

## Regular Academic Fall Tournament III

Head Edited by Arthur Delot-Vilain and Shardul Rao

Edited by Dean Ah Now, Gus Carvell, Tasis Gemmill-Nexon, Alex Moon, Karsten Rynearson, and Maxwell Ye

Written by Joy An, Blake Andert, Jake Boonin, Dylan Bowman, Ean Casey, Shohom Chakraborty, Joseph Chen, Rachel Ezielev, Eddie Fuhrer, Max Gedajlovic, Elizabeth Grace, Arjun Kala, Matthew Kaung, Amogh Kulkarni, Athena Liu, Joel Miles, Sinecio Morales, Owen Riley, Samir Sarma, Bryanna Shao, Cece Shao, Danesh Sivakumar, Ananya Tadigadapa, Shiva Tegulla, Coby Tran, Felix Wang, John Wang, Paul Wang, Raymond Wang, Ben Weiner, Amanda Wu, Junzhi Xie, Michelle Yu, Audrey Yuen, Nathan Zhang, Walter Zhang, and the editors

Special thanks to Dylan Bowman, Bryanna Shao, Paul “Do You Have Ears?” Wang, and Ben Weiner

---

### Packet 10

1T. **The death of one king with this name in a jousting accident eventually led to the French Wars of Religion. The first ruler of the Angevin Empire had this name. That king of this name became the Duke of Aquitaine upon marrying Eleanor, and was the father of John I and Richard I. A king of this name from Navarre won the last of the French Wars of Religion against (\*) two other people of this name. That king of this name converted to Catholicism upon assuming the throne and founded the Bourbon Dynasty. An English king of this name attempted to have his marriage to Catherine of Aragon annulled. For 10 points, give this first name shared by four kings of France, as well as an English king who had six wives.**

ANSWER: **Henry** [or **Henri**; accept **Henry** II of France or **Henry** II of England or **Henry** Curtmantle or **Henri** Courtmanteau or **Henry** Plantagenet or **Henry** IV or **Henry** of Navarre or Good King **Henry** or **Henry** the Great or **Henry** VIII]

<Rao — European History>

1B. The conductor Serge [surge] Koussevitzky [koo-seh-VITZ-key] made many contributions to early 20th century music. For 10 points each:

[M] Koussevitzky acted as a mentor to this composer and championed much of this composer’s music, beginning with the *Symphony for Organ and Orchestra* in 1924. Koussevitzky also conducted the first recording of the orchestral suite to this composer’s ballet *Appalachian Spring*.

ANSWER: Aaron **Copland**

[E] In addition to conducting, Koussevitzky was a talented performer of this instrument for which he wrote a concerto in F-sharp minor. This instrument is the largest and lowest instrument in an orchestra’s string section.

ANSWER: double **bass** [or string **bass** or upright **bass** or **contrabass**; do not accept or prompt on “contrabassoon”]

[H] In 1922, Koussevitzky commissioned Maurice Ravel to create an orchestration of this piano suite. In his orchestration, Ravel opened a depiction of an oxcart using a tuba solo in this suite’s third movement, “Bydło” [bid-woh].

ANSWER: **Pictures at an Exhibition** [or **Tableaux d’une exposition** or **Kartinki s výstavki**; accept **Pictures from an Exhibition - A Remembrance of Viktor Hartmann**]

<Rao — Auditory Fine Arts>

2T. **The addressee of one poem by this author “let her golden hair scatter in the breeze,” which in its original language may be a pun on that addressee’s name. This poet claimed to be the first person since ancient times to climb a mountain for the view in “The Ascent of Mont Ventoux.” A 366-poem collection by this author is divided into sections called (\*) “In Life” and “In Death.”**

This poet began that collection by addressing the reader with the line “you who hear the sound, in scattered rhymes.” For 10 points, name this Italian poet whose collection *Il Canzoniere* contains many poems addressed to a woman named Laura.

ANSWER: **Petrarch** [or Francesco **Petrarca**]

<Rao — European Literature>

2B. The Rovereta affair resulted in a constitutional crisis in this country. For 10 points each:

[H] Name this country whose Grand and General Council is analogous to the Roman Senate and its Captains Regent to Roman consuls. The foreign policy skills of Antonio Onofri helped gain this country's recognition from many European powers.

ANSWER: (Most Serene) Republic of **San Marino** [or (La Serenissima) Repubblica di **San Marino** or Ripóbblica d' **San Marein**]

[E] The Rovereta affair started when five socialist lawmakers broke away from a coalition with one party of this ideology in the Grand and General Council. A manifesto of this ideology was written by Karl Marx and Friedrich Engels.

ANSWER: **communism** [accept word forms]

[M] Following the break-up of the socialist-communist coalition, a Sammarinese party of this name set up a provisional government in Rovereta, which sparked the affair. A German "Union" of this name was first led by Konrad Adeneuer and later, Angela Merkel.

ANSWER: **Christian Democratic** [accept word forms; accept Sammarinese **Christian Democratic** Party or **Christian Democratic** Union of Germany; do not accept or prompt on just "Christian" or "Democratic"]

<Rao — European History>

3T. A length named for this process is equal to 2 times the square root of a constant  $D$  times time. That constant characterizing this process is equal to the product of Boltzmann's constant, absolute temperature, and mobility, according to Einstein's relation. This process is simulated by a random walk and is a macroscopic result of (\*) Brownian motion. The flux of this process is modeled by Fick's law. The rate of this process is inversely proportional to the square root of molar mass according to Graham's law. For 10 points, name this process of particles moving from areas of high to low concentration, which for water is called osmosis.

ANSWER: **diffusion** [accept **diffusion** length or **diffusion** coefficient or **diffusive** flux]

<Morales — Chemistry>

3B. *Note to moderator: read answerline carefully.* The perpetrator of this action paralleled it in the characters Shinji and Reiko in his story "Patriotism." For 10 points each:

[H] Name this action which was performed by the author of the novel *The Decay of the Angel* on live television after a failed coup.

ANSWER: Yukio **Mishima's seppuku** [accept Mishima **Yukio's seppuku** or Kimitake **Hiraoka's seppuku**, accept **suicide**, **disembowelment**, or **hara-kiri** in place of seppuku; prompt on **suicide**, **disembowelment**, or **hara-kiri** alone]

[M] Mishima wrote a novel titled for the "Spring" form of this substance, whose "Country" also titles a Yasunari Kawabata novel about Shimamura's encounters with the geisha Komako.

ANSWER: **snow** [accept *Spring* **Snow** or **Snow Country**]

[E] Another novel by Mishima is titled for one of these structures "of the Golden Pavilion." In that novel, Mizoguchi burns down one of these structures where the Buddha is worshipped.

ANSWER: **temple** [accept **Temple of the Golden Pavillion**]

<Ezriev — World Literature>

4T. This artist designed a sculpture for the Hart Senate Office Building which was installed after their death, *Mountains and Clouds*. The siege of Almadén during the Spanish Civil War is commemorated by this artist's *Mercury Fountain*. This artist designed a sculpture in Chicago's (\*) Federal Plaza that uses their namesake shade of red. This artist created *Flamingo*, one of their "stabiles," [sta-BEELS] which are named for their contrast with their works like *Lobster Trap and Fish Tail*. For 10 points, name this American artist known for moving sculptures called mobiles [MOH-beels].

ANSWER: Alexander **Calder**

<Carvell — Visual Fine Arts>

4B. Christian Anfinsen demonstrated that the result of this process is dependent on only the primary structure. For 10 points each:

[M] Name this process in which a protein adopts a three-dimensional structure. This process typically involves the formation of alpha helices and beta sheets.

ANSWER: protein **folding** [do not accept or prompt on "translation" or "protein synthesis"]

[H] Protein folding in cells is often assisted by these compounds that include GroEL and GroES. Heat shock proteins are examples of the "molecular" types of these compounds.

ANSWER: **chaperones** [accept molecular **chaperones** or **chaperonins**]

[E] Extreme values of temperature or this quantity can interfere with protein folding by causing denaturation. The stomach possesses a low value of 1 for this quantity due to the high concentration of hydrochloric acid.

ANSWER: **pH** [or **power of hydrogen** or **potential of hydrogen**]

<Ye — Biology>

5T. After one event, this person evaded capture by fleeing to the HMS *Vulture*. Speculated reasons for this man's actions include a left leg wound inflicted at Ridgefield and the death of his first wife Margaret Mansfield. A letter by this man that decries the readers as being "duped by a virtuous Credulity" is entitled "Letter to the Inhabitants of America." This husband of Peggy Shippen worked with Ethan Allen to capture (\*) Fort Ticonderoga. After being captured, Major John André revealed this man's plot to surrender West Point to the British. For 10 points, name this general of the American Revolution known for his defection to the British.

ANSWER: Benedict **Arnold** <Wang—American History>

5B. This animal gained mythological powers after eating nine magical hazelnuts that fell into a well. For 10 points each:  
[H] Name this animal that Finegas sought for seven years. One hero accessed this creature's power by sucking his thumb.

ANSWER: **salmon of knowledge** [accept **salmon of wisdom**]

[M] This hero obtained wisdom after burning his thumb of the salmon of knowledge. This hero slew the fire-breathing goblin Aillén and is the leader of Fianna.

ANSWER: **Finn MacCool** [or **Fionn mac Cumhaill**]

[E] Finn is a hero from this island country, whose other mythological figures include Cu Chulainn and St. Patrick.

ANSWER: **Ireland** [accept **Eire**]

<Wu — Mythology>

6T. An important substance in this religion was farmed at the Pinnacle Community that was founded by Leonard Howell, the author of *Promise Key*. Prince Emanuel Edward Charles founded a sect of this religion that does not eat mangoes or sugarcane. This religion's discouragement of salt and vegetarianism are a crucial part of the (\*) I-tal diet. The "mansions" of this religion include Niyabinghi and Bobo Ashanti. The *Holy Piby* influenced this religion's adherents' belief in Ethiopians being the chosen people, leading to their worship of Emperor Haile Selassie. For 10 points, name this religion whose dreadlock-wearing adherents often smoke ganja.

ANSWER: **Rastafarianism** [or **Rastafari** movement]

<Morales — Religion>

6B. This technique has been proposed as a way to reduce the amount of land and water needed for agriculture. For 10 points each:

[M] Identify this technique, which uses mineral solutions to grow plants without using soil.

ANSWER: **hydroponics** [or **hydroponic** agriculture]

[E] In recent years, this organization has experimented with growing lettuce and radishes hydroponically as a way to sustain humanity in space. In the 1960s, this American government organization launched the Apollo program.

ANSWER: **NASA** [or **N**ational **A**eronautics and **S**pace **A**dministration]

[H] The U.S. military conducted early experiments in modern hydroponics on this Pacific island in the late 1930s. This American island was attacked alongside Pearl Harbor, Guam, and the Philippines on December 7, 1941.

ANSWER: **Wake** Island

<Delot-Vilain — Other>

7T. While addressing the Australian House of Representatives in 2017, current prime minister Scott Morrison mockingly said that this resource "won't hurt you." An ad criticizing "Cocaine Mitch" was released by an unsuccessful Senate candidate who became wealthy due to this resource. That candidate, Don Blankenship, was the CEO of (\*) Massey Energy, which sold this resource. Donald Trump claimed that a "clean" version of this resource was being produced in Montana. Senator Joe Manchin has been criticized for holding stocks in companies that sell this resource, of which his state West Virginia is a large producer. For 10 points, name this black rock which can be burned as a fossil fuel.

ANSWER: **coal** [accept clean **coal**; accept specific forms of coal such as **anthracite** or bituminous **coal**]

<Rao — Current Events>

7B. Along with a western neighbor, this state names a set of “resolutions” that were secretly written by Thomas Jefferson and James Madison. For 10 points each:

[E] Name this state. This state has produced the most U.S. presidents, including Jefferson, who founded its flagship university in Charlottesville.

ANSWER: Virginia

[M] The Virginia and Kentucky Resolutions protested these two acts, which gave John Adams the ability to imprison non-citizens and government critics. After being arrested under these laws, Matthew Lyon was re-elected to Congress from prison.

ANSWER: Alien and Sedition Acts

[H] The Kentucky Resolution proposed state nullification of “unjust” federal laws, which inspired South Carolina to nullify this 1828 bill. This bill was designed to fail by targeting both Northern and Southern imports, but passed anyway.

ANSWER: Tariff of Abominations [accept Tariff of 1828]

<Zhang — American History>

8T. **This character exclaims “Howl, howl, howl, howl! O, you are men of stones” while lamenting the death of his daughter, whom he begs to “stay a little. Ha!” after killing the slave who hanged her. A servant of this character, who refers to him as “nuncle,” mysteriously disappears after Act III of the play in which they appear. This character states “nothing will come of nothing” after his (\*) daughter is unable to articulate how much she loves him. At the beginning of the play he names, this character divides his kingdom between his daughter Regan and Goneril after casting out Cordelia, the daughter who actually loves him. For 10 points, name this tragic Shakespearean king.**

ANSWER: King Lear

<Bowman — British Literature>

8B. These mathematical objects can be recursively defined, such as in two examples named for Lucas and Fibonacci. For 10 points each:

[E] Name these mathematical objects whose sum of terms gives a series. When these objects differ by a fixed constant, they are called “arithmetic.”

ANSWER: sequences [accept Lucas sequence or Fibonacci sequence or arithmetic sequences]

[M] A sequence possesses this property if its terms are bounded in some epsilon-neighborhood past an arbitrary number. For series, this property is tested for using the root and ratio tests.

ANSWER: convergence [accept convergent]

[H] If a sequence has this property and is bounded, then it always converges by a namesake convergence theorem. A sequence has this property if it is always increasing or always decreasing.

ANSWER: monotone [accept monotonic]

<Ye — Other Science>

9T. **This molecule can be distorted by groove-binding and intercalating agents. One method used to quantify this molecule uses another compound named after pac-man. In the LAMP method, this molecule binds to SYBR [cyber] Green. A process for amplifying this molecule was invented by Kary Mullis and involves thermal cycling. This molecule is cleaved in the (\*) Southern blot and is separated in gel electrophoresis. This molecule is analyzed in a technique named after Frederick Sanger. Short tandem repeats in this molecule are targeted by CRISPR/Cas9, allowing for its splicing. For 10 points, name this double-stranded, hereditary molecule used to fingerprint individuals in forensics.**

ANSWER: DNA [or deoxyribonucleic acid; accept specific types of DNA such dsDNA or ssDNA]

<Xie — Biology>

9B. A character in this novel refers to mirrors as leaks and unknowingly causes the creation of the vicious “Pluto Gang.” For 10 points each:

[H] Name this novel in which Dwayne Hoover goes on a homicidal rampage after reading a Kilgore Trout novel that tells him he is the only creature in the universe with free will.

ANSWER: **Breakfast of Champions**, or Goodbye Blue Monday

[M] *Breakfast of Champions* was written by this author. Billy Pilgrim becomes “unstuck in time” in another of this author’s novels set during World War II.

ANSWER: Kurt **Vonnegut**

[E] *Breakfast of Champions* includes a Kilgore Trout novel featuring a scene in which the Creator of the Universe invites an experimental creature to a banquet at the Waldorf Astoria hotel, which is located in this city’s Manhattan borough.

ANSWER: **New York** City [or **NYC**]

<Gedajlovic — American Literature>

10T. A character in this film named “Sven the Governator” is a parody of Arnold Schwarzenegger. The primary town in which this film is set was removed from the map after the construction of interstate highway 40. At the beginning of this film, a character who seeks the sponsorship of (\*) Dinoco repeats a mantra about “eating losers for breakfast.” The main character of this film is required to repave the main road of a town as part of community service and states “I am speed.” In this film, the three-time Piston Cup champion Doc Hudson retires to the town of Radiator Springs. For 10 points, name this film about Lightning McQueen.

ANSWER: **Cars** [do not accept or prompt on “Cars 2” or “Cars 3” or “Planes”]

<Ye — Pop Culture>

10B. Jesus had this action performed on him in the Jordan River by his cousin John, whose epithet refers to this practice. For 10 points each:

[E] Name this ritual that Christians undergo in order to “wash away” original sin.

ANSWER: **baptisms**

[M] In Acts, this apostle tells the “men of Judaea” to “Repent, and be baptized.” This apostle earlier walked on water and denied Jesus three times.

ANSWER: Simon **Peter** [or Simeon **Peter** or St. **Peter** or **Cephas**; prompt on **Simon** or **Simeon** alone]

[H] This resident of Damascus cures Saul of Tarsus of his blindness and baptizes him as Paul. This disciple of Jesus had a name meaning “beloved of God.”

ANSWER: **Ananias** of Damascus

<Morales — Religion>

11T. One kingdom in this region was initially a member of the Mahan Confederacy. It’s not in China, but the “Heavenly Horse” Tomb was built by a different kingdom in this region. A 15th century ruler of a kingdom in this region set up a research institute known as the Hall of Worthies. The Baekje Kingdom was one of the Three Kingdoms of this region. This region became a “hermit kingdom” under the rule of the (\*) Joseon Dynasty. One country on this peninsula follows the state ideology of juche. In June 1950, that country on this peninsula crossed the 38th parallel to attack its southern neighbor. For 10 points, name this East Asian peninsula whose northern half contains a country ruled by Kim Jong-un.

ANSWER: **Korea** [or **Korean** Peninsula; accept South **Korea** or Republic of **Korea** or North **Korea** or Democratic People’s Republic of **Korea**]

<Rao — World History>

11B. An outcrop of this art movement called SoFlo originated in Miami in the 1990s and includes artists such as Caron Bowman. For 10 points each:

[H] Name this art movement founded by Takashi Murakami characterized by bold lines and bright colors.

ANSWER: **superflat**

[E] Superflat originated in this Asian country. Many superflat artworks explore sexual fetishism in otaku culture from this country.

ANSWER: **Japan** [or **Nihon**-koku or **Nippon**-koku]

[M] One of Murakami’s widely used motifs is one of these objects with a smiley face over it. A 2010 print by Murakami that features many of these objects is titled *If I Could Reach That Field of [these objects], I Would Die Happy*.

ANSWER: **flowers**

<An — Visual Fine Arts>

12T. **A theory in which the universe contains exactly one of these particles was proposed by John Wheeler. The angular momentum of these particles is multiplied by the Lande g-factor to determine their magnetic moment. They're not photons, but in one experiment, diffraction patterns of these particles were observed when they were fired at a (\*) nickel target.** A photon whose energy is greater than that of the work function can eject one of these particles from a metal surface. The discovery of this particle involved observing the deflection of a cathode ray by J.J. Thomson. For 10 points, name these particles that orbit the nucleus in an atom.

ANSWER: **electrons** [accept one-**electron** universe]

<Ye — Physics>

12B. Rising sea temperatures have caused major bleaching events in many of these ecosystems. For 10 points each:

[E] Name these ecosystems. A “Great Barrier” one of these ecosystems lies off the eastern coast of Australia.

ANSWER: coral **reefs**

[H] North of the Great Barrier Reef lies the Coral Triangle, a region with over 500 species of coral which is centered on this country. This country contains the island of Sulawesi, which is the site of a proposed UNESCO World Heritage Site intended to protect corals.

ANSWER: **Indonesia** [or Republic of **Indonesia**]

[M] 75% of the world's species of corals can be found in Raja Ampat, an archipelago in Indonesia's portion of this island. It shares this island with a country named for this island whose capital is Port Moresby.

ANSWER: **New Guinea** [accept Papua **New Guinea**]

<Zhang — Geography>

13T. **Tchaikovsky's Opus 51 Six Pieces contains three pieces in this genre, including one titled “Sentimentale.” The third movement of Tchaikovsky's Symphony No. 5 is one of these pieces, and the second movement of his Symphony No. 6 is a variant of this genre in 5/4 [five-four] time. One of these pieces in C-minor in Shostakovich's Suite for Variety Orchestra opens with a solo for alto saxophone, which is soon joined by tenor saxophone. The last piece in The (\*) Nutcracker Suite is one of these pieces “of the Flowers.” Johann Strauss II wrote many of these pieces, such as ones called Emperor and On the Beautiful Blue Danube.** For 10 points, name these Viennese dances in ¾ [three-four] time.

ANSWER: **waltz** [or **valse** or **Walzer**; accept **Valse Sentimentale** or “**Waltz** of the Flowers” or *Emperor Waltz*]

<Rao — Auditory Fine Arts>

13B. This conflict concluded when Louis VIII agreed to renounce his claim to the throne at the Peace of Lambeth. For 10 points each:

[H] Name this conflict in which Robert Fitzwalter led a certain group of nobles in rebellion against an unpopular English monarch.

ANSWER: **First Barons' War** [prompt on **Barons' War**]

[M] This deposed English King died in 1216 during the First Barons War. This King, nicknamed Lackland, ascended to throne after the death of his brother Richard the Lionheart.

ANSWER: **John** Lackland

[E] The First Barons war broke out after John's refusal to follow this great charter, signed in Runnymede in 1215. This document established habeas corpus and restricted the power of the monarchy.

ANSWER: **Magna Carta**

<Gedajlovic — Other History>

14T. **“Properly basic” beliefs were used to oppose this position by reformed epistemologists. William Paley created the “Watchmaker analogy” to argue against this belief. In a lecture given at Battersea Town Hall, one philosopher argued that [emphasize] opposition to this belief is mostly based on a (\*) fear of death.** That same thinker critiqued opponents of this belief because they often shift the burden of disproof onto others, and proposed a hypothetical teapot between Earth and Mars to support this belief. The “problem of evil” is a common argument for this position. For 10 points, name this philosophical position argued for by Bertrand Russell in *Why I Am Not a Christian*.

ANSWER: **atheism** [accept New **Atheism**; accept equivalents like **God not existing** before mention; accept word forms like **atheist**]

<Miles — Philosophy>

14B. Along with a transition metal, three elements from this family are named for the Swedish town of Ytterby. For 10 points each:  
[E] Name this family of elements that are named for the element with atomic number 57. This family resides directly above the actinides on the periodic table.

ANSWER: **lanthanides**

[M] This quantity for lanthanides decreases disproportionately across the row compared to other periods. This quantity is often reported in units of angstroms.

ANSWER: atomic **radius**

[H] The “lanthanide contraction” is partially because of the poor shielding ability of these constructs relative to the increasing nuclear charge. These constructs are characterized by an azimuthal quantum number of 3.

ANSWER: **f-orbitals** [accept **4f-orbitals**; prompt on atomic **orbitals** or electron **orbitals**]

<Ye — Chemistry>

15T. **In one story titled for one of these events, spies and astrologers visit a sacred latrine named Qaphqa to contact an organization simply called The Company. In addition to a Jorge Luis Borges story titled for this kind of event “in Babylon,” one of these events is organized by Mr. Summers, who discusses replacing a worn-out wooden box used for this type of event. A character who has participated in one of these events 77 times claims that these events make (\*) “corn be heavy soon.”** After drawing a paper slip with a black dot, Tessie Hutchinson screams “it’s not fair” while being stoned to death as a result of one of these events. For 10 points, name this type of event that titles a short story by Shirley Jackson.

ANSWER: the **lottery** [accept “The **Lottery** in Babylon”]

<Ye / Rynearson — American Literature>

15B. *William Tell* opens with a love song sung by a person with this occupation, Ruodi. For 10 points each:

[H] Name this occupation. In one opera, Nadir and Zurga, who both have this occupation, sing the duet “Au [ow] fond [fawn] du temple [TAWM-pleh] saint [sawn]” and compete for the love of the priestess Leila.

ANSWER: **fishermen** [accept *The Pearl* **Fishers**]

[M] In “Au fond du temple saint,” this concept “takes our hearts by storm and turns us into enemies.” In a famous “Habanera,” the title character of another Bizet opera calls this concept “a rebellious bird.”

ANSWER: **love** [accept “**Love** is a rebellious bird” or “L’**amour** est un oiseau rebelle”]

[E] That aforementioned Bizet opera is titled for this Roma girl who enters by singing the “Habanera.” This character falls in love with the torero Escamillo and is stabbed by Don José [zhoh-ZAY] at the end of the opera.

ANSWER: **Carmen**

<Kulkarni — Other Fine Arts>

16T. **One expedition during these wars led to the surrender of Cassivellaunus. Titus Labienus [la-BEE-nus] served as the second-in-command of one side during these wars. Ambiorix, the leader of the Belgae, led a successful revolt during these wars. During one battle in these wars, one side intentionally trapped themselves between two walls in order to keep reinforcement troops at bay. These wars ended with the siege of (\*) Alesia and the capture of Vercingetorix.** One side’s leader during these wars wrote a *Commentary* on them, after which that ruler crossed the Rubicon River. For 10 points, name this series of wars between the Roman Republic and tribes located primarily in present-day France.

ANSWER: **Gallic** Wars [or Bello **Gallico**; accept *Commentary on the Gallic Wars* or *Commentarii de Bello Gallico*]

<Rao — Other History>

16B. The death of Fanny Robin in this novel causes Sergeant Troy to attempt to drown himself. For 10 points each:

[H] Name this novel in which the protagonist, Bathsheba Everdene, eventually marries Gabriel Oak. This novel is named for a line from Thomas Gray’s “Elegy Written in a Country Churchyard.”

ANSWER: ***Far from the Madding Crowd***

[E] This British author of *Far from the Madding Crowd* also wrote about Michael Henchard in *The Mayor of Casterbridge* and penned *Jude the Obscure*.

ANSWER: Thomas **Hardy**

[M] In *Far From the Madding Crowd*, Gabriel has this job. Christopher Marlowe wrote a poem about a “passionate” one of these people, who were often depicted in pastoral scenes.

ANSWER: **shepherds**

<Casey — British Literature>

17T. *Pseudomonas syringae* are capable of living in these formations and can cause their creation at around -2°C. An increase in methane concentration can cause one of these formations consisting of ice crystals to form. One process for creating these formations involves spraying silver iodide into the air and is called “seeding.” The “scarf,” or (\*) “pileus,” type of these formations arise from another that may absorb them later after rising through convection. When these formations turn gray, the suffix “-nimbus” is appended onto their name. For 10 points, name these formations of atmospheric water and ice that include cirrus and cumulus types.

ANSWER: **clouds** [accept **cloud** seeding; accept noctilucent **clouds** or scarf **clouds** or pileus **clouds** or cirrus **clouds** or cumulus **clouds**]

<Morales — Other Science>

17B. Prior to this country declaring its independence, Sheikh Mujibur Rahman was prevented from taking office after winning the 1970 Pakistani general elections. For 10 points each:

[E] Name this country that was known as East Pakistan from 1947 to 1971. This country’s war of independence was sparked after Operation Searchlight was conducted in its capital, Dhaka.

ANSWER: People's Republic of **Bangladesh** [or Gônoprojatontṛī **Bangladesh**]

[H] At the time, Pakistan was led by this general and president who stayed in power for only two years. After Pakistan’s defeat in the Bangladesh Liberation War of 1971, this president resigned in favor of Zulfikar Ali Bhutto.

ANSWER: Yahya **Khan** [or Agha Muhammad Yahya **Khan**]

[M] When India declared war against Pakistan in support of Bangladesh, their forces were led by General Jagjit Singh Aurora, who was of this religion. Indira Gandhi was assassinated after targeting this religion’s Golden Temple in Amritsar in Operation Blue Star.

ANSWER: **Sikhism** [or **Sikhi**]

<Rao — World History> [Edited]

18T. **One character in this novel quotes the motto “Pen is envy” to discourage other characters from writing. This novel’s protagonist finds the phrase “don’t let the bastards grind you down” scratched into a dresser. Men who are “salvaged” in this novel are hung from the Wall, and can be killed in Particicutions. At the urging of (\*) Serena Joy, this novel’s protagonist has an affair with the chauffeur Nick. This novel’s protagonist secretly plays a game of Scrabble with the Commander. For 10 points, name this dystopian novel set in the Republic of Gilead in which Offred holds the title position of servitude, written by Margaret Atwood.**

ANSWER: *The **Handmaid’s Tale***

<Rao — Other Literature>

18B. In three dimensions, this action is characterized by the SO<sub>3</sub> [S-O-three] group. For 10 points each:

[E] Name this action in which points on an object move circularly around a fixed point. The Earth undergoing this action around its axis is responsible for the day-night cycle.

ANSWER: **rotation** [accept **rotation** group]

[H] In rigid body dynamics, rotational motion is described by equations named for this mathematician. Unlike Newton’s second law, this mathematician’s equations account for applied torque across three principal axes.

ANSWER: Leonhard **Euler** [accept **Euler**’s rotation equations]

[M] In Euler’s equations, the applied torque is given in terms of this quantity and angular velocity. More conventionally, torque is equal to this quantity times the second derivative of angular position.

ANSWER: **moment of inertia** [or **rotational inertia**; do not accept or prompt on “inertia”]

<Ye — Physics>

19T. **This city’s Aeropageus hill is where the god Ares is said to have been tried for the first-ever murder. John the Apostle claimed that an “unknown god” in this city was actually the Biblical God. The three daughters of this city’s king were driven mad upon discovering a box containing the infant Ericithonius, who also became king of this city. The first ruler of this city was the half-human (\*) half-snake Cecrops, who judged a contest in which Poseidon’s gift of horses was defeated by the olive tree planted by this city’s patron goddess. That patron goddess was depicted in a now-lost statue in this city’s Parthenon. For 10 points, name this city named for the Greek goddess of wisdom.**

ANSWER: **Athens** [accept **Athens**]

<An — Mythology>

19B. This poet wrote “A Season in Hell,” where he symbolized his tumultuous relationship with Paul Verlaine as a journey where he begins repulsed with a personification of Beauty and ends speaking to the Devil. For 10 points each:

[H] Name this French poet, who wrote about the “bitter redness of love ferment[ing]” in “The Drunken Boat.”

ANSWER: Arthur **Rimbaud** [or Jean Nicolas Arthur **Rimbaud**]

[E] Another depiction of hell in poetry is by William Carlos Williams and titled for “Asphodel, That Greeny [one of these things],” where the speaker “came... to know/that there were [these things] also in hell.” The speaker of that poem mentions an example of this kind of plant growing on graves, a “sexual orchid that bloomed.”

ANSWER: **flower** [accept “Asphodel, That Greeny **Flower**”]

[M] In his poem “Contemplating Hell,” this author ventured that Hell is “a place much like the city of London” but that “it must be even more like Los Angeles.” This author also described a family torn apart by war in the play *Mother Courage and Her Children*.

ANSWER: Bertolt **Brecht** [accept Eugen Berthold Friedrich **Brecht**]

<Ezriev — European Literature>

20T. **One character in this film claims that they’re an only child named Jessica from Chicago. In one scene from this film, a character smokes a cigarette while sitting on a toilet in a flooded bathroom. That character in this film is among the casualties after a birthday party at the end of this film turns violent. Jobs as an art therapist, (\*) English teacher, and housemaid are among those acquired by members of the central family of this film. At the 2020 Oscars, this film became the first film with primarily non-English dialogue to win Best Picture. The Kim family infiltrates the Park household in, for 10 points, what 2019 Korean film directed by Bong Joon-ho?**

ANSWER: ***Parasite***

<Weiner — Other Fine Arts>

20B. E. E. Evans-Pritchard stated that, in the event of a granary collapse that kills a person, the collapse would be blamed on one of these people. For 10 points each:

[M] Name these people who Evans-Pritchard studied among the Azande. Oracles and namesake “doctors” would be used to identify these people.

ANSWER: **witches** [accept **witchcraft** or **witch** doctors]

[E] These insects were used in Azande oracles to determine the answers to questions. Evans-Pritchard documented how witchcraft was blamed when eight Azande people were killed after a door frame infested with these wood-eating insects collapsed on them.

ANSWER: **termites** [or **Isoptera**]

[H] The Azande *benge* oracle involved poisoning one of these animals and using its time of death to determine who used witchcraft. Clifford Geertz’s essay “Deep Play” describes how these animals represented powerful men in Balinese culture.

ANSWER: **chickens** [accept **roosters**; accept **cocks**; accept **cockerels**; accept **capons**; accept **Gallus gallus domesticus**; accept “Deep Play: Notes on the Balinese **Cockfight**; prompt on **fowl** or **poultry**]

<Kulkarni — Social Science>