the chirped laser pulse are manipulated by one of *these* periodic arrays of diffracting elements. They are used in the lab to split light into its colors.

ANSWER: diffraction **gratings** <SE>

5. This composer's last piece is a set of three *Symphonic Dances*. For 10 points each:

[10] Name this composer whose second piano concerto in C minor begins with huge, bell-like chords in the piano.

ANSWER: Sergei (Vasilyevich) **Rachmaninoff**

[10] This Texan pianist shockingly won the inaugural Tchaikovsky Competition with a performance of Rachmaninoff's *third* piano concerto. He's the namesake of the most prestigious American piano competition.

ANSWER: Van **Cliburn** [or Harvey Lavan **Cliburn**, Jr.]

[10] That competition was held in *this* former country, which Rachmaninoff's family fled in 1918. After being censored by this country's government, Dmitri Shostakovich wrote patriotic works like the "Leningrad" Symphony.

ANSWER: **Soviet Union** [or **USSR**; or **United Soviet Socialist Republics**; or **Soyuz Sovetskikh Sotsialisticheskikh Respublik**; or **CCCP**] <JW>

6. A 1995 study by Card and Krueger found that raising the "minimum" form of this concept did not affect unemployment. For 10 points each:

[10] Name this form of monetary compensation given to workers in exchange for labor. Their "Iron Law" describes how these values tend towards their minimum sustainable value in the long run.

ANSWER: **wages** [accept reasonable equivalents like **salaries**; prompt on **income**; accept **minimum wage**; accept **Iron Law of Wages**]

[10] The Iron Law of Wages was named by analogy to *this* man's Law of Rent, which states that rent is equivalent to the economic advantage gained by using the land. Piero Sraffa revitalized interest in this man's theories.

ANSWER: David **Ricardo**

[10] A modern criticism of the Iron Law is the observation that companies frequently pay employees higher-than-necessary wages, which are described by *this* term.

ANSWER: **efficiency** wages <BY/AF>

7. For 10 points each—answer the following about Chicago in American literature:

[10] Jurgis Rudkus is a Chicago meat packer in *this* muckraking novel by Upton Sinclair, which exposed the horrendous conditions of the meatpacking industry in the Midwest.

ANSWER: *The* **Jungle**

[10] After calling it "Hog Butcher for the World," Carl Sandburg's poem "Chicago" gives the city an epithet involving *this* body part.

ANSWER: Big **Shoulders**

[10] This title character of a 1900 novel discovers her talents as an actress after she leaves her rural Wisconsin home for Chicago. This character leaves her husband George Hurstwood, who falls from the middle class to homelessness.

ANSWER: Sister **Carrie Meeber** [accept either] <SCW>

8. For 10 points each—answer the following about early human settlements in South America:

[10] This modern country was once home to the Chavín culture, which was later home to the Incan Empire. Machu Picchu is located in this country.

ANSWER: Republic of **Peru**

[10] In 2007, archaeologists found remains of *these* animals in Chile, which gives some evidence that Polynesians reached South America. This animal was first domesticated in and around Thailand.

ANSWER: **chickens**

[10] Polynesians also colonized *this* island near South America, which is locally known as Rapa Nui.

ANSWER: **Easter** Island <VS>

9. Two methods for this task are the Levenberg–Marquardt and Gauss–Newton algorithms. For 10 points each:

[10] Give the general name for this task, which attempts to explain a dependent variable using some independent variables. The “linear” type of this task outputs a best-fit line.

ANSWER: **regression**

[10] In the simplest case, the best-fit line is determined by minimizing *this* function of the difference between the observed value and the estimated value.

ANSWER: the **square** of the difference [accept least **squares**]

[10] Unlike ordinary linear regression, logistic regression and the probit model are common methods for performing regression when the dependent variable has *this* characteristic.

ANSWER: **binary** [accept descriptive answers like “has **two** possible **values**”; prompt on **discrete**] <BY/AF>

10. Emperors who underwent this fate include Commodus and Elagabalus. For 10 points each:

[10] Give the two-word Latin phrase which describes this postmortem denigration in which a traitor’s name was stricken from the record and all images of him removed.

ANSWER: ***Damnatio memoriae***

[10] Another emperor to undergo the *damnatio memoriae* was this son of Vespasian and last Flavian emperor. This younger brother of Titus called himself *Dominus et Deus*, or “Lord and God.”

ANSWER: Titus Flavius Caesar **Domitianus** Augustus

[10] The effects of a *damnatio memoriae* can be seen on Septimius Severus’ structure of *this* type, from which the image of his son Geta has been removed. Titus and Constantine built “triumphal” examples of these monuments.

ANSWER: triumphal **arch** <SPQR>

11. Near the end of this story, its female protagonist quotes lines by Dante on the origins of “gentillesse.” For 10 points each:

[10] Name this story, which relates Ovid’s version of the story of King Midas before its protagonist encounters a group of 24 fairies on the road. It ends with the protagonist’s old, ugly wife turning into a beautiful young woman.

ANSWER: “The **Wife of Bath**’s Tale”

[10] The Wife of Bath is one of many pilgrims who tell tales on their way to *this* English town in a poem by Geoffrey Chaucer.

ANSWER: **Canterbury** [accept *The Canterbury Tales*]

[10] In a 15th-century poem, this knight also finds out that women just want “sovereignty” over their husbands. The “Pearl Poet” wrote a 14th-century poem in which this knight is protected from a sword by Lady Bertilak’s girdle.

ANSWER: Sir **Gawain** [accept *The Wedding of Sir Gawain and Dame Ragnelle* or *Sir Gawain and the Green Knight*] <JR>

12. The huge iron Bendegó meteorite survived a September 2018 fire that presidential candidate Marina Silva called “a lobotomy in [her country’s] memory.” For 10 points each:

[10] The aforementioned fire destroyed its country’s oldest and largest example of *what* type of institution, in which the meteorite was stored?

ANSWER: **museums** [accept National **Museum**]

[10] The National Museum was located in *this* Brazilian city, which was the capital until 1960. The statue of Christ the Redeemer overlooked the 2016 Summer Olympics in this city.

ANSWER: **Rio de Janeiro** [prompt on **Rio**]

[10] Rebuilding efforts for the museum are complicated by *this* new president’s dissolution of the Ministry of Culture. Other priorities in his first week in office included eliminating indigenous land protections in the Amazon.

ANSWER: Jair (Messias) **Bolsonaro** <HK>

13. This city got its modern name from a local phrase meaning “houses of stone.” For 10 points each:

[10] Name this city where eight soapstone bird sculptures were found. It’s often divided into a Hill Complex, a Valley Complex, and the Great Enclosure.

ANSWER: Great **Zimbabwe**

[10] The most iconic building from Great Zimbabwe’s Great Enclosure is a conical tower. Conical *roofs* were often used to top *these* towers, which project from medieval European castles.

ANSWER: **turrets**

[10] Amazingly, Great Zimbabwe, like Machu Picchu, was built in dry stone, meaning that they didn’t use *this* binding material. This form of cement is used to hold together brick buildings.

ANSWER: **mortar** <JR>

14. This process began after the Congress of Vienna in 1815 and was largely finished by 1871. For 10 points each,

[10] Name this process by which the Italian states were unified into the Kingdom of Italy and underwent a cultural “revival.” Give the original Italian term.

ANSWER: **Risorgimento**

[10] A key step in the *Risorgimento* was the Sardinian annexation of *this* island, which was taken with the help of the “Expedition of the Thousand.” This island had previously been under Bourbon Spanish control.

ANSWER: **Sicily**

[10] This advocate of the *Risorgimento* attacked Austrian rule in his novel *The Betrothed*, in which he also helped popularize the Tuscan-inflected dialect that became the modern Italian language.

ANSWER: Alessandro (Francesco Tommaso Antonio) **Manzoni** <SPQR>

15. Stesichorus alleged that this woman was really the daughter of Theseus and Helen. For 10 points each:

[10] Name this eldest daughter of Agamemnon and Clytemnestra. This woman was tricked into coming to Aulis with the promise of marriage to Achilles.

ANSWER: **Iphigenia** [accept **Iphianassa**]

[10] This priest had declared that Iphigenia must be sacrificed to appease Artemis. Following the Trojan War, this priest died of a broken heart when he lost a prophecy competition to Mopsus.

ANSWER: **Calchas**

[10] During that contest, Mopsus correctly predicted the number of offspring that would be born to *this* kind of animal. Another of these animals ravaged Calydon before it was killed by Meleager.

ANSWER: **boar** [accept **pig**; accept **sow**] <SPQR>

16. These reactions can proceed via chain-growth or step-growth mechanisms. For 10 points each,

[10] Name this kind of reaction, which also has a “living” type. These reactions form long, repeating chains out of monomers; a description is fine.

ANSWER: **polymerization** reaction [accept any answer indicating that a **polymer** is being formed]

[10] Some chain-growth polymerization reactions use *these* species and have activation, elongation, and termination steps. These species contain an unpaired valence electron.

ANSWER: free **radicals**

[10] This molecule is often used for free radical polymerization reactions because it is less explosive than benzoyl peroxide. When this molecule decomposes, it eliminates nitrogen gas to yield two cyanopropyl radicals.

ANSWER: **AIBN** [or **azobisisobutyronitrile**] <HK>

17. This man was known as “Le Douanier” for his day job as a customs officer. For 10 points each:

[10] Name this French post-Impressionist artist, known for exotic scenes like *The Sleeping Gypsy* and *Tiger in a Tropical Storm*.

ANSWER: Henri (Julien Félix) **Rousseau**

[10] Many of Rousseau’s paintings were eventually picked up by these two art dealers, one of which gave Cézanne his first solo exhibition, and the other of which was the main dealer for early Cubism. Name *either* dealer.

ANSWER: Daniel-Henry **Kahnweiler** OR Ambroise **Vollard**

[10] Rousseau was frequently exhibited in one of *these* institutions “of the independents.” Most Parisian art was exhibited in institutions with this name, including one named for “Autumn” and another named for the “Refused.”

ANSWER: **salons** [accept more specific answers like **Salon d’Automne**] <SCW>

18. In one of this man’s plays, a prostitute reads sentimental novels with titles like *Fatal Love*, and makes up stories about a former lover whose name keeps changing. For 10 points each:

[10] Name this author of a realist 1902 play about a group of depressed cellar-dwellers and their encounter with the optimistic vagrant Luka

ANSWER: Maxim **Gorky** [or Alexei Maximovich **Peshkov**]

[10] This German playwright often made socialist themes the center of his *Lehrstücke* or “teaching-pieces.” This creator of “epic theater” created *The Threepenny Opera* with Kurt Weill [“vile”].

ANSWER: (Eugen) Bertolt (Friedrich) **Brecht**

[10] Brecht’s theater rejected the conventions of tragedy espoused by this Ancient Greek philosopher. This student of Plato wrote the *Poetics*.

ANSWER: **Aristotle** <JR>

19. Trainees at entertainment companies in *this* country are often forced to sign so-called “slave contracts,” which can ban them from dating. For 10 points each,

[10] Name this East Asian country whose “idol” music industry has produced groups like Girls’ Generation, Bigbang, and Blackpink. Its music industry has been imitated in China and Japan’s C-pop and J-pop industries.

ANSWER: **South Korea** [prompt on partial answer; or **Republic of Korea**; or **ROK**; or **Dachan Minguk**; do not accept or prompt on “Democratic People’s Republic of Korea” or “DPRK”]

[10] This 7-member K-pop boy band goes by a 3-letter acronym and has produced hits like “DNA.” Their music video for “IDOL” became the most-viewed video on YouTube within the 24 hours after its release in August.

ANSWER: **BTS** [or **Bangtan** Sonyeondan]

[10] This lead single from BTS’s album *Love Yourself: Tear* debuted at the 2018 Billboard Awards. The chorus laments that “I grew a flower in a dream that can’t come true,” and that “I’m so sick of this [title concept].”

ANSWER: “**Fake Love**” <HK>

20. Kunti and Madri were the mothers of these figures whose fathers were Dharma, Vayu, Indra, and the Ashvins. For 10 points each:

[10] Name this group of five brothers who were all married to Draupadi. They fought a war against their cousins, the children of Queen Gandhari.

ANSWER: **Pandavas**

[10] This second eldest of the Pandavas personally killed all 100 Kauravas during the Kurukshetra War. This son of Vayu carried his brothers and their mother to safety when Duryodhana attempted to burn them alive.

ANSWER: **Bhima**

[10] In one incident, Bhima’s half brother Duryodhana attempts to poison him and drown him in *this* geographic feature. Bhima’s great uncle Bhishma was born from Shantanu and the personification of this holy river.

ANSWER: **Ganges** river [accept **Ganga**] <HK>

Tiebreaker

21. This system became popular in the 18th century as a way to bypass the traditional guilds. For 10 points each:

[10] Name this system of manufacturing, in which employers sent out materials to individual workers, who then sent back finished goods. It was later superseded by factory work.

ANSWER: **putting-out** system [accept **outwork** or **domestic** system or **workshop** system; prompt on **cottage** industry]

[10] Merchants often “put out” the raw material for *this* process, which was once done using a distaff. This process was automated by combining a “jenny” invented by James Hargreaves with Richard Arkwright’s water frame.

ANSWER: **spinning** [accept **spinning jenny** or **spinning mule**; prompt on **textiles** or **cloth** production]

[10] With the advent of highly flammable textile factories, some mills tried using the new “cast” version of this metal to make building frames, which they thought would be fireproof. They were not.

ANSWER: cast **iron** <JR>