

**LADUE INVITATIONAL
SPRING TOURNAMENT 2011**

Round 5

TOSS-UPS

1. One of this man's works, based on a fairy tale of the same title by Basile, sees a magician play cards with a witch who curses a prince with the title obsession, and in another, Andrei is encouraged to ask Natasha to dance. He composed his first opera at age 9, *The Giant*, and in another work, this composer of *The (*)Love of Three Oranges* associates the two title characters with the strings and the French horns, respectively. For ten points, name this composer of *War and Peace*, *The Gambler*, and *Cinderella*, who tells the story of a young boy living with his grandfather in *Peter and the Wolf*.

ANSWER: Sergei Sergeyevich **Prokofiev**

<HX>

2. One cause of this event was the signing of the General Service Enlistment Act, which raised fears that sons would not be able to follow their fathers into an army with a tradition of family service. Another cause of this event involved controversy over the new design of the Enfield Rifle, which required soldiers to bite open cartridges greased with (*) lard or tallow, violating religious prohibitions on meat-eating. Beginning in Meerut and spreading as far as Calcutta, for ten points, name this 19th century rebellion of the namesake soldiers against the British in northern India, sometimes called India's First War of Independence.

ANSWER: **Indian Rebellion of 1857** (accept **Sepoy Mutiny**, **Sepoy Rebellion**, **Great Rebellion**, **Indian Mutiny**, **Uprising of 1857**, **Revolt of 1857**; accept **India's First War of Independence** before mention)

<HX>

3. This character, created by Masahiro Sakurai, was originally named Popopo and loves to eat Maxim Tomatoes. In the Super Smash Bros. series, he is described as an "extremely skilled technician" and has a Final Smash ability as a cook. In another game, this character splits into four different colors and travels through (*) Dream Land to combat Dark Meta Knight. That game, *the Amazing Mirror*, was also the only game that didn't feature his usual nemesis King Dedede. For ten points, name this pink, round creature capable of floating and absorbing other people's powers by forcefully inhaling them into his expandable mouth.

Answer: **Kirby**

<EnzeC>

4. SQUIDS take advantage of this property to detect very weak magnetic fields, and an incorrect EE Times article claimed that Silane had this property at room temperature, though YBCO was the first material found to exhibit this property above the boiling point of (*) nitrogen. When a compound exhibits this property, it will expel any internal magnetic field, which is called the Meissner Effect. For ten points, name this phenomenon, where at low enough temperatures, a substance's resistance drops to zero.

ANSWER: Superconductivity (accept word forms like Superconductor)

<MS>

5. This man wrote a work in which the Swedish women Birgetta and Elisabeth are both interested in David. This author of *The Professor of Desire* also wrote of Silk's oppression and affair with Faunia Farley, the school janitor, as well as a novel about Richard Kilman. In addition to *Exit Ghost*, this man wrote a novel in which FDR loses the presidential election to Charles Lindbergh. Nathan Zuckerman is the narrator of his(*) *The Human Stain*, and he also wrote a work in which a man discusses his Jewish mother. *The Plot Against America* was written by, for ten points, which Jewish-American author of *Goodbye, Columbus* and *Portnoy's Complaint*?

ANSWER: Philip Milton Roth

<KT>

6. This operation was extended by Lebesgue, and Fubini's Theorem states that the order in which it is performed may be reversed. One type of this operation can be performed with the LIATE rule, which advises that logarithmic functions should be *u* while exponential functions should be (*) *dv*. This operation can be estimated using Simpson's rule, which is constructed from the midpoint rule and the trapezoidal rule, and performing this operation on the term x results in $x^2/2 + C$. For ten points, name this mathematical operation used to find the area under a curve, the opposite of a derivative.

ANSWER: Integration (accept word forms like integral or integrating, prompt on antiderivative and word forms)

<HX>

7. One commission investigating this event concluded that the President should listen to his National Security Advisor more and was composed of Brent Snowcroft, Edmund Muskie, and John Tower. One part of this event aimed to free hostages in Lebanon, and the other half hoped to topple the (*) FSLN. This event was a violation of the Boland Amendment, and the scope of the entire operation was changed by Oliver North. For ten points, what was this Reagan Administration scandal, where funds from selling arms to a certain Middle East country were sent to aid Nicaraguan rebels?

ANSWER: Iran-Contra Affair

<MS>

8. Though its not the tongue, this organ has receptors which allow it to “taste” sodium glutamate and its volume increases when the rugae are stretched. Parietal cells in this entity release an intrinsic factor necessary for the absorption of vitamin B12, and this entity converts boluses into chyme, which then passes through the pyloric sphincter into the (*) duodenum. Because pepsinogen, an enzyme found in this organ, is activated by an acidic environment, signals from the vagus nerve trigger the release of HCl from the lining of this organ when food is ingested. For ten points, name this organ that lies between the esophagus and the small intestine in the digestive system.

ANSWER: **Stomach**

<HX>

9. One of this author’s works sees the title character bring his son Felix to the “Pedagogical Province”. In addition to writing about *Wilhelm Meister’s Journeyman Years*, this man wrote a play which contains a scene where the title character is accompanied home from Easter celebrations by a poodle. That play also sees a poorly administered sleeping potion kill the mother of (*) Gretchen, the title character’s love. In this man’s most famous novel, the protagonist falls in love with a girl from Wahlheim, despite her engagement to Albert, and commits suicide when he realizes he can’t have Lotte. For ten points, name this German author of *Faust* and *The Sorrows of Young Werther*.

ANSWER: Johann Wolfgang von **Goethe**

<MS>

10. This philosopher was heavily influenced by the ideas of Dostoyevsky, crediting him as “the only psychologist from whom I have anything to learn,” and he claimed that “what does not kill me, makes me stronger” in *Twilight of the Idols*. One of this man’s most fundamental ideas was the (*) “will to power,” and another, the Übermensch, was perverted by the Nazi regime. For ten points, name the German philosopher who wrote *Thus Spoke Zarathustra* and famously proclaimed “God is dead” in *The Gay Science*.

ANSWER: Friedrich **Nietzsche**

<HX>

HALFTIME

11. One work by this man depicts the title bird lying on a table with a white tablecloth, while another shows a woman holding a green umbrella, looking down at the viewer. This painter of *Pheasant* and *La Promenade* is better known for depicting (*) boats in the harbor at Le Havre in a painting that lent its name to an artistic movement. For ten points, name this French painter of a series of Haystacks and *Impression, Sunrise* who is most famous for his *Water Lilies*.

ANSWER: Oscar Claude **Monet**

<HX>

12. One kind of these includes the Raven's Progressive Matrices, which asks the subject to fill in the missing element in the series based on patterns of coloration, and recent results from these entities reflect the Flynn effect, a progressive increase of average scores from these entities.

William Stern proposed a way to score these entities by multiplying the (*) quotient of the "mental age" and "chronological age" of the test-taker by 100, a system that provided a basis for the Stanford-Binet type of this entity. Smarter people supposedly get better scores on, for ten points, what standardized tests whose scores are called intelligence quotients?

ANSWER: **IQ** tests (accept **Intelligence** test before mentioned)

<HX>

13. This work opens with a chance meeting outside a mosque in Chandrapore, and near the end of this novel, the protagonist finds that Stella was the woman married by his English friend, not the main antagonist, who is rescued from her predicament by Mrs. Derek. (*) Ronny Heaslop's mother dies of heatstroke on her way back to England, so Mrs. Moore cannot give her opinion of the altercation in the Marabar caves, and Cyril Fielding is unsure of what actually happened. For ten points, name this novel in which Adela Quested accuses Dr. Aziz of a crime he did not commit, a work by E.M. Forster.

ANSWER: **A Passage to India**

<MS>

14. This man emerged victorious from a combat with a lion that he was forced into by Galerius, and he captured Ascaric and Merogaisus when the Franks invaded Gaul following his promotion to emperor. This ruler also reversed the persecutions of his predecessor by signing a letter with Licinius that proclaimed (*) religious toleration; that letter is the Edict of Milan, which was issued soon after the conclusion of the Diocletianic Persecution. Famously seeing a cross before the Battle of Milvian Bridge, this is, for ten points, which Roman Emperor, who ruled from 306 to 337 and converted his country to Christianity?

ANSWER: **Constantine the Great** (also accept **Constantine I**, **Saint Constantine**, **Flavius Valerius Aurelius Constantinus**; prompt on **Constantine**)

<HX>

15. The Clemmensen reduction is a reaction used to reduce acyl- types to alkyl- types of this compound, and hydrogenation of this compound can yield cyclohexane. This compound was first isolated in 1825 by Michael Faraday, who called it bicarburet of hydrogen, but its (*) structure was not discovered until 1865, when Friedrich August Kekulé dreamed of a snake biting its own tail. Phenols contain a hydroxyl group bound to one of, for ten points, what organic compound with chemical formula C₆H₆, the simplest aromatic hydrocarbon?

ANSWER: **Benzene**

<HX>

16. This state's Mermentau River flows between Calcasieu (KAL-ka-shew) River and Vermilion Bay, and the Amite River flows into Lake Maurepas, which lies next to the second-largest inland body of saltwater in the US. The Pearl River lies on part of this state's eastern boundary, while the (*) Sabine River lies on its western boundary, and its highest point, Driskill Mountain, lies in the north. After flowing past Shreveport, the Red River flows into the Atchafalaya River, which empties into the Gulf of Mexico. Lake Pontchartrain lies in, for ten points, what state with capital at Baton Rouge?

ANSWER: Louisiana

<JD>

17. The AVL type of this structure requires operations to be preceded and followed by rotations, which change the structure of these entities without changing the order of their elements, while the red-black type of these structures are self-balancing, and can search, insert, and delete in $O(\log n)$ time. A (*) binary type of this data structure requires that each node have at most two child nodes, with a root node that has no parents, and leaf nodes that have no children. For ten points, name this widely used data structure that uses linked nodes to emulate the hierarchical structure of its namesake plant.

ANSWER: Tree

<HX>

18. This poet always used green ink, and he wrote of a "Furious Struggle Between Seamen and an Octopus of Colossal Size." He wrote poems dedicated to conger chowder, large tuna, and an artichoke in his (*) *Elementary Odes*, and Gabriel Garcia Marquez called him the "greatest poet of the 20th century." The 1971 Nobel Prize was won by, for ten points, which Chilean poet and author of *Twenty Love Poems and a Song of Despair*, who included "The Heights of Macchu Picchu" in his *Canto General*?

ANSWER: Pablo Neruda

<MS>

19. Vanuatu was granted independence from this country in 1980, and Chantal Sébire fought for the right to have euthanasia in this country. In 2009, many cars were set on fire in this country, but that paled in comparison to the state of emergency declared after (*) 2005 riots by poor youth. The current President of this country served under Mitterand and Chirac, and recently got married to the former singer and model Carla Bruni. For ten points, name this country, in which Nicholas Sarkozy is the President in Paris.

ANSWER: France or the French Republic

<MS>

20. This man was inspired by Nikolai Chernychevsky's novel of the same name, and argued for a socialist political party in his pamphlet *What Is to Be Done?*. This man allowed some private ventures to exist, mostly in agriculture, but taxed them heavily, as outlined in his (*) New Economic Policy. An online poll is asking civilians to vote whether or not to bury his body, which is presently displayed in Red Square. In 1917, he returned home in a sealed train car, after which he led the October Revolution. For ten points, who was this victor in the Russian Revolution, the first head of the USSR?

ANSWER: Vladimir Ilyich Lenin

<MS>

BONUSES

1. Bonus: The gifts wind up useless, but that's OK! For ten points each:

[10] Name this short story, in which James sells his watch to buy combs for Della, who sells her hair to buy a chain for his watch.

ANSWER: "**The Gift of the Magi**"

[10] This author included "A Retrieved Reformation" and "The Gift of the Magi" in his short story collection *The Four Million*.

ANSWER: **O. Henry** (accept: William Sydney **Porter**)

[10] In this other O. Henry work, Bill Driscoll and Sam Howard kidnap the very annoying son of Ebenzer Dorset.

ANSWER: "**The Ransom of Red Chief**"

<KT>

2. Bonus: He became a vampire in 1918 and has an odd craving for mountain lions. For ten points each:

[10] Name this vampire from the *Twilight* series, who is the lover of Bella.

Answer: **Edward** Cullen (prompt on "Cullen")

[10] In this book of the *Twilight* saga, Edward falsely believes Bella is dead and goes to Italy to find the Volturi so they can kill him.

Answer: **New Moon**

[10] In *New Moon*, this brother of Edward attempts to kill Bella after she gets a paper cut, causing the whole Cullen family to move away from Forks.

Answer: **Jasper** Hale

<EnzeC>

3. Bonus: These atoms are formed by the loss or gain of electrons from its valence electron. For ten points each:

[10] Name these charged atoms in which the total number of electrons is not equal to the total number of protons.

ANSWER: **Ions**

[10] This theory, sometimes called Gillespie-Nyholm Theory, enables the prediction of the shapes of ionic molecules. It utilizes the fact that particles with the same charge repel.

ANSWER: **V**alence **S**hell **E**lectron **P**air **R**epulsion (or **VSEPR**, pronounced "vesper")

[10] These diagrams, named after their formulator, represent the bonding between atoms of a molecule with lines and lone pairs of electrons with dots.

ANSWER: **Lewis** Dot Diagrams

<HX>

4. Bonus: It most likely was not nailed to a door. For ten points each:

[10] Name this document criticizing the Catholic Church's sale of indulgences, which first appeared at the Castle Church in Wittenburg.

ANSWER: *The **95 Theses** on the Power and Efficacy of Indulgences*

[10] This German priest wrote the *95 Theses*, starting the Protestant Reformation.

ANSWER: Martin **Luther**

[10] The actions of this man was the primary catalyst for Luther's publication. He annoyed Luther by claiming that "As soon as a coin in the coffer rings/the soul from purgatory springs."

ANSWER: Johann **Tetzel**

<KT>

5. Bonus: This deity was born from the left eye of Izanagi. For ten points each:

[10] Name this Japanese sun goddess whose brother, Susanoo, threw a half-flayed pony into her weaving hall, causing her to flee to a cave called Iwayado.

ANSWER: **Amaterasu** Omikami

[10] Amaterasu is an example of these natural forces. Other ones include Hachiman, the god of war, and Tsukuyomi, the moon god.

ANSWER: **Kami**

[10] Amaterasu and the other Kami are integral to the mythology of this indigenous religion of Japan.

ANSWER: **Shinto**

<HX>

6. Bonus: The frame story involves Scheherazade wanting to live just a bit longer. For ten points each:

[10] Name this collection of tales, which includes the stories of Aladdin and Ali Baba.

ANSWER: ***One Thousand and One Nights** or **Arabian Nights***

[10] This king normally executes one of his wives each day, but is so enraptured by Scheherazade's tales that he lets her live to hear the endings.

ANSWER: **Shahryar**

[10] One of the most famous stories in the *Arabian Nights* deals with this man, who has many adventures on his seven voyages across the sea, culminating in one which involves him being carried to heaven by the bird-people.

ANSWER: **Sinbad** the Sailor (don't accept Sinbad the Porter)

<MS>

7. Bonus: The Farmers' Alliance met in Omaha, Nebraska in July of 1892 to form this party. For ten points each:

[10] Name this political party that appealed to poor farmers, and was generally hostile towards railroads, banks, and elites.

ANSWER: **Populist** Party (also accept **People's Party**)

[10] In 1896, this man ran in the presidential election against McKinley and lost. He tried two more times, and then served as the Secretary of State for Woodrow Wilson.

ANSWER: William Jennings **Bryan**

[10] In his first presidential bid, Bryan resisted the gold standard and promoted this instead.

ANSWER: **Free** coinage of **silver** (accept obvious word forms; prompt on "silver")

<JD>

8. Bonus: This concept was introduced by John von Neumann and Oskar Morgenstern in *The Theory of Games and Economic Behavior*. For 10 points each:

[10] Name this concept in game theory which describes a state in which each player is making the best decisions based on the others' strategies.

ANSWER: **Nash equilibrium**

[10] Nash equilibrium was used by Antoine Augustin Cournot in his theory of this market form, in which a market is dominated by a small number of sellers.

ANSWER: **Oligopoly** (prompt on **Duopoly**)

[10] This other market form is characterized by a lack of economic competition, and occurs when one individual or enterprise has complete control over a market.

ANSWER: **Monopoly**

<HX>

9. Bonus: It concludes with "Gaudeamus igitur." For ten points each:

[10] Name this composition, a medley of student drinking songs, which was composed for the University of Breslau, from which its composer had received an honorary doctorate.

ANSWER: **Academic Festival Overture** Op. 80

[10] This German composer of *A German Requiem* and *Academic Festival Overture* is slightly more famous for a namesake lullaby composed to celebrate the birth of Bertha Faber's son.

ANSWER: Johannes **Brahms**

[10] This sad counterpart to the *Academic Overture* is a free-standing symphonic piece in which Brahms quotes material from the last movement of his second symphony. Although it possesses a turbulent and tormented character, it does not follow a dramatic storyline.

ANSWER: **Tragic Overture** Op. 81

<HX>

10. Bonus: The double helix structure of this entity can be seen in a famous x-ray diffraction image taken by Rosalind Franklin, called Photo 51. For ten points each:

[10] Name these long polymers of nucleotides that carry genetic information, like their single-stranded counterparts, RNA.

ANSWER: DeoxyriboNucleicAcid

[10] DNA contains these units which have no particular use, sometimes called “junk DNA”.

ANSWER: Noncoding DNA (also accept introns)

[10] These segments of DNA are able to move themselves to new locations and can either copy a region and implement it somewhere or entirely cut a region and place it in the DNA.

ANSWER: Transposons (accept jumping genes)

<KT>

11. Bonus: Name some things about mountains in the Americas, for ten points each:

[10] This Alaskan mountain is the highest peak in North America and has an actual rise greater than that of Mount Everest.

ANSWER: Mt. McKinley or Denali

[10] The tallest mountain in this North American mountain range is Mt. Elbert. It lies east of the Sierra Nevada, and this range stretches from northwestern Canada to New Mexico.

ANSWER: Rocky Mountains or Rockies

[10] This Andean mountain is the tallest in the Americas. It is located in the Argentinian province of Mendoza, and has a peak at 22,841 feet.

ANSWER: Mt. Aconcagua

<CC>

12. Bonus: This man’s essay “Circles” states “The eye is the first circle; the horizon which it forms the second; and throughout nature this primary figure is repeated without end.” For ten points each:

[10] Name this American philosopher and author of *Experience*, *Self-Reliance*, and *The Over-soul* who famously gave a speech titled “The American Scholar”.

ANSWER: Ralph Waldo Emerson

[10] In this groundbreaking essay, Emerson defines the title concept as a paradise, not ruled by a superior being. It established the view of the undeveloped environment of the Americas as a clean slate, and inspired Thoreau’s *Walden*.

ANSWER: Nature

[10] *Nature* provided the foundation of this philosophical movement, a core belief of which was an ideal spirituality that is only realized through intuition.

ANSWER: Transcendentalism (accept word forms)

<HX>

13. Bonus: It really states the the time derivative of momentum is force. For ten points each:

[10] Name this law, which states that force equal mass times acceleration.

ANSWER: **Newton's Second** Law

[10] As the speed of an object approaches the speed of light, Newtonian physics doesn't hold. Instead, we have to look at this concept realized by Einstein.

ANSWER: **Special Relativity** (prompt on relativity, do not accept general relativity)

[10] Going from Newtonian to relativistic reference frames requires a transformation named for this man. His namesake factor is equal to 1 over the square root of 1 minus v squared over c squared.

ANSWER: Hendrik Antoon **Lorentz**

<MS>

14. Bonus: Pedro Crespo helps return the title character home after he gets beaten up. For ten points each:

[10] Name this novel in which the protagonist battles with windmills while atop his noble steed, Rocinante, alongside his squire Sancho Panza.

ANSWER: **Don Quixote** (accept *El ingenioso hidalgo don Quijote de la Mancha* or *The Ingenious Gentleman Don Quixote of La Mancha*)

[10] This author of *Don Quixote* also wrote novels such as *Los Trabajos de Persiles y Sigismunda* and *La Galatea*.

ANSWER: Miguel de **Cervantes** Saavedra

[10] This beautiful woman, in reality the peasant Aldonza Lorenzo, never appears in the novel, but is nonetheless the love interest of Don Quixote.

ANSWER: **Dulcinea** del Tobosco

<KT>

15. Bonus: It was home to Plato's Akademia and Aristotle's Lyceum. For ten points each:

[10] Name this notable polis in Ancient Greece, the birthplace of Socrates, Pericles, and Sophocles. It is also considered the birthplace of democracy.

ANSWER: **Athens**

[10] Athens led this league in the Peloponnesian War against Sparta, whose original purpose was to continue fighting the Persian Empire. Its name derives from an island in the Mediterranean, the official meeting place of the league until Pericles moved it to Athens.

ANSWER: **Delian** League

[10] The Peloponnesian War was temporarily halted after the deaths of war hawks Cleon and Brasidas led to the signing of this cease-fire.

ANSWER: Peace of **Nicias**

<HX>

16. Bonus: They were first described by Aristotle as “stars with hair,” leading to their astronomical symbol of a disk with three hairlike extensions. For ten points each:

[10] Name these small, icy bodies that orbit the Sun, and display a visible coma and sometimes a tail. Famous ones include ones named for Biela and Halley.

ANSWER: Comets

[10] Short-period comets are thought to originate in this region of the solar system that lies beyond the orbit of Neptune and is home to Pluto.

ANSWER: Edgeworth-Kuiper belt

[10] It is hypothesized that longer-period comets originate in this spherical region, postulated by Ernst Öpik. The outer extent of this region defines the gravitational boundaries of the Solar System.

ANSWER: Oort cloud

<HX>

17. Bonus: Two people in white extend their arms downwards, a black man holds a piece of rope, and another man points his spear down. For ten points each:

[10] Name this painting in which some people on a boat in Havana harbor attempt to save the title character from the title sea creature.

ANSWER: Watson and the Shark [10]

This Irish-American artist from Boston painted *Watson and the Shark*, as well as portraits of Sam Adams and Paul Revere.

ANSWER: John Singleton Copley [10] This other Copley work depicts a young Henry Pelham holding a golden chain, which is looped around the title animal's neck.

ANSWER: A Boy with a Squirrel

<JD>

18. Bonus: His story was based off the real life tale of Alexander Selkirk. For ten points each:

[10] Name this character, who owns a plantation in Brazil, befriends Friday, and kills some bloodthirsty cannibals after being stranded on an island off the South American coast.

ANSWER: Robinson Crusoe (accept either)

[10] *Robinson Crusoe* is a work by this man, who fictionalized the events of a London epidemic in *A Journal of the Plague Year*.

ANSWER: Daniel Defoe

[10] This other Defoe work details the exploits of the title con woman, who accidentally marries her half-brother and is eventually sent to Newgate Prison, much like Defoe himself.

ANSWER: Moll Flanders

<MS>

19. Bonus: It gained independence in 1957, the first sub-Saharan African nation to do so. For ten points each:

[10] Name this country in West Africa. It is bordered by Côte d'Ivoire to the west and Togo to the east, and has capital at Accra.

ANSWER: **Ghana**

[10] Ghana was formerly known by this name when it was a British colony.

ANSWER: **Gold Coast**

[10] Much of the Gold Coast was controlled by this major ethnic group before the British government seized land there.

ANSWER: **Ashanti** or **Asante**

<HX>

20. Bonus: Identify some facts from recent political scandals, for ten points each:

[10] During Obama's 2009 speech to a joint session of Congress regarding health care, Representative Joe Wilson shouted out this two-word phrase.

ANSWER: **You Lie!**

[10] This former chair of the House Ways and Means Committee was recently censured for unethical behavior.

ANSWER: Charles Bernard "Charlie" **Rangel**

[10] This Texas Representative and former Republican House Majority Leader was convicted of laundering corporate money for political purposes in 2010. He had previously resigned in 2006.

ANSWER: Tom **DeLay**

<MS>