Ladue Invitational Spring Tournament VI

Written and edited by the Ladue Academic Team: Raj Paul(head editor), Moses Schindler(head editor), Akshay Govindan, Glen Morgenstern, Charlie Loitman, Logan Page, Nevan Giuliani, Philip Adams, Jacob Cytron, and Maya Mutic with help from Ben Zhang, Alston Boyd, Ethan Strombeck, Pranav Sivakumar, Henry Roe, and Arjun Nageswaran

ROUND 5 - TOSSUPS

1. In a story by this author, a character is accused of stealing a wallet, and later dies repeating that he only took the title object; that story is "The Piece of String". Another work by this man describes how a character shares the contents of a picnic basket with other passengers before their carriage is detained, and how that character is forced to sleep with a (*) Prussian officer. In another story by this author, a character is informed that an object she had lost ten years earlier was a fake by Madame Forestier, and wasn't worth more than 500 francs. For ten points, name this author of "Ball of Fat" who described Madame Loisel's loss of the title piece of jewelry in "The Necklace."

ANSWER: Guy de Maupassant

<MS>

2. During this time, the Sequoia genus developed, and the beginning of this time was marked by an extinction of 96% of all species, known as the Permian mass extinction. The middle of this era witnessed the separation of the continents of Gondwana and Laurasia, together known as (*) Pangaea. The end of this era saw an event which created the Chicxulub crater, the K-T mass extinction. Because it consisted of the Triassic, Jurassic, and Cretaceous periods, this era is often called "Age of the Dinosaurs". For ten points, name this geological era that occurred after the Paleozoic, but prior to the Cenozoic. ANSWER: Mesozoic Era

<MS>

3. The Witch of Agnesi curve is defined by the intersection two lines which are determined by two points on one of these shapes, and Monge's Theorem states that the intersections of lines formed by taking certain points on one of these shapes are collinear. The Feuerbach point is defined as the intersection of two of these figures, one of those is the (*) nine-point one of these shapes. The power of a point theorem deals with the intersections of lines with these shapes, and the unit one is commonly used to define trigonometric values. For 10 points, name this shape that is the set of all points equidatant from a given point, whose circumference divided by its diameter is pi.

ANSWER: circle

<MS>

4. A 1610 eruption of the Momotombo stratovolcano in this country caused inhabitants of its city of Leon to relocate. This nation's capital was damaged in a 1972 earthquake caused by the Cocos Plate, and the Tipitapa and San Juan rivers both flow through this nation's namesake lake. The (*) Miskito Coast, named for a local African-Native American ethnic group, makes up the majority of this country's east coast. This nation's largest lake is alternatively called Cocibolca, and would feature heavily in the construction of the Panama Canal. For ten points, name this Central American country with capital Managua.

ANSWER: Republic of <u>Nicaragua</u> [or República de <u>Nicaragua</u>] <HR>

5. A poem by this man describes how the title object's "petals throb against the world / your submarine crops tremble." Another poem by this man talks about a person who looks "like a world, lying in surrender" and describes "white hills, white thighs". This author of "Body of a Woman" described objects that are "soft as rabbits" and "made of wool in winter" in his "Ode to My Socks". A poem by this author has a narrator who climbs the (*) "ladder of the earth" in order to reach the title location. For ten points, name this author who included "The Heights of Macchu Picchu" in his Canto General and lamented that "Tonight I can write the saddest lines" in his Twenty Love Poems and a Song of Despair

ANSWER: Pablo <u>Neruda</u> [or Ricardo Eliecer Neftali Reyes <u>Basoalto</u>]

6. A certain history asserts that one ruler of this polity was a demonic figure who could make his own head vanish. Nikephoros Xiphias led the forces of this polity to victory over the Bulgarians at the Battle of Kleidion, and following that battle, the epithet "Bulgar-Slayer" was given to a future emperor of this polity, (*) Basil II. Procopius wrote a "Secret History" of a ruler who was the subject of a revolt that emerged from a chariot race, the Nika riots and Tribonian compiled a law code for this empire, the Corpus Juris Civilis. Iconoclasm became dominant in this empire, whose capital housed the Hagia Sophia. For ten points name this empire that Theodora and Justinian I ruled, with capital at Constantinople. ANSWER: Byzantine Empire

7. W bosons are formed from the collisions of electrons and the antiparticles of these things in Glashow resonance. The PMNS matrix describes the quantum states of these particles, and devices built to detect them, such as IceCube, must be very large and are often underwater. These particles were initially proposed by Wolfgang Pauli to satisfy the law of conservation of energy during beta decay. This particle's three flavors, (*) electron, mu, and tau, oscillate over time, and the Homestake experiment affirmed that the Sun emits these particles as a result of nuclear fusion. For ten points, name these extremely small, chargeless particles, whose name in Italian literally means "little neutral one".

ANSWER: <u>neutrino</u>s

<AG>

- 8. This man said that he would make the phrase "Merry Christmas" more widely used than "Happy Holidays" in department stores, and also commented that the EPA was a "disgrace". This politician suggested that "Second Amendment people" could prevent pro-gun control (*) Supreme Court justices from getting nominated. This politician compared Syrian refugees to a bowl of Skittles with a few poisoned ones, and one woman said that half of the supporters of this man could be put into a "basket of deplorables." He also claimed that Barack Obama was not born in the United States. For ten points, name this man who defeated Hillary Clinton to become the 45th president of the United States. ANSWER: Donald Trump [accept The Donald, do not accept Donald Trump Jr., prompt on "Trump"] <AG+MS>
- 9. The main character in this novel is scared that his servant Victor will look at the title object, causing him to call for Mr. Hubbard. The protagonist of this work receives a "little yellow book", which he buys a dozen copies of. An acquaintance of the protagonist of this work implores him to never marry a woman with (*) straw-colored hair, and after this, the protagonist reveals he is in love with an actress. That friend, Henry Wotton, also must inform the protagonist of the actress Sibyl Vane's death. The artist Basil Hallward creates the title object, which ages cruelly and horribly, while the protagonist maintains his youth. For ten points, name this only novel by Oscar Wilde.

ANSWER: The **Picture of Dorian Gray**

<GM>

10. When this man was asked whether he was ready to lead his country, he answered "I have climbed to the top of the greasy pole." This man wrote about the unification of Italy in his novel *Lothair*, and published his last book *Endymion* shortly before his death. Lionel de Rothschild gave this man money to buy almost half of the Suez Canal Company shares, and this man dealt with the (*) Eastern Question during the second half of his career. This politician helped propose the 1867 Reform Act, which allowed more of the working class in his country to vote. In the 1876 Royal Titles Act, this politician bestowed the title of "Empress of India" upon Queen Victoria. For ten points, name this former Conservative Prime Minister of Britain and rival of William Gladstone, the first and only Jewish person to lead the UK.

ANSWER: Benjamin **Disraeli**

<GM>

<u>HALFTIME</u>

11. In one of these works, a character complains that the Washington Monument "doesn't even look that much like Washington." A person in another one thinks "Better set my iPod to the 'Kill Bill' fight theme, just in case" as he imagines a fight scene in a post office. Another one of these comics imagines several other speeches William (*) Safire would have given had the moon landing gone wrong. while a physicist is run over by a truck while contemplating a problem held by a man in a black hat in "Nerd Sniping." This webcomic frequently revisits the theme of velociraptors. For ten points, name this webcomic "of romance, sarcasm, math, and language," written by Randall Munroe.

ANSWER: xkcd

12. In this opera, Arnold sings the aria, "Asile hereditaire" after looking at his old home and reminiscing of his father, who was killed by Austrians. This opera's French libretto was written by Etienne de Jouy and Hippolyte Bis, and the son of its protagonist sets his house on fire as a signal to begin a revolt. This opera's overture contains a ranz de vaches and a storm section, but is best known for the (*) brass fanfare in its finale. The protagonist of this work is captured by the Austrian governor Gessler after refusing to bow to a hat, and that character later tells Jemmy, "Sois immobile", or "Be still". For ten points, name this Giacomo Rossini opera about a Swiss hero who shoots an apple off his son's head.

ANSWER: William Tell

<RP+GM>

13. A model for this process on the surface of a catalyst was made using carbon monoxide "jumping" through platinum to a "free space." James Maxwell and Josef Stefan independently developed an equation to describe this process for dilute gases and fluids, respectively. This process can be described by mobility times (*) Boltzmann's constant times absolute temperature. Graham's law identifies the rate of this process through a small hole as the inverse of the square roots of the molecular mass of a gas's particles. When water undergoes this process across a semipermeable membrane, it is called osmosis. For ten points, name this process in which substances go from areas of high concentration to low concentration.

ANSWER: diffusion

 $\langle CL \rangle$

14. Prior to this battle, its losing side had won at the Battle of Chancellorsville and Joseph Hooker resigned as general of the Army of the Potomac. Richard Ewell was unsuccessful in taking Culp's Hill at this battle, and Joshua Chamberlain led a bayonet charge by the 20th of Maine at (*) Little Round Top. On the final day of this battle, Confederate soldiers led a failed assault at Cemetery Ridge, an event known as Pickett's Charge, and Robert E. Lee was forced to retreat to Virginia. For ten points, name this turning point of the Civil War, fought at the location in which Lincoln would later give a namesake "Address".

ANSWER: Battle of Gettysburg

<RP>

15. When this man asked another for his name, that man replied "I am that I am." That event occurred after this man fled to Midian after murdering a person. This man was nearly killed by God before his wife, Zipporah, quickly circumcised his child, and water once flowed out of a rock when this man struck it. This brother of (*) Miriam who once spoke to a burning bush broke one object after seeing his followers worship a golden calf. For ten points, name this brother of Aaron, who received the Ten Commandments on Mount Sinai and led the Israelites out of Egypt.

ANSWER: Moses

<MS>

- 16. A painting featuring one of these objects shows a plate of cherries lying on a wooden board in front of a lute-playing nun, and that painting is by Hieronymus Bosch. A woman wearing a blue and red dress holds her baby in a Mary Cassatt work whose canvas is dominated by a green one of these things. James Monroe holds an American flag and (*) stands on one of these things in a painting by Emanuel Leutze. The word "GLOUCESTER" is written in black paint on the back of one of these objects in a painting by Winslow Homer, who depicted a black man in one of these objects surrounded by sharks. For ten points, name these modes of transportation featured in *Breezing Up* and *Gulf Stream*. ANSWER: boat or ship [accept obvious equivalents]
- 17. Rituximab may be used to treat one variety of this condition by binding to the CD20 receptor, and the Sticker's variety is transmissible in dogs. The Gardasil vaccine may decrease the risk of getting another variety, and genes that suppress this condition follow the two-hit hypothesis. Examples of these genes are pRb and p53, while other genes such as Ras can be (*) mutated to cause this condition. Cells of this type don't experience anchorage or density dependence, and can therefore form tumors. For ten points, name this condition in which cells reproduce too quickly and spread throughout the body by metastasis, which is typically treated by radiation and chemotherapy.

ANSWER: cancer

 $\langle LP \rangle$

18. This novel is compared to Little Women for its virtuous sentimentality in an essay by James Baldwin concerning his distaste for it, *Everybody's Protest Novel*. A minor character in this novel, Prue, experienced the death of her child after she stopped producing breast milk, and another character does not believe she was ever born. That character, who is taught Christianity by Ophelia, is (*) Topsy. In this novel, Eva, the daughter of Evangeline St. Claire, meets the main character on a steamboat to New Orleans after he is sold by Arthur Shelby. After the protagonist refuses to disclose where Cassy and Emmeline have gone to Simon Legree, he is flogged to death. For ten points, name this novel about slavery, written by Harriet Beecher Stowe.

ANSWER: Uncle Tom's Cabin

 $\langle RP \rangle$

19. In one story, Vishnu was forced to make strange faces to make this god laugh and spit out his discus. This Hindu god is well known for being the god of opportunities, and he is usually prayed to first in a Hindu temple. This god cursed the moon, which created the waxing and waning periods, and to assist Vyasa, he severed one of his body parts to transcribe the (*) Mahabharata. This god was awarded a magical mango after he defeated his brother Kartikeya in a race around the universe by simply circling around his parents three time. After this god tried to protect his mother Parvati, he was beheaded by Shiva, his father. For ten points, name this elephant-headed god from Hindu mythology.

ANSWER: <u>Ganesha</u> (accept <u>Ganesh</u>, <u>Ganapati</u>, <u>Pillaiyar</u>, or <u>Vinayaka</u>) <KS+RP>

20. A musical artist who gained fame under a stage moniker named after these objects claimed in one song that he, "had a sit down with Farrakhan" and "Turned the White House to the Terror Dome." Della sells her hair to buy Jim one of these objects for his watch in *The Gift of the Magi*, and in calculus, a rule named after these objects states that the derivative of (*) f of g of x is f prime of g of x times g prime of x. *The Communist Manifesto* claims that the Proletarians have nothing to lose but these objects, and *The Social Contract* begins, "Man is born free, and everywhere he is in" these objects. Fenrir was bound in, for ten points, what metal objects composed of several connected links.

ANSWER: chains [accept 2 Chainz, watch chain, Chain rule, hanging chain]

ANSWER: <u>chains</u> [accept <u>2 Chainz</u>, watch <u>chain</u>, <u>Chain</u> rule, hanging <u>chain</u> <RP+MS>

End of regulation, only proceed if tied

21. This man's reign began almost immediately with an attempted revolt by the Governor of Egypt, who marched on Aleppo. This ruler executed the only son he had with his wife Mustafa, and he expelled the Knights Hospitaller from Rhodes. An admiral of this ruler named Hayreddin Barbarossa defeated Andrea Doria and the Holy League at the Battle of Preveza, and (*) Louis II drowned while trying to escape another battle that this man had won; that conflict was the Battle of Mohacs. After revising his country's kanun, this ruler was nicknamed "the lawgiver". For ten points, name this 16th century sultan of the Ottoman Empire who was known as "the magnificent".

ANSWER: <u>Suleiman</u> the Magnificent (accept <u>Suleiman</u> I, <u>Suleiman</u> the Lawgiver, or <u>Suleiman</u> the Magnificent) <RP+AN>

22. This man stated, "Doubt is conquered by faith, just as it is faith which brought doubt into the world." This man claims "subjectivity is truth" and its converse in *Philosophical Fragments*. He compared a biblical figure to Agamemnon, describing the difference in the way they feel about the sacrifice of loved ones. That figure, (*) Abraham, was unsure about the necessity to sacrifice his son Isaac, as described in this man's book while he wrote under the pseudonym Johannes de Silentio. For ten points, name this Danish existentialist philosopher, author of *Fear and Trembling* and *Either/Or*.

ANSWER: Søren Aabye Kierkegaard

<CL>

BONUSES

1. Bonus: One of these was observed in 1604, while another in 1987. For ten points each:

[10] Name these astronomical phenomena that result from the core-collapse of a star. They exist in Type I and Type II varieties.

ANSWER: supernovae

[10] One type of supernovae consists of a binary system with this type of stellar remnant, and is used to accurately approximate distances in space. Sirius B is an example of this type of stellar remnant.

ANSWER: white dwarf [prompt on "dwarf"]

[10] White dwarves cannot be stable above this mass, named for an Indian physicist. Equal to roughly 1.44 solar masses, one of this concept's analogues is named for Robert Oppenheimer as well as two other scientists.

ANSWER: Chandrasekhar limit

<AG>

2. Bonus: Donald Trump called for the U.S. to seize this resource from Iraq, calling it "reimbursement". For ten points each:

[10] Name this fossil fuel that is refined into gasoline, mainly produced by organizations in OPEC.

ANSWER: crude oil (accept petroleum)

[10] This country, once led by Hugo Chavez, is the only South American country in OPEC besides Ecuador. It was one of that organization's founding nations.

ANSWER: Venezuela

[10] This current president of Venezuela accused the United States of attempting to seize Venezuelan oil in June of 2016. He has since faced calls from his people to leave office after a major food crisis in Venezuela.

ANSWER: Nicolás Maduro Moros

 $\langle AN \rangle$

3. Bonus: These nomadic people consumed the milk of the horses they rode, which they called Kumis. For ten points each:

[10] Name this central Asian people who lived in yurts under the rule of a Khan.

ANSWER: Mongols (accept Mongol empire)

[10] The fragmentation of the Mongol Empire in 1259 led to the creation of this territory led by Juchi. It was expanded by Batu Khan, who eventually sacked Kiev.

ANSWER: Golden Horde

[10] After the Golden Horde sacked Kiev, this Prince of Novgorod was forced to pay heavy taxes to the Golden Horde after they sacked Kiev, but he more famously fought off the Teutonic Knights at the Battle on the Ice.

ANSWER: Alexander Nevsky

<RP+GM>

4. Bonus: This goddess was given the sword Kusanagi-no-Tsurugi as a gift of forgiveness from her brother. For 10 points each:

[10] Name this goddess who fled into a cave after that brother threw a flayed horse at her loom. She was later lured out of the cave when another goddess started dancing on a tub.

ANSWER: Amaterasu-omikami [accept Ohirume-no-muchi-no-kami]

[10] Amaterasu was the daughter of this other god. After his wife died by giving birth to the fire god, he went to the underworld to try to bring her back, but he was unsuccessful.

ANSWER: Izanagi-no-mikoto [accept Izanagi-no-Okami, do not accept Izanami]

[10] Amaterasu and Izanagi are both gods, or kami, from the Shinto religion, which is from this Asian country.

ANSWER: Japan [or Nippon; or Nihon]

5. Bonus: Carbon examples of these include graphite, charcoal, and diamonds. For ten points each:

[10] Give this name that classifies the different physical forms in which one element may exist.

ANSWER: allotropes

[10] One of the two main allotropes of phosphorus is this volatile one, which is the most abundant and ignites immediately when exposed to air. It is commonly used in smoke signals and incendiary ammunitions.

ANSWER: white phosphorus

[10] After white phosphorus was deemed too dangerous for use in these objects, Arthur Albright began mass producing red phosphorus as an alternative. These objects create fire from the frictional heat produced by strikes against suitable surfaces.

ANSWER: matches

 $\langle RP \rangle$

6. Bonus: Several of this man's compositions were inspired by visits to Spillville, Iowa. For ten points each:

[10] Name this composer of the tone poem *The Water Goblin* and the *American String Quartet* who is best known for his 9th Symphony, *From the New World*.

ANSWER: Antonín Leopold **Dvořák**

[10] This other composer created a cycle of tone poems known as *Ma Vlast*, which includes one that depicts a flowing river, *The Moldau*.

ANSWER: Bedřich Smetana

[10] Dvorak and Smetana are both from this Eastern European country, where Leoš Janáček's *Sinfonietta* was premiered in its capital, Prague.

ANSWER: Czech Republic

 $\langle ES \rangle$

7. Bonus: This character runs away after seeing a play in which a king is killed when poison is poured in his ear. For ten points each:

[10] Name this character who kills his brother by pouring poison in his ear. He later convinces Laertes to help him try to kill his nephew with a poisoned sword.

ANSWER: King Claudius

[10] This daughter of Polonius in *Hamlet* is told to "get thee to a nunnery." King Claudius later recruits her brother to help him kill Hamlet after she drowns.

ANSWER: Ophelia

[10] When talking to Hamlet, a grave digger discovers the skull of this jester. Hamlet describes this character as "a fellow of infinite jest".

ANSWER: Yorick

 $\langle MS \rangle$

8. Bonus: In Judaism, it is customary to make noise and boo whenever this man's name is said. For ten points each:

[10] Name this man, who as advisor to King Xerxes, almost killed all the Jews in Shushan.

ANSWER: Haman

[10] Haman was thwarted by this second wife to King Ahasuerus, whose uncle inspired her to become the queen of Shushan.

ANSWER: Esther

[10] The Book of Esther tells the story of this Jewish holiday, which is celebrated by dressing in costume and baking triangle-shaped pastries.

ANSWER: Purim

<JC>

9. Bonus: Name these Roman Emperors who were not from the Julio-Claudian Dynasty. For ten points each:

[10] This man constructed the Colosseum and was the final ruler of the Year of the Four Emperors, as well as the first of the Flavian Dynasty.

ANSWER: <u>Vespasian</u> [or Titus Flavius Caesar <u>Vespasian</u>us Augustus]

[10] Born in Spain, this second of the Five Good Emperors defeated King Decebalus at the Battle of Sarmizegetusa as part of his conquest of Dacia.

ANSWER; <u>Trajan</u> [or Caesar Nerva <u>Trajanus</u> Divi Nervae filius Augustus]

[10] Trajan was succeeded by this emperor, who built a massive wall in Britain to mark the northern boundary of his empire.

ANSWER: <u>Hadrian</u> [or Publius Aelius Trajanus <u>Hadrian</u>us Augustus]

<RP>

- 10. Bonus: This work was commissioned for the ground-floor wall of the Rockefeller Center, but was later ordered to be destroyed because it included a depiction of Lenin. For ten points each:
- [10] Name this mural that shows a figure who stands amidst the lenses of an oversized microscope while a large hand clutches an orb in front of him.

ANSWER: Man, Controller of the Universe [or Man at the Crossroads]

[10] This Mexican muralist created *Man*, *Controller of the Universe*. Other works by this artist include *The Flower Carrier* and the *Detroit Industry Murals*.

ANSWER: Diego Rivera

[10] Diego Rivera was married to this Mexican painter, who included a monkey, a cat, and a thorned necklace in one of her many self-portraits.

ANSWER: Frida Kahlo de Rivera

 $\langle RP \rangle$

- 11. Bonus: The sum of the elements in the nth row of this figure is 2 to the power of n. For ten points each:
- [10] Name this figure, whose kth entry in its nth row is equal to n choose k. The ends of this figure are all 1's, and any other number is equal to the sum of the two numbers above it.

ANSWER: Pascal's triangle

[10] Starting from the leftmost one of the third row of Pascal's Triangle and going down and to the right, one finds these numbers. These numbers are equal to n times n plus one over 2. The first four of these numbers are 1,3,6, and 10.

ANSWER: **triangular** numbers [or **triangle** numbers]

[10] Harlan Brothers proved that the limit as n approaches infinity of the product of the terms in row n-1 times the product of the terms in row n+1 divided by the product of the terms in row n squared of Pascal's Triangle is equal to this constant.

ANSWER: e [or Euler's constant]

 $\langle MS \rangle$

- 12. Bonus: In the French and Indian War, Benedict Arnold abandoned Fort Ticonderoga, which defended this lake. For ten points each:
- [10] Name this North American lake that was also the site of the Battle of Plattsburg in the War of 1812. It is located between New York and Vermont.

ANSWER: Lake Champlain

[10] Lake Champlain extends into this province of Canada, the only French speaking province. Samuel de Champlain, the namesake of the lake, founded the capital of this province in 1608.

ANSWER: Quebec

[10] This river flows through Quebec's cities of Montreal and Quebec City before draining into its namesake gulf. The name "Canada" derives from the string of cities Samuel de Champlain founded along this river.

ANSWER: St. Lawrence River

 $\langle RP \rangle$

13. Bonus: The use of "yellow journalism" by William Randolph Hearst and Joseph Pulitzer raised support of U.S. entry into this war. For ten points each:

[10] Identify this war that was triggered by the explosion of the U.S.S. Maine. It was fought over the independence of Cuba and the Philippines.

ANSWER: Spanish-American War

[10] Under his policy of Reconcentration, this Governor General was nicknamed "Butcher" for his inhumane treatment of Cubans in concentration camps.

ANSWER: Valeriano "Butcher" Weyler

[10] This regiment of troops, led by Theodore Roosevelt, was victorious at the Battle of San Juan Hill. Alexander Proctor sculpted an equestrian statue of Roosevelt as the leader of this group of soldiers.

ANSWER: Rough Riders

 $\langle RP \rangle$

- 14. Bonus: A character in this work deduces that the name of a horse must be Brunellus. For ten points each:
- [10] Name this book, narrated by Adso, which sees William of Baskerville investigate a series of murders taking place Benedictine monastery.

ANSWER: The Name of the Rose

[10] This Italian author of *The Name of the Rose* also described a 'Plan' concocted by Belbo, Diotallevi, and Casaubon in *Foucault's Pendulum*.

ANSWER: Umberto Eco

[10] As it turns out, the deaths were taking place because the pages of this book had been poisoned. Jorge dies after trying to eat this book and burn down the aedificium.

ANSWER: The **second** book of Aristotle's **Poetics** [or **Aristotle's** book on **Comedy**]

<MS>

- 15. Bonus: At the beginning of this work, a character who "maded teh Skiez and a Erfs n stuffs" "rode invisible bike over teh waterz." For ten points each:
- [10] Name this wiki-based work, started by Martin Grondin, which attempts to translate a certain religious text into a feline setting. Near the start of this work, Adam and Eve are expelled from the Garden of Eden by the Ceiling Cat.

ANSWER: LOLCat Bible Translation Project

[10] This famous lolcat, whose actual name is Tarder Sauce, became famous due to the namesake emotion that appears in her face. Memes produced of this cat include those such as "I had fun once...it was awful."

ANSWER: Grumpy Cat

[10] This other internet cat is actually an animated cat with a Pop-Tart body, which leaves a rainbow trail behind it as it flies through space. The song that accompanies this cat repeats its own name several times.

ANSWER: Nyan Cat

16. Bonus: This quantity's namesake law explains that it has an inverse relationship with price for a given product. For ten points each:

[10] Identify this economic quantity, the willingness to buy a product, often grouped with supply.

ANSWER: demand

[10] A decrease in the cost of one good would result in a decrease in the demand for goods with this relationship to that good. Those two goods would then have a positive cross-price elasticity of demand.

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

[10] These types of goods notably do not follow the law of demand, but in fact become more popular as their price rises. Potatoes during the Irish Potato Famine are an example of these types of goods.

ANSWER: Giffen goods

<AG+PA>

- 17. Bonus: Answer some questions about cell division, for ten points each:
- [10] Name this component of the cell cycle in eukaryotes in which chromosomes are separated so that two nuclei may form, one for each daughter cell.

ANSWER: mitosis

[10] This stage of mitosis begins when securin is marked with ubiquitin. In this stage, chromosomes are split and sister chromatids move to opposite ends of the cell.

ANSWER: anaphase

[10] In plants, this process is performed by a cell plate, while in animals it is done with a cleavage furrow. This component of cell division divides the cytoplasm between two daughter cells.

ANSWER: cytokinesis

 $\langle LP \rangle$

18. Bonus: Remi Boncoeur helps one character in this novel get a job as a security guard, but that character is eventually fired. For ten points each:

[10] Name this novel from the Beat movement that follows the adventures of Sal Paradise and Dean Moriarty.

ANSWER: On The Road

[10] On The Road is the most famous work of this American author.

ANSWER: Jack Kerouac

[10] Kerouac modeled the Buddhist Hitchhiker Ray Smith off of himself, who appears in this novel in which climbs Matterhorn Peak with his friend Japhy Ryder, who advises him to work as a fire lookout on Desolation Peak.

ANSWER: The Dharma Bums

<RP>

- 19. Bonus: Answer the following about a man who initiated the Age of Discovery. For ten points each:
- [10] Name that man, a Duke of Viseu who sponsored the discovery of the Azores and exploration down the coast of Africa. Despite his nickname, he never actually captained a ship.

ANSWER: <u>Henry the Navigator</u> [prompt on "Henry" accept <u>Henry the Seafarer</u>]

[10] Henry the Navigator was a patron for exploration from this European country, which was also the home of many explorers such as Bartolomeu Dias and Ferdinand Magellan.

ANSWER: Kingdom of **Portugal**

[10] Henry was a prince of this Portuguese dynastic house, which was founded by his father John I. It preceded the House of Braganza.

ANSWER: House of **Aviz**

 $\langle RP \rangle$

20. Bonus: This novel begins by stating that "for a man of his age, fifty-two, divorced, he has, to his mind, solved the problem of sex rather well." For ten points each:

[10] Name this novel in which David Lurie goes to live with his lesbian daughter after being fired as a teacher for having an affair with one of his students.

ANSWER: Disgrace

[10] *Disgrace* was written by this South African author who described a magistrate's sympathy with the title native people in his *Waiting for the Barbarians*.

ANSWER: John Maxwell Coetzee

[10] This other work by Coetzee details the title character's journey to Prince Albert. Near the end of this work, the title character returns to a apartment in the city he had escaped from at the beginning, Cape Town.

ANSWER: Life & Times of Michael K.

<MS>

21. Bonus: A type of this phenomenon which causes the sky to be blue is named after Rayleigh. For ten points each:

[10] Name this phenomenon in which particles' paths are forced to change.

ANSWER: scattering

[10] When a photon comes into contact with matter, it undergoes this type of scattering named after an Indian physicist.

ANSWER: Raman scattering [or Raman effect]

[10] This inelastic scattering occurs when a photon is scattered by a charged particle, and earned its namesake a Nobel Prize in Physics. It results in a decrease of energy and thus increase of wavelength of the photon.

ANSWER: **Compton** scattering [or **Compton** effect]

<AG>

22. Bonus: Pro-segregationist governor Lester Maddox was elected separately as Lieutenant Governor when this man was elected Governor. For ten points each:

[10] Name this former Governor of Georgia and 39th President of the United States. He was defeated by Ronald Reagan in the 1980 Presidential Election.

ANSWER: James Earl "Jimmy" Carter

[10] During his presidency, Jimmy Carter engaged in several of these talks with Leonid Brezhnev to derail the development of nuclear arms. Similar talks earlier took place between Nixon and Brezhnev.

ANSWER: SALT II (accept Strategic Arms Limitation Talks II, prompt on "SALT", do NOT accept "Salt I")

[10] With Omar Torrijos, Carter signed two treaties that ceased U.S. control of this structure, which had been constructed in 1914 during the presidency of Teddy Roosevelt.

ANSWER: Panama Canal

 $\langle AN \rangle$