

**LADUE INVITATIONAL
SPRING TOURNAMENT 2011**

Round 3

TOSS-UPS

1. This era began after the passage of legislation which was later amended by the Cullen-Harrison Act, the Volstead Act, and it saw a rise in the popularity of Bevo and speakeasies. Chicago's St. Valentine's Day Massacre occurred during this era, part of its resulting increase in (*) organized crime. Ended by the 21st Amendment, for ten points, name this period of American history ushered in by the 18th Amendment, during which the manufacture, transport, and sale of alcohol was banned.

ANSWER: Prohibition

<MS>

2. In one of his paintings, this artist depicts three peasants dancing to bagpipes next to the title structure, which is structurally similar to a Penrose triangle. In another, a man trips the man behind him when he falls into a ditch, which will trip the four men behind them, as they are all holding on to the same stick. This painter of *The Magpie on the Gallows* and *The Blind Leading the Blind* also created a work in which armies of (*) skeletons attack the living, as well as a series of six works depicting country life in Flanders, including one titled *The Hunters in the Snow*. For ten points, name this Renaissance painter of *The Triumph of Death*, who is best known for his *Landscape with the Fall of Icarus*.

ANSWER: Pieter "Peasant" Bruegel the Elder (don't accept any other Breugel if a first name is given)

<HX>

3. The official source of this river is a glacier on Geladandong Mountain in the Dangla Mountain Range. Yichang City's Gezhouba Dam lies on this river in Hubei Province, while this river's third dam, the Xiluodu Dam, is under construction. This river turns 180 degrees at Shigu in Yunnan Province, and joins with the Jialing and Han Rivers. This very (*) polluted river flooded several times in the early 20th century, each resulting in over 100,000 deaths. The Three Gorges Dam is built on, for ten points, what longest Chinese river, which lies south of the Yellow River?

ANSWER: Yangtze River (also accept Chang Jiang)

<JD>

4. In this man's longest play, Falk wants to be a great poet and Lind a missionary, and in another, Hilda convinces the title character to put a garland on the top of a tower, causing him to fall to his death. In addition to *Love's Comedy*, and the aforementioned play about Halvard Solness, (*) *The Master Builder*, he wrote about Dr. Stockmann's attempts to close down the new baths in *An Enemy of the People*. The author of a play about Nora's failed marriage with Torvald, this is, for ten points, what Norwegian playwright of *A Doll's House* and *Hedda Gabler*?

ANSWER: Henrik Ibsen

<KT>

5. The structure of one type of these entities was solved in 1958 by Max Perutz, who shared the 1962 Nobel Prize in Chemistry with Sir John Cowdery Kendrew, while another type of these compounds can be allosterically changed by a calcium ion, an important step of the sliding filament model. That compound is tropomyosin, which prevents (*) myosin from binding to actin, both of which are also types of these polymers. For ten points, name this class of biologic compounds exemplified by myoglobin and hemoglobin, which consist of polypeptide chains of amino acids.

ANSWER: Proteins

<HX>

6. Objections to this include its exclusion of many famous figures due to an exact interpretation of the Swedish word "idealisk". The first American to receive this was Sinclair Lewis in 1930, and the first person to ever do so was Sully Prudhomme in 1901. It was famously turned down by (*) Jean-Paul Sartre, and was awarded in 2009 to Herta Muller. For ten points, what is this prestigious honor, given to the individual whose lifetime body of writing the Swedish Academy deems the best, whose counterparts include Physics, Chemistry, and Peace?

ANSWER: Nobel Prize in Literature (accept equivalents, prompt on Nobel Prize)

<MS>

7. The Piast Dynasty was the first family to unify this country, whose Battle of Legnica halted Mongol incursion into this nation, but ended with the death of Henry II of Silesia. The Soviet Treaty of Friendship, Cooperation, and Mutual Assistance was signed in the capital city of this country, and various (*) partitions divided up the land owned by Lithuania and this country. One organization in this country was founded at a Gdansk Shipyard and called "Solidarity" by Lech Walesa, and helped lead to its liberation from the USSR. For ten points, name this country, which saw its president Lech Kaczynski recently die in a plane crash, leading to a new leader in Warsaw.

ANSWER: Republic of Poland

<MS>

8. On April 2nd, 2009, members of the Rutgers community set a Guinness World Record for the largest gathering of people dressed as this person. First created by Martin Handford in 1987, he is sometimes seen with Wizard Whitebeard, who sent him on a quest to discover the truth about himself and his arch-nemesis Odlaw, who is similar in appearance except for (*) yellow and black clothes and a moustache. The key to identifying this man is to look for his distinctive red and white striped shirt, bobble hat, and glasses, but that's often easier said than done. For ten points, name this fictional character who is nowhere to be found.

Answer: Waldo or Wally

<EnzeC>

9. The Fischer type of this process is used to determine trace amounts of water in a sample, and the complexometric variety is particularly useful in determining the different metal ions present in a solution. Although enthalpy change can be used to locate the (*) equivalence point in this process, that procedure is most often accomplished using indicators such as phenolphthalein. For ten points, identify this common laboratory technique used to determine the unknown concentration of a known reagent, commonly applied to acids and bases.

Answer: **Titration**

<EnzeC>

10. This figure was originally portrayed as a prophetic wild man living in the Caledonian forest in the sixth century, and Vortigen's soothsayers planned to sacrifice this figure and sprinkle his blood on the ground. Instead, this figure detected an underground pool that contained two different colored dragons. Later, this figure's potion helped a man disguise himself as Gorlois and have a son by Igraine; that man was (*) Uther, and this man was imprisoned in a tree by one of his students. For ten points, name this legendary wizard who enchanted Excalibur to ensure that none but Arthur could draw it from the stone.

Answer: **Merlin**

<CC>

HALFTIME

11. The earliest known use of this technology was found at Kaman-Kalehoyuk in Anatolia, and the Haya people of Africa likely developed this technology centuries before Europeans. The wootz variety of this metal came from India, and carbon nanotubes have recently been discovered in the nearly unbreakable (*) Damascus variety of this metal, which was used to make really good swords. Created most famously by the Bessemer Process, for ten points, what is this alloy consisting mainly of carbon and iron?

ANSWER: **Steel**

<MS>

12. Alaska is home to the largest concentration of this bird in the United States, and a 1940 law protected both it and its golden counterpart. This animal captivated public attention after Rachel Carson pointed out its DDT related plight in *Silent Spring*, which landed it on the endangered list until (*) 1995. Seen on our national seal holding a thirteen-leaf olive branch is, for ten points, what animal, the adjective in whose name means white, not hairless, the national bird and symbol of the United States?

ANSWER: **Bald Eagle** (also accept *Haliaeetus leucocephalus*, prompt on just eagle)

<EmilyC>

13. This man wrote a poem in which the speaker asks the reader to “Tread softly because you tread on my dreams.” In addition to “Aedh Wishes for the Cloths of Heaven,” he retold the Greek myth of Zeus appearing as a bird and raping a woman in “Leda and the Swan” and claimed “a terrible beauty is born” while describing an (*) Irish uprising in another poem. This author of “Easter 1916” inspired Achebe with his line “Things fall apart; the centre cannot hold.” For ten points, who is this poet, who asked about a rough beast slouching back to Bethlehem to be born in “The Second Coming”?

ANSWER: William Butler Yeats

<SA>

14. The earliest known Internet reference to this activity was in August 2002, and one variation of this activity states that it only ends when the Prime Minister of the United Kingdom publicly declares so. This activity is an example of ironic processing and it is said that (*) everybody in the world is currently engaged in this activity, whether they know it or not. If someone remembers they are doing this, they must announce it publicly, a key rule of, for ten points, what mental contest, which you lose if you think about it?

Answer: Playing The Game (prompt on I Lost, accept I Lost The Game)

<EnzeC>

15. This man described despair as the title malady in one work, and, in another, a section entitled *The Seducer’s Diary* parallels his own life, as Johannes’ behavior towards Cordelia is very similar to the author’s behavior towards Regine Olsen. In a third work, this man described the (*) knights of faith and infinite resignation, and discusses the ethics associated with Abraham’s attempted sacrifice of Isaac. For ten points, name this Danish philosopher and author of *Sickness Unto Death*, *Either/Or*, and *Fear and Trembling*.

ANSWER: Søren Kierkegaard (prompt on Anti-Climacus before “Seducer’s”)

<MS>

16. Pappus’s Theorem deals with collinearity in this polygon, and the regular variety of this polygon is an orthogonal projection of a 5-simplex. The n th number of this type is equal to two times n squared minus n , and it has the most sides of any regular polygon which can (*) tile the plane. For regular polygons of this type, the longest diagonal is twice as long as a side, and the exterior angle is 60 degrees, meaning that each interior angle is 120 degrees. For ten points, give the general name for a six-sided polygon.

ANSWER: Hexagon

<MS>

17. One character in this novel was supposed to be named Caleb, and another character always wants to hold parades, while a third is always trying to stab the protagonist after the death of Nately. In addition to the aforementioned antics of Lieutenant Schiesskopf and Major (*) Major Major, this novel sees Captain Cathcart continually raise the number of required missions, much to the chagrin of the Pianosa-based bombardiers. For ten points, name this novel, in which Yossarian can only get out of flying missions if he is crazy, but wanting to get out of missions proves his sanity, a work of Joseph Heller.

ANSWER: Catch-22

<MS>

18. One work by this man, with scenes based off of Gluck's *Iphigénie en Tauride*, sees the title character break a vow to Neptune after refusing to sacrifice his son. Another of this composer's operas begins with a handsome prince being pursued by a serpent, and a third sees Susanna in a room with the Count and Cherubino. This composer of (*) *Idomeneo, King of Crete* also wrote a work that includes a famous melody beginning E-flat, D, D, his Symphony No. 40 in G minor, one of only three minor key symphonies he ever wrote. For ten points, name this Austrian prodigy who composed *The Magic Flute* and *The Marriage of Figaro*.

ANSWER: Wolfgang Amadeus Mozart or Johannes Chrysostomus Wolfgangus Theophilus Mozart)

<HX>

19. In 2010, this was the only country in the southern hemisphere to join the Organization for Economic Cooperation and Development, and on a recent tour here, Barack Obama praised this country's technical advancements, calling it "the most digitally connected country in Latin America." During that meeting at La Moneda presidential palace, Obama talked with this country's president, (*) Sebastián Piñera, about the 8.8 magnitude earthquake that happened there last year, as well as the "Los 33" incident, a 25-day affair concluding with the successful rescue of all the men who had been trapped in a copper-gold mine in the Atacama desert. For ten points, name this South American country with capital at Santiago.

ANSWER: Chile

<HX>

20. Kater's variety of this device can be used to find the local gravitational acceleration, and the double variety exemplifies chaotic motion. The Foucault variety of this device proves that the Earth is rotating, and the period of a simple one of these devices is equal to 2π times the square root of L over g . Their behavior can be approximated as (*) simple harmonic motion when the small-angle approximation holds and the amplitude is small. For ten points, what is this device commonly used in physics, in which a weight is suspended from a pivot point by a string, allowing it to swing back and forth?

ANSWER: Pendulum

<MS>

BONUSES

1. Bonus: The red background is likely due to the eruption of Krakatoa. For ten points each:

[10] Name this painting, depicting a man holding his hands to his face, which has its mouth wide-open.

ANSWER: **The Scream** (accept **Skrik**)

[10] *The Scream* is the most famous work of this Norwegian artist, who included it in his collection *The Frieze of Life*.

ANSWER: Edvard **Munch**

[10] This other Munch painting depicts the end of the life of his tubercular sister Sophie; his father and aunt surround her in her chair, and his brother Andreas appears to be attempting a quick exit.

ANSWER: **Death in the Sick Room** (also accept **Ein Tod**)

<KT>

2. Bonus: In one scene of this work, Pearl doesn't recognize her mother without the title ornament on. For ten points each:

[10] Name this novel, in which Hester Prynne is forced to wear a large A as punishment for her affair with Arthur Dimmesdale.

ANSWER: **The Scarlet Letter**

[10] In *The Scarlet Letter*, Hester came to America two years before this man, her husband. He finds out Dimmesdale's secret and exacts his revenge, but ultimately leaves his property to Hester's daughter Pearl.

ANSWER: **Roger Chillingworth** (accept either)

[10] In addition to writing *The Scarlet Letter*, this man wrote such other novels as *The Blithedale Romance* and *The House of the Seven Gables*.

ANSWER: Nathaniel **Hawthorne**

<MS>

3. Bonus: This man was the commander of the New Model Army. For ten points each:

[10] Name this Lord Protector of England who gained power after victory in the English Civil War.

ANSWER: Oliver **Cromwell**

[10] Cromwell took his seat as Lord Protector after this king was executed. His failures in the Thirty Years' War prompted the English Civil War.

ANSWER: **Charles I** of England (prompt on **Charles**)

[10] This group supported Cromwell and the revolutionaries. They were contrasted with the Cavaliers, and were named after their hairstyle.

ANSWER: **Roundheads**

<KT>

4. Bonus: These mathematical expressions can either be convergent or divergent. For ten points each, [10] Name this term used to describe the sum of the elements in an arithmetic progression.

Answer: arithmetic **series** (do not accept “arithmetic sequence”)

[10] This is a shorthand way of expressing an arithmetic series involving a certain Greek letter and a dummy variable.

Answer: **sigma** notation

[10] An arithmetic series is said to be convergent when the limit exists for the infinite sequence of this operation, which can be found by adding up a finite number of terms of the series.

Answer: **partial sum**

<EnzeC>

5. Bonus: Lots of SI units are named after people. Name some, for ten points each:

[10] This unit of temperature is named after its British developer. It equals zero at absolute zero and has intervals equivalent to that of the Celsius scale.

ANSWER: **Kelvin**

[10] This is the unit for pressure, equal to one newton per square metre, and is also the unit in which Young’s modulus is measured. It is named after the Frenchman who generalized Torricelli’s work.

ANSWER: **Pascal**

[10] This unit of radioactivity is named after the man who shared a Nobel Prize with the Curies for their discovery of radioactivity. One unit is defined as the decay of one nucleus in a sample per second.

ANSWER: **Becquerel**

<BZ>

6. Bonus: This group of works begins with "Of Strange Lands and People" and is most famous for its seventh piece, "Dreaming." For ten points each:

[10] Name this set of thirteen musical pieces intended to invoke memories of youth, including "Blind Man's Bluff" and "Pleading Child.”

ANSWER: **Kinderszenen** (also accept *Scenes from Childhood*, or **op. 15**)

[10] *Kinderszenen* was written for this instrument, which was also featured in *Carnaval* and *Variations on the name “Abegg”*. The wife of the composer of the aforementioned pieces, Clara, played this instrument.

ANSWER: **Piano**

[10] This composer of *Kinderszenen* also wrote the Spring and Rhenish symphonies, as well as *Scenes from Goethe's Faust*.

ANSWER: Robert **Schumann**

<HX>

7. Bonus: Generally, they taste sour, and examples of them include hydrogen chloride. For ten points each:

[10] Name these substances that have a pH lower than 7.

ANSWER: Acids

[10] This theory asserts that acids are substances which increase the concentration of hydronium ions when dissolved in water. It is expanded on by the Bronsted-Lowry theory.

ANSWER: Arrhenius theory or Arrhenius definition

[10] In this other theory, acids are defined as anything that accepts lone electron-pairs.

ANSWER: Lewis theory or Lewis definition

<KT>

8. Bonus: One scene from this movie sees a motorcyclist punting the main character's dog off a bridge after being hit by a burrito, resulting in someone else taking the main character's job at Channel 4 Evening News. For ten points each,

[10] Name this 2004 comedy film which pits the title character against Veronica Corningstone, whom he eventually falls in love with.

Answer: Anchorman: The Legend of Ron Burgundy

[10] In addition to starring in *Talladega Nights* and *Blades of Glory*, this comedian plays Ron Burgundy in *Anchorman*.

Answer: Will Ferrell

[10] This is the type of cologne used by reporter Brian Fantana which emits a very strong smell and is illegal in nine countries.

Answer: Sex Panther

<EnzeC>

9. Bonus: This work opens up in the small village of Ixopo. For ten points each:

[10] Name this novel about Stephen Kumalo's attempt to find his son, whom he later learns has murdered Arthur Jarvis.

ANSWER: Cry, the Beloved Country

[10] *Cry, the Beloved Country* is a work by this author of *Ah, But Your Land is Beautiful*, who wrote about Pieter van Vlaanderen in *Too Late the Phalarope*.

ANSWER: Alan Paton

[10] This son of Stephen Kumalo kills Jarvis while breaking into his house. The novel ends right after his execution.

ANSWER: Absalom Kumalo

<KT>

10. Bonus: This operation was launched in November 1942 and was led by Dwight D. Eisenhower. For ten points each:

[10] Name this World War II Operation which saw the American and British invasion of North Africa.

ANSWER: Operation **Torch**

[10] The Western Task Force of Operation Torch was led by this Major General, who was later relegated to Brigadier General for slapping a recuperating soldier.

ANSWER: George S **Patton**

[10] Allied forces met this brilliant German Field Marshal at the Battle of Kasserine Pass. Also known as the Desert Fox, he was defeated at the Battle of El Alamein.

ANSWER: Erwin **Rommel**

<JD>

11. Bonus: Most of them were banished to Tartarus after they lost a war. For ten points each:

[10] Name this race of Elder Gods, included Atlas and Prometheus, which was eventually overthrown by Zeus and his siblings.

ANSWER: **Titan**

[10] This Titan goddess of memory slept with Zeus for nine nights to create the nine muses.

ANSWER: **Mnemosyne**

[10] This most famous Titan castrated his father Uranus and proceeded to eat his children so they couldn't overthrow him, a plan which didn't work so well.

ANSWER: **Cronos** (or **Cronus**)

<KT>

12. Bonus: One participant in it was nicknamed John Wayne after he tried to mimic a Cool Hand Luke character. For ten points each:

[10] Name this experiment, conducted at the namesake university, which was cancelled after six days due to the overly sadistic tendencies of some of the members.

ANSWER: **Stanford Prison** Experiment (accept **Zimbardo** experiment)

[10] Critics of the Stanford Prison Experiment noted that it lacked this fundamental element of a proper experiment. When changed, it often causes changes in its counterpart, the DV.

ANSWER: **Independent Variable** (or **IV**)

[10] This Professor of Psychology at Stanford conducted the Stanford prison experiment. He also wrote *The Time Paradox*, *The Shy Child*, and *The Lucifer Effect*.

ANSWER: Phillip George **Zimbardo**

<BZ>

13. Bonus: Examples of volcanoes formed by these regions include ones in Hawaii and Tahiti. For ten points each:

[10] Name these areas of volcanic activity often found far from tectonic plate boundaries, which may also form archipelagos.

ANSWER: **Hotspot**

[10] Hotspots are thought to result from these thermal diapirs, masses of hot rock rising from their namesake layer of the Earth.

ANSWER: **Mantle plume**

[10] Mantle plumes commonly result in the formation of this type of mafic, aphanitic igneous rock that makes up most of Earth's oceanic plates.

ANSWER: **Basalt**

<HX>

14. Bonus: This bomb was designed to have a yield of 100 megatons of TNT, but its test version only ended up being 50 megatons to decrease nuclear fallout. For ten points each:

[10] Name this 1961 bomb, which had a mushroom cloud 40 miles tall and a 5 mile wide fireball, the most powerful nuclear weapon ever detonated.

ANSWER: **Tsar Bomb**

[10] The Tsar Bomba is an example of this type of bomb, whose power comes from the fusion of atoms.

ANSWER: **Hydrogen Bomb**

[10] The detonation of the Tsar Bomba devastated the nearby Novaya Zemlya archipelago, which lies in this ocean.

ANSWER: **Arctic Ocean**

<JD>

15. Bonus: The protagonist counts himself as lucky and goes to sleep content, despite the fact that his life obviously sucks. For ten points each:

[10] Name this novel, detailing the events of a span of 24 hours, which sees Shukhov, the title character, forced to clean a bathroom and do hard labor in freezing cold temperatures.

ANSWER: **One Day in the Life of Ivan Denisovich**

[10] *One Day in the Life of Ivan Denisovich* is a work by this author of *Cancer Ward*, who won the 1970 Nobel Prize.

ANSWER: Aleksandr **Solzhenitsyn**

[10] This most famous Solzhenitsyn work drew from the author's experiences in a Soviet work camp; in it, he traces the unfortunate path of a zek through Russia's complex penal system, the "chain of islands" for which the book is named.

ANSWER: **The Gulag Archipelago**

<MS>

16. Bonus: Treatments for it include chemotherapy, radiotherapy, and surgery. For ten points each:

[10] Name this abnormality and disease where cells may grow uncontrollably and possibly damage other tissues.

ANSWER: **Cancer** (accept **Malignant Neoplasm**)

[10] These uncontrollable growths do not harm any tissues and are unable to metastasize.

ANSWER: **Benign** tumor (prompt on tumor)

[10] These genes prevent apoptosis in infected cells, which is really bad if those cells are cancerous.

ANSWER: **Oncogene**

<KT>

17. Bonus: Aotearoa is the Maori name for this country. For ten points each:

[10] Name this Pacific Island country with capital at Wellington.

ANSWER: **New**

Zealand

[10] This strait separates the North and South Islands of New Zealand.

ANSWER: **Cook** Strait

[10] This sea separates New Zealand from Australia, and is named for a Dutch explorer. It partially shares its name with an island to the south of Australia.

ANSWER: **Tasman** Sea

<JD>

18. Bonus: The frame story of this novel is a series of letters written by Robert Walton, the captain of a ship. For ten points each:

[10] Name this novel, subtitled “A Modern Prometheus”, which sees the title doctor create a giant man and bring him to life, only to have his creation go on a murderous rampage, killing his wife and brother.

ANSWER: **Frankenstein**

[10] *Frankenstein* is a work by this woman, whose husband Percy was an important author in his own right.

ANSWER: **Mary Shelley**

[10] Upon killing William, Frankenstein’s brother, the monster steals his locket and plants it in the pocket of this woman, William’s nanny, who is subsequently convicted of William’s murder.

ANSWER: **Justine Moritz** (accept either)

<MS>

19. Bonus: Its name means “land between the rivers”. For ten points each:

[10] Name this area, situated in the Fertile Crescent, which was once home to the Sumerians and Assyrians. It is considered to be the “cradle of civilization”.

ANSWER: **Mesopotamia**

[10] Mesopotamia is situated between these two rivers, which join in the Shatt al-Arab and empty into the Persian Gulf. Name both.

ANSWER: **Tigris** and **Euphrates** rivers [accept in reverse order, accept **Tigris-Euphrates** river system]

[10] After Alexander the Great’s death, Mesopotamia became part of this largest Hellenistic empire, whose capital was later moved to Antioch.

ANSWER: **Seleucid** empire

<BZ>

20. Bonus: There’s been quite a bit of flooding in the past year. For ten points each:

[10] The Indus river overflowed its banks by quite a bit in July 2010, submerging more than one-fifth of this South Central Asian country.

ANSWER: **Pakistan**

[10] There was a lot of flooding in Australia too. After the December flooding of Queensland came the January flooding of this other state, caused by Tropical Cyclone Yasi.

ANSWER: **Victoria**

[10] Flooding also occurred in this South American country, the worst natural disaster there since their 1967 mudslides near Sao Paulo.

ANSWER: **Brazil**

<MS>