

# **LADUE INVITATIONAL SPRING TOURNAMENT 2013**

Round 12

## TOSS-UPS

**1. The Ruvuma River forms the southern border of this country, which contains Kalambo Falls and Gombe National Park, as well as Pemba and Mafia Islands. Lake Natron and Ol Doinyo Lengai are located in this country's Arusha Region, which also contains the Ngorongoro Crater. With its northern neighbor, this country shares the (\*) Serengeti Plain, and it borders Lakes Malawi and Tanganyika to the west. Zanzibar is controlled by this country, which contains Africa's highest point, Kilimanjaro. For ten points, name this country located between Kenya and Mozambique, whose capital moved to Dodoma from Dar es Salaam.**

ANSWER: United Republic of Tanzania

<JD>

**2. This novel questions whether God had intestines after discussing how Yakov Stalin threw himself against an electric fence. After a character in this novel dies in a car accident, his son Simon marks the grave with "He wanted the Kingdom of God on Earth," and that father's lover hates (\*) kitsch. In this novel, Franz participates in a march in Cambodia, and one woman wears a bowler hat while Tereza takes pictures of her. For ten points, identify this novel about Tomas and his lover Sabina, written by Milan Kundera.**

ANSWER: *The Unbearable Lightness of Being* (or *Nesnesitelná lehkost bytí*)

<MS>

**3. Students in Chinese colleges have alleged they were forced to work for a company associated with this one, and one product produced by this country accidentally discovered a secret Taiwanese airbase. Scott Forstall was asked to leave this company after he refused to sign an apology letter about the failings of (\*) software he developed, and Samsung was ordered to pay this company over one billion dollars in a patent lawsuit. Its current chair is Arthur Levinson and its CEO Tim Cook took over after the death of Steve Jobs. For ten points, name this company that produces the iPhone.**

ANSWER: Apple Inc. (prompt on FoxConn if they buzz in the first sentence)

<DA>

**4. The "Four Horsemen" and "Three Musketeers" were opposing groups in this body, which David Davis left his position in to avoid being part of the 1877 Electoral Commission. It began incorporation in 1925, thanks to the anarchist Benjamin Gitlow. *Federalist No. 78* defends the only part of the (\*) Constitution that mentions this body. To allow the New Deal to proceed unimpeded, FDR tried to nearly double the size of it in a namesake "packing" plan. For ten points, identify this 9-member body which gained the power of judicial review under Chief Justice John Marshall.**

ANSWER: Supreme Court of the United States (accept SCOTUS; prompt on "judiciary")

<MS>

**5. The terminal velocity of an object acted upon by a drag force is proportional to the square root of its mass times this quantity, and a launched object has escape velocity equal to the square root of  $2r$  times this quantity. The maximum height a launched projectile reaches is inversely proportional to this quantity, and the projectile's vertical velocity equals initial velocity minus this quantity times time. This quantity is equal to (\*) big-G times M over R-squared, and a certain type of potential energy has magnitude mass times height times this quantity. For ten points, identify this quantity which on Earth is about 9.8 meters per second-squared, often symbolized little-g.**

ANSWER: acceleration due to gravity (accept any answer with both the underlined words or word forms; prompt any answer with one of them, accept little-g or lowercase-g before mention, prompt on just "G")

<MS>

**6. This anthropologist studied African race relations in his *The Dynamics of Culture Change* and discussed the dichotomy between the Sacred and the Profane in his *Magic, Science, and Religion*. He wrote the introduction to his student's *Facing Mount Kenya*, and this thinker refuted the Oedipus Complex in his (\*) *Sex and Repression in Savage Society*. His most famous work studies the Kula Ring system of the Trobriand Islanders, whom he also analyzed in *Coral Gardens and their Magic*. For ten points, name this Polish anthropologist who wrote *Argonauts of the Western Pacific*.**

Answer: Bronisław Kasper Malinowski

<DA>

7. These substances are broken apart when ferric chloride turns into ferric hydroxide in the presence of water. One type of these substances can be produced by Bredig's Arc Method, and, when they contain water, peptization can be performed. Adding surfactants stabilizes one type of these substances, which generally scatter light in the (\*) Tyndall Effect. Particles from these substances aggregate in flocculation, and specific types of them include gels and emulsions. For ten points, identify these substances like blood and milk, in which small particles are dispersed, but not dissolved, in a continuous phase.

ANSWER: colloids

<MS>

8. The Pishon and Gihon rivers rise in this region, and one figure born here can possess women through mirrors. After the coming of the Messiah, wicked souls will pass through Gehenna before eventually arriving here, and the entrance to it is guarded by a flaming sword. According to Joseph Smith, this location is in Jackson County, Missouri. Two figures who lived here wore (\*) fig leaves to cover their nakedness and were forced to leave after eating from the Tree of Knowledge. For ten points, identify this biblical garden which Adam and Eve were cast out of.

ANSWER: Garden of Eden (or Gan Edhen)

<MS>

9. This author wrote a work in which the speaker has "passed by the watchman on his beat / and dropped my eyes", while another of his poems mentions that Mary "sat musing on the lamp-flame at the table" before telling Warren "Silas is back." This author of "Acquainted with the Night" and (\*) "Death of the Hired Man" wrote another poem in which the narrator "look[ed] down one [path] as far as [he] could/ To where it bent in the undergrowth." That poem claims that the speaker's decision "made all the difference" after "two roads diverged in a yellow wood". For ten points, name this American poet of "The Road Not Taken."

ANSWER: Robert Frost

<MP>

10. The First Carnatic War was the Indian theater of this conflict, and one leader in it claimed his army "always attacks" after winning the Battle of Mollwitz. George II led British troops at the Battle of Dettingen in this war, the last time a British monarch would ever do so. The 1745 capture of Louisbourg occurred in the North American theatre of this war, which was called (\*) King George's War. It began after the Pragmatic Sanction of 1713 was violated by Frederick II's invasion of Silesia. The treaty of Aix-la-Chapelle ended, for ten points, what war fought after Maria Theresa's ascension to the Habsburg throne?

ANSWER: War of the Austrian Succession

<KT>

## HALFTIME

11. Doug McIlroy described a way to find the worst inputs for this algorithm in "A Killer Adversary for" it. Switching from it to an in-place algorithm at a sufficiently deep level of recursion results in a logarithmic worst case runtime in an algorithm developed by David Musser. The complexity of this algorithm increases as its workload decreases, which is why running it on an ordered list has complexity  $O(n^2)$  ["big oh of en squared"] even though its average runtime is  $O(n \log n)$  ["big oh of en log en"]. First developed by (\*) C. A. R. Hoare, its second step partitions elements of a list which are greater and smaller than a pivot. For ten points, name this algorithm, the fastest sorting algorithm known.

ANSWER: quicksort (prompt on sorting algorithm)

<HX>

12. In one novel, Ethan and Cutbelly's victory at this game stops Coyote from destroying Michael Chabon's *Summerland*. HUAC investigates the Port Ruppert Mundys who play this sport in Philip Roth's *The Great American Novel*, and *The Chosen* opens with a game of it. Jay Gatsby's friend Meyer Wolfsheim fixes some of these games, and another player of this sport goes back to the pros with the assistance of "Wonderboy" after being shot by Harriet Bird. Besides (\*) Roy Hobbs in *The Natural*, other players of this sport include Flynn and Blake, who tears "the cover off the ball," and their teammate who brings "no joy to Mudville." For ten points, identify this sport, played by the title character of Ernest Thayer's "Casey at the Bat."

ANSWER: baseball

<MS>

**13. One man of this name, who was killed in a hunting accident by Walter Tirel, appointed St. Anselm as Archbishop of Canterbury and was nicknamed after his red face. Another man of this name was assassinated by Balthasar Gerard and had previously instigated the Eighty Years' War against Spain. An English king of this name launched an invasion after the death of Edward the Confessor and had his accomplishments recorded on the (\*) Bayeux tapestry. A member of the House of Orange with this name ousted James II with his wife Mary in the Glorious Revolution. For 10 points, give this name of the king who won at the 1066 Battle of Hastings and was nicknamed "the Conqueror".**

ANSWER: William (accept Willem or Guillaume; accept William Rufus, William the Silent, William III, or William the Conqueror)

<BZ>

**14. In one song by this group, the singer asks the title figure, "Can you hear the drums?" and states that those drums "were closer now". That song, "Fernando," became their best-selling single of all time. This group sang "If you've got no place to go" and "If you change your mind" to do the title action in "Take a Chance on Me." The singer of one song by this group asks her unfaithful lover, (\*) "How can I resist you?" and "Does it show again?" In another song by this group, the singer tells the title figure that "You can dance, you can jive". For ten points name this Swedish group with hits such as "Mama Mia" and "Dancing Queen."**

ANSWER: ABBA

<MiP>

**15. In the *Mahabharata*, one god of this type is the father of the warrior Karna. Ares turned Alectryon into a rooster because he failed to warn Ares of the arrival of another god of it, which, in Hinduism, is represented by the god Surya. In Norse mythology, Mani is the brother of a goddess of this object who is chased by the wolf Skoll. A goddess of this (\*) hid in a cave because her brother threw a flayed horse at her loom; that goddess had a brother named Susano'o and was named Amaterasu. The Greek god of this handed his chariot to his son Phaeton, who ended up scorching the Earth. For 10 points, name this daytime celestial body ruled by Helios.**

ANSWER: Sun god (or solar deity/god; accept answers equivalent in meaning)

<BZ>

**16. In addition to eye infections in AIDS patients, the drug Cidofovir is sometimes used to treat cases of this disease. Currently, this disease is vaccinated against with the *vaccinia* virus. Ordinary, modified, flat, and hemorrhagic are types of the variola major form of this disease, which is generally more severe than its (\*) variola minor form. This disease forms rashes which subsequently develop into fluid-filled pustules that eventually scab over. In 1796, Edward Jenner developed a way to vaccinate people against this disease by using the cowpox virus. For ten points, name this viral skin disease eradicated in the 1970s.**

ANSWER: smallpox (accept variola before mentioned)

<BZ>

**17. Ludger Sylbaris survived one of these events thanks to being imprisoned, and an event of this type in the Philippines coincided with Cyclone Yunya. A 20th century one of these events in Mexico formed Paricutin, and this kind of occurrence at Mazama caused the formation of the Wizard Island-containing (\*) Crater Lake. One of these events in 1815 led to the "Year without a Summer" and took place at Tambora, while the loudest sound in modern history was heard when one occurred at Krakatoa. For ten points, identify these natural disasters, one of which occurred in 1980 at Mount St. Helens.**

ANSWER: volcanic eruptions

<MS>

**18. George Enescu composed two of these pieces titled after his native Romania, and another was composed by Debussy for the Paris Conservatoire's clarinet examinations. 24 variations on a violin caprice are included in one work of this type by Rachmaninoff, and Liszt included the "Rákóczi March" in his fifteenth work of this type based on folk themes from his home country. A notable (\*) clarinet glissando begins another for piano and jazz band. Free-flowing structures and highly variable moods characterize, for ten points, what type of musical work, exemplified by one "on a Theme of Paganini" and Gershwin's one "in Blue"?**

ANSWER: rhapsody

<HX>

**19. One of this author's poems, an "Agony in Eight Fits," sees the Bellman claim "what I tell you three times is true," and the Baker vanish, for the title creature "was a Boojum, you see." In another of his poems, a boy stands in "uffish thought" "by the Tumtum tree" before "galumphing back" with the head of the title creature, slain with a vorpal blade. In the most famous novel by this author of "The (\*) Hunting of the Snark" and "Jabberwocky," the protagonist plays croquet with the Queen of Hearts and meets the Mad Hatter and the always-grinning Cheshire Cat. For ten points, name this author of *Alice's Adventures in Wonderland*.**

ANSWER: Lewis Carroll (or Charles Lutwidge Dodgson)

<MS>

**20. The  $n$ th Catalan number is given by  $2n$  choose  $n$  divided by this function of  $n$ , and the coefficients of this function to the  $k$ th power are found in the  $k$ th row of Pascal's Triangle. To prove an argument via induction, one proves that if the statement is true for a value  $n$ , it is also true for this function of  $n$ . The remainder when a polynomial  $P$  is divided by this function is (\*)  $P(-1)$  [" $P$  of negative one"], and if there are  $n$  holes and at least this many pigeons, two of them will be in the same hole. This function is graphically represented by a slope-1 line through the point  $(0,1)$  "zero comma one". For ten points, name this function, which, when applied to an integer, yields the next higher integer.**

ANSWER:  $n+1$  (" $n$  plus one", accept also stuff like "adding one" or anything that implies the number coming out is one bigger than the one going in, or anything with a different variable than  $n$  like  $x+1$ )

<MS>

## End of regulation, only proceed if tied

**21. This man designed a distorted statue of Saint Mark, meant to be viewed in a raised niche of the Orsanmichele. Vasari called this man's depiction of Mary Magdalene flawless, and the nickname *Zuccone*, meaning "pumpkin," is given to his bald sculpture of the prophet Habakkuk. Another of his sculptures rests on a pedestal with two carvings symbolizing the gates of the underworld, and shows (\*) Erasmo da Narni atop his horse. This artist is most famous for a work which was the first free-standing nude since antiquity, depicting a *contrapposto* man leaning on his sword with a head at his feet. For ten points, name this Florentine sculptor of *Gattamelata* and a bronze *David*.**

ANSWER: Donatello (or Donato di Nicolo di Betto Bardi)

<MS>

**22. Rulers of this empire never held absolute power due to the council of Gbara. One ruler of this empire was assisted by his general Tiramakhan and set his capital at the city of Niani. According to legend, this empire was founded after a battle in which an arrow deprived (\*) Sumanguru of his magic powers. A later ruler of this empire underwent an extremely extravagant hajj to Mecca and ruled as Mansa Musa. For ten points, name this African empire that conquered Ghana and was founded by Sundiata Keita.**

ANSWER: Mali Empire

<MiP>

## **BONUSES**

1. Bonus: It took place near the modern-day town of Kodok. For ten points each:

[10] Identify this 19th century event in southern Sudan, in which British forces held their ground until French forces under Marchand ultimately retreated and relinquished control of the namesake crossroads.

ANSWER: **Fashoda** Incident

[10] This man led the British forces at Fashoda, after earlier having won the Battle of Omdurman. This “Hero of Khartoum” commanded British troops in the Boer wars and lost prestige after the 1915 Shell Shortage.

ANSWER: Horatio Herbert **Kitchener**

[10] British recruiting posters for World War I depicted Kitchener doing this action. A later American poster iconically depicts Uncle Sam doing this with his right hand with a caption reading “I WANT YOU FOR U.S. ARMY.”

ANSWER: **pointing** his finger at you (accept anything similar)

<MS>

2. Bonus: They can come in cinder cone, composite, or shield types. For ten points each:

[10] Identify these typically mountainous objects, through which magma sometimes erupts in the form of lava. One famous example is Mt. Vesuvius.

ANSWER: **volcanoes**

[10] Volcanoes can sometimes form in the middle of tectonic plates, usually over these holes in the earth’s crust that allow upwelling of mantle plumes. They are responsible for the formation of the Hawaiian islands.

ANSWER: **hotspots**

[10] This ropery type of basaltic lava is generally smoother and has a lower viscosity than the similar aa (“ah-ah”) due to its higher temperatures. It can form lava tubes when its surface solidifies on top of still-flowing lava.

ANSWER: **pahoehoe** (“puh-hoi-hoi”)

<MS>

3. Bonus: Members of this kingdom’s royalty included Cassiopeia and Andromeda. For ten points each:

[10] Name this nebulously defined African region where the Olympians would often go and feast. It shares its name with a country whose former ruler, Haile Selassie, is venerated by Rastafarians.

ANSWER: **Aethiopia**

[10] This man’s son was the Aethiopian prince Memnon. Priam bribed this lover of Eos with a golden grapevine, and he turned into a cicada after receiving immortality without eternal youth.

ANSWER: **Tithonus**

[10] This hero saved the Aethiopian princess Andromeda from a sea monster and later married her. He had earlier went on a quest to bring back the head of Medusa and save his mother Danae from a marriage to Polydectes.

ANSWER: **Perseus**

<BZ>

4. Bonus: This character lost his leg while serving under Edward Hawke. For ten points each:

[10] Name this literary character, the captain of the *Hispaniola*, whom Jim Hawkins overhears plotting a mutiny. He owns a parrot named after his former captain Flint.

ANSWER: **Long John Silver** (accept either)

[10] Long John Silver and Jim Hawkins appear in this novel, in which they voyage to the title locale to recover the pirate Flint’s hidden booty.

ANSWER: **Treasure Island**

[10] *Treasure Island* is a work by this British novelist, who also wrote *Kidnapped* and *The Strange Case of Dr. Jekyll and Mr. Hyde*.

ANSWER: Robert Louis **Stevenson**

<MS>

5. Bonus: Answer some questions about a popular PBS series, for ten points each:

[10] This television series centers around the title fictional estate set in Yorkshire, England and focuses on the aristocratic Crawley family and their servants.

Answer: **Downton Abbey**

[10] This third cousin of the Earl becomes the heir presumptive to the estate after the deaths of the other heirs on the RMS Titanic. He later marries Mary.

Answer: **Matthew** Crawley

[10] The Earl's mother, the Dowager Countess, is played by this actress, also notable for her role as McGonagall in the Harry Potter films.

Answer: Dame Maggie **Smith**

<CC>

6. Bonus: Answer some questions about geometric transformations, for ten points each:

[10] This type of rigid transformation adds a vector to each point of an object, shifting it without changing its shape or orientation.

ANSWER: **translation**

[10] This other type of rigid motion flips a shape over a given line.

ANSWER: **reflection**

[10] This sort of transformation, when done with respect to a circle, reflects every point across it and scales proportionally to one over the original distance from the center. The center of the circle is sent to the point at infinity.

ANSWER: circle **inversion**

<YL+MS>

7. Bonus: After this figure's birth, his mother threatens to castrate his father. For ten points each:

[10] Identify this literary character, who drowns a number of Parisians in urine and gives Friar John the money to found the Abbey of Thélème.

ANSWER: **Gargantua**

[10] Gargantua and his son Pantagruel appear in a number of novels by this French author, whose works are filled with lots of innuendo and crass humor.

ANSWER: Francois **Rabelais**

[10] Gargantua and Pantagruel are both these kinds of creatures. A Cornish folk-hero named Jack was known for killing these, though in the original tale there was no magic beanstalk.

ANSWER: **giants** (or **really big men** or equivalents)

<MS>

8. Bonus: This man constructed his capital near the ruins of Avaris. For ten points each:

[10] Identify this 19th Dynasty Egyptian pharaoh who built the temple at Abu Simbel and was buried at Tomb KV5 in the Valley of the Kings. This long-lived pharaoh had a wife named Nefertari.

ANSWER: **Ramesses the Great** (or **Ramesses II**; or **Ozymandias**; prompt on "Ramesses")

[10] Ramesses the Great fought this 1274 BCE chariot battle against the Hittites under Muwatalli II in modern-day Syria, which resulted in the world's first peace treaty.

ANSWER: Battle of **Kadesh**

[10] Two centuries earlier, the king of Kadesh had lost this battle against the 18th dynasty pharaoh Thutmose III in modern-day Israel. It is the first recorded battle in history.

ANSWER: Battle of **Megiddo**

<JD>

9. Bonus: A gavotte of its first act is taken from the third movement of its composer's *Classical Symphony*. For ten points each:

[10] Name this ballet, whose "Dance of the Knights" depicts a certain Montague at the Capulets' ball.

ANSWER: Romeo and Juliet

[10] *Romeo and Juliet* was composed by this Russian composer whose other ballets include *Chout* and *The Prodigal Son*. He also composed *The Love for Three Oranges* and the suite *Peter and the Wolf*.

ANSWER: Sergei Prokofiev

[10] Prokofiev's *Scythian Suite* was compiled from music commissioned by this Russian art patron and founder of the Ballets Russes. He also commissioned de Falla's *The Three-Cornered Hat* and Stravinsky's *The Rite of Spring*.

ANSWER: Sergei Diaghilev

<HX>

10. Bonus: Thin filaments are composed of this material. For ten points each:

[10] Name this protein that forms a cross-bridge with myosin when a myocyte contracts.

ANSWER: actin

[10] Thin and thick filaments formed by actin and myosin slide across one another in order for these tissues to contract. They come in smooth, striated, and cardiac varieties, and are connected to bones by tendons.

ANSWER: muscle tissue (or muscular tissue)

[10] Muscle cells contain this special kind of endoplasmic reticulum that stores and pumps calcium ions. The calcium ions then allow muscle cells to contract by altering the formation of actin-myosin cross-bridges.

ANSWER: sarcoplasmic reticulum (or SR)

<BZ>

11. Bonus: This man's father Tuekakas warned him never to trust the white man. For ten points each:

[10] Identify this leader of the Nez Perce, who was forced to flee from the Wallowa valley. When he finally surrendered, he supposedly gave the "fight no more forever" speech.

ANSWER: Chief Joseph (accept Young Joseph or Hinmatóowyahtqít)

[10] Chief Joseph's surrender was to this man, though it had been Oliver Howard's forces doing most of the chase. He also commanded the forces who captured Geronimo, and later quashed the Pullman strike.

ANSWER: Nelson Miles

[10] Miles intercepted the Nez Perce before they could cross the border and flee to this land, where Sitting Bull was located. This British dominion was a popular destination for escaped slaves.

ANSWER: Canada (prompt on specific parts of Canada, like Saskatchewan)

<MS>

12. Bonus: Answer the following about the laws and the LGBT movement, for ten points each:

[10] This 2003 Supreme Court case overturned *Bowers v. Hardwick*, ruling that the 14th Amendment made unconstitutional a Texas sodomy law.

ANSWER: Lawrence v. *Texas*

[10] A case scheduled to go before the Supreme Court is challenging this law that was signed by Bill Clinton that defines marriage as a legal union between one man and one women.

ANSWER: Defense of Marriage Act (accept DOMA)

[10] Another future Supreme Court case deals with this California Constitutional Amendment that says "only marriage between a man and a woman is valid or recognized in California."

ANSWER: Proposition 8

<DA>



13. Bonus: Paul-Jacques-Aimé Baudry's only historical painting is of this woman. For ten points each:

[10] Identify this woman, who, in an Edvard Munch painting, stands naked facing the viewer as blood pools on the bed beside her. Another painting does not show her, but does show the letter she used to gain access to a certain journalist.

ANSWER: Charlotte Corday

[10] This Neoclassical artist, who painted the latter work, also painted *The Oath of the Horatii*, *The Death of Socrates*, and *The Victors Bring to Brutus the Bodies of His Sons*, as well as many portraits of Napoleon.

ANSWER: Jacques-Louis David

[10] The aforementioned painting depicts the death of this French revolutionary leader, murdered by Corday while taking a bath.

ANSWER: Jean-Paul Marat

<MS>

14. Bonus: One of this author's characters takes the name Richard Hunter after being given a suit. For ten points each:

[10] Identify this American author of several rags-to-riches stories, like *Ragged Dick* and *Mark the Match Boy*.

ANSWER: Horatio Alger

[10] This author satirized Alger's novels in his tale of "the dismantling of Lemuel Pitkin," *A Cool Million*. He also wrote *Miss Lonelyhearts* and *The Day of the Locust*.

ANSWER: Nathanael West

[10] In his poem "Rondeau," West compares these body parts of his lady to "brimming pools of ecstasy." Shakespeare says that these of his mistress "are nothing like the sun" in a famous sonnet.

ANSWER: eyes

<MS>

15. Bonus: This quantity for different axes can be found by the Huygens-Steiner, or parallel-axis theorem. For ten points each:

[10] Identify this rotational analogue of mass, an object's resistance to rotational acceleration.

ANSWER: moment of inertia (or rotational inertia)

[10] The kinetic energy of a rotating body is equal to one-half the moment inertia times this quantity squared. This quantity, typically symbolized omega, is equal to a point's velocity divided by its distance from the axis of rotation.

ANSWER: angular velocity (do not accept or prompt on "linear velocity")

[10] If a point mass has mass  $M$  and is a distance  $R$  from an axis, what is its moment of inertia about that axis?

ANSWER:  $MR^2$  (M times R-squared, accept mass times radius-squared)

<MS>

16. Bonus: This figure was given the title "Supreme Mysterious and Primordial Leader." For ten points each:

[10] Identify this sixth century BC figure, whom Tang emperors claimed descent from. This founder of a certain religion is believed to be one of the Three Pure Ones, and he supposedly lived in his mother's womb for 70 years.

ANSWER: Laozi or Lao-Tsu

[10] Laozi was the founder of this Asian religion, the symbol of which is the black and white circle of yin and yang, and whose text is the *Tao Te Ching*.

ANSWER: Taoism (or Daoism)

[10] Central to Taoism is this principle of acceptance, usually translated as "non-doing," which encourages people to be yielding like water.

ANSWER: wu wei

<MS>

17. Bonus: Answer the following about poems about poetry, for ten points each:

[10] This author's *Ars Poetica* states that poems "should not mean, but be." The speaker of his "You, Andrew Marvell" feels "how swift how secretly / The shadow of the night comes on."

ANSWER: Archibald MacLeish

[10] This man described one who "for three years" "strove to resuscitate the dead art / of Poetry" in his "Hugh Selwyn Mauberley." He wrote much of his *Cantos* while imprisoned in Italy.

ANSWER: Ezra Pound

[10] This author wrote that "It is difficult / to get the news from poems" in "Asphodel, That Greeny Flower." He wrote "I have eaten / the plums / that were in / the icebox" in "This is Just to Say" and penned the long *Paterson*.

ANSWER: William Carlos Williams

<MS>

18. Bonus: It can be calculated using a Wilhelmy plate by measuring the force exerted on the plate. For ten points each:

[10] Identify this property, symbolized gamma, that is reduced by emulsifiers. The Clausius-Clapeyron equation includes this component for small droplets, and it may also be defined as work done on an area.

ANSWER: surface tension

[10] Surface tension is caused by this property in which similar molecules stick together, contrasted with adhesion.

ANSWER: cohesion (accept word forms)

[10] In fluid dynamics, the Young-Laplace equation describes the change in this type of pressure as surface tension times the sum of the reciprocals of the radii of curvature.

ANSWER: capillary pressure

<EnC>

19. Bonus: It emphasized universal brotherhood and taught that a person of "moral and intellectual perfection" is free from destructive emotions. For ten points each:

[10] Name this Hellenistic school of philosophy which advocated for self-control to think clearly. Its members included Marcus Aurelius, Cicero, and Seneca the Younger.

ANSWER: Stoicism (accept word forms)

[10] This founder of Stoicism rejected the cynicism of his teacher, Crates of Thebes. He declined Athenian citizenship in order to remain faithful to his native Citium.

ANSWER: Zeno of Citium

[10] Stoicism was opposed by this other Hellenistic school, which considered pleasure the highest and only good. Its members included Hermarchus and the Roman poet Lucretius.

ANSWER: Epicureanism (accept word forms)

<HX>

20. Bonus: As ruler, he was effectively controlled by his father Filaret. For ten points each:

[10] Name this Tsar whose 1613 ascension to the Russian throne ended the Time of Troubles and began the Romanov dynasty.

ANSWER: Mikhail I Fyodorovich (or Michael Romanov)

[10] One cause of the Time of Troubles in Russian history was the fact that this cruel and ruthless Tsar struck and killed his son and heir, which meant his mentally disabled son, Feodor, would take the throne instead.

ANSWER: Ivan the Terrible (or Ivan IV Vasilyevich; accept Ivan Grozny or Ivan the Fearsome or Ivan the

[10] This man was part of a regency council under Feodor I, and assumed the title of Tsar after Feodor's death. The Time of Troubles began as soon as this man died of an illness without leaving any heirs.

ANSWER: Boris Godunov (prompt on "Godunov")

<BZ>

21. Bonus: Loch Lomond lies 20 miles northwest of its largest city. For ten points each:

[10] Name this country which contains the Firth of Forth and the Firth of Clyde as well as cities such as Aberdeen, Glasgow, and its capital Edinburgh, which lies north of England.

ANSWER: **Scotland** (or **Alba**)

[10] Scotland controls the Shetland Islands, the Orkney Islands, and this archipelago lying off the western coast of Scotland which contains the Isle of Lewis and the Isle of Skye.

ANSWER: the **Hebrides** (or **Innse Gall**)

[10] This highest point in Scotland, located in the Grampians, is also the highest point in the United Kingdom.

ANSWER: **Ben Nevis** (or **Beinn Nibheis**)

<JD>

22. Bonus: Answer the following about Europeans who helped in the American Revolution, for ten points each:

[10] This Pole was promoted to Head Engineer of the Continental Army and helped fortify the American forces at Saratoga. He also led an uprising against Imperial Russia to protest the partitions of Poland.

ANSWER: Andrzej Tadeusz Bonawentura **Kościuszko**

[10] This Prussian commander helped train the Continental Army during the winter at Valley Forge, and wrote the *Revolutionary War Drill Manual*.

ANSWER: Baron Friedrich Wilhelm August Heinrich Ferdinand von **Steuben**

[10] Many people from this country, such as the Comte de Rochambeau and Marquis de Lafayette, were instrumental to the victory at Yorktown. However, it deepened its financial trouble after aiding the American war effort.

ANSWER: Kingdom of **France**

<MiP>