

## COLLABORATIVE ACADEMIC SPRING TOURNAMENT 2019

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### PACKET 14 TOSSUPS

1. **This group is the last to still read from the *Ausbund*, the oldest continuously used hymnbook in the world. Individuals in this belief system follow the core principle of *gelassenheit*, or total submission to God. At age 16, youth in this sect decide whether or not to enter it in a period of freedom called (\*) *rumspringa*. This sect split off from the Swiss Mennonites under the leadership of Jakob Ammann. A code of conduct called *ordnung* encourages members of this sect to shun modern technology, and most of its adherents live in Pennsylvania or Ohio. For 10 points, name this Anabaptist religious sect, whose members often travel by horse and buggy.**

ANSWER: **Amish** [prompt on Mennonite before mention] <JA>

2. **Rituals performed on this day are observed by Diggory Venn as he crosses Egdon Heath at the beginning of *The Return of the Native*. The protagonist of a 2005 film based on a graphic novel assassinates Peter Creedy on this day before commandeering the public address system to play the *1812 Overture*. Traditional festivities on this day include the purchasing of (\*) fireworks and the lighting of bonfires to burn straw effigies of a conspirator executed in 1606. For 10 points, name this British festival set on the 5th of November that celebrates the failure of the Gunpowder Plot.**

ANSWER: **Guy Fawkes** Night [or Guy Fawkes Day; accept Bonfire Night or Fireworks Night or the 5th of November before mention] <JA>

3. **The individual rights of residents of this colony were protected by the Body of Liberties. In this colony, John Wheelwright advocated for a “covenant of grace” during the Antinomian Controversy. Smallpox inoculation was encouraged in this colony by Cotton Mather. Its first governor, John Winthrop, called it a “city upon a hill” in a sermon. Due to her religious views, Anne (\*) Hutchinson was expelled from this colony, leading her to move to Rhode Island. Hundreds of people were accused of being witches in its town of Salem. For 10 points, name this New England colony where many Puritans settled in Boston.**

ANSWER: **Massachusetts Bay** Colony [prompt on Massachusetts] <WG>

4. **Two times the time average of this quantity equals  $n$  times the time average of its counterpart according to the virial theorem. This quantity is equal to momentum squared divided by twice the mass. The change in this quantity is equal to the dot product of force and distance according to a theorem named for it and (\*) work. This quantity is conserved in elastic, but not inelastic, collisions. For translational motion, this quantity is equal to one-half  $mv$  squared. For 10 points, name this type of energy which is contrasted with potential energy.**

ANSWER: **kinetic energy** [or KE; prompt on “energy”] <EM>

5. **In this play, the “noble gull-catcher” Maria forges a fake love letter addressed to “M, O, A, I,” instructing its recipient to constantly smile and wear yellow stockings. W. Somerset Maugham’s novel *Cakes and Ale* takes its title from this play, in which the Duke of Illyria arrests Antonio, who becomes enraged after the theft of his purse. In this play, Malvolio targets (\*) Toby Belch for his drunkenness and acts as Olivia’s steward. Duke Orsino marries the crossdressing page Cesario in this play, which recounts the events following a shipwreck. For 10 points, identify this Shakespeare comedy in which Viola reunites with her twin brother Sebastian.**

ANSWER: **Twelfth Night**, or *What You Will* <NS>

6. A fresco of this scene by Andrea del Castagno places one figure closer to the foreground than all the others. Dali's treatment of this scene features a translucent hovering torso with outstretched arms over the central figures. Another painting of this scene is illuminated only by a lamp in the top left and a (\*) halo around the central figure. One painting of this scene was marred by the extension of a doorway into the refectory of a church in Milan. A depiction of this scene is set on a diagonal axis and was created by Tintoretto. The Gospel of John inspired a Leonardo Da Vinci painting of, for 10 points, what Biblical scene in which Jesus and his apostles share a meal?

ANSWER: The Last Supper <JA>

7. Reagents with a central atom of this element are used to add to alkenes in an anti-Markovnikov ("ann-tie-mar-KOV-nee-KOFF") fashion in a reaction discovered by Brown. The wurtzite form of this element's nitride is harder than diamond. Clusters containing this element are classified as closo, nido or arachno by Wade's rules. This element's trifluoride is a strong Lewis acid. The coefficient of thermal expansion of silicate (\*) glass is increased by adding this element. This element violates the octet rule by forming compounds with 6 valence electrons. For 10 points, name this element with atomic number 5 and symbol B.

ANSWER: boron [accept B before mention] <GC>

8. This leader threatened to invade Greece after a general was murdered while surveying the Albanian-Greek border during the Corfu Incident. This leader of the Republic of Salo was rescued by Otto Skorzeny ("skort-ZAY-nee") in the Gran Sasso Raid. His rise to power was aided by the Acerbo ("ah-SAIR-bo") Law. This man was hanged from meathooks, along with his mistress Clara Petacci ("peh-TA-chee"). This man recognized the independence of (\*) Vatican City when he signed the Lateran Treaty with Pius XI. Victor Emmanuel III was unable to prevent his man from taking power following the March on Rome with his Blackshirts. For 10 points, name this fascist leader of Italy during the World War II.

ANSWER: Benito Mussolini [or Benito Amilcare Andrea Mussolini] <GP>

9. One of this author's novels alternates between a fantasy world in which a man reads dreams from unicorn skulls and a science fiction world in which the data-stealing Semiotecs compete with the data-shuffling Calcutecs. This author wrote about Aomame ("ow-mah-MAY"), who is reunited with Tengo after being transported to a world with two moons. Toru Okada searches for his (\*) cat Noboru Wataya in another novel by him. This author wrote about a love triangle between Naoko, Midori and Toru Watanabe ("wah-tah-NAH-bay") in a novel that takes its title from a Beatles song. For 10 points, name this contemporary Japanese author of *1Q84*, *The Wind-Up Bird Chronicle*, and *Norwegian Wood*.

ANSWER: Haruki Murakami <NS>

10. In an opera by this composer, Ninetta sings the aria "Deh, tu reggi il momento" and is eventually put on trial for losing a silver spoon. An overture by this composer contains a duet for English horn and flute in the "Call to the Cows" section. In that opera, which features the aria "Sois immobile," Gessler seizes Jemmy and forces the protagonist to (\*) shoot an apple off his son's head. This composer of *The Thieving Magpie* wrote an opera in which Rosina and Count Almaviva marry beginning with the aria "Largo al factotum" sung by Figaro. For 10 points, identify this Italian composer of the operas *William Tell* and *The Barber of Seville*.

ANSWER: Gioachino Rossini [or Gioachino Antonio Rossini] <NS>

11. A value described by this word appears in the top left of the Cayley table for the Klein-4 group. The unknot serves as this element for groups in which the knot sum is the operation. A matrix whose elements are given by the Kronecker (“KROH-nek-er”) delta is described by this term, and has (\*) ones on the main diagonal and zeros elsewhere. Multiplying an element by its inverse gives this element. For multiplication, this element is one. For 10 points, give this term that names a multiplicative property stating that any number times one is equal to itself.

ANSWER: identity <JA>

12. One component of these systems shifts via “assimilation” and “discard” in the core-frame model. Edward Ullman and Chauncy Harris proposed that these systems have “multiple nuclei,” and another man’s study of “communication routes” in these systems led him to divide them into “sectors.” Ernest Burgess’ model of these systems can be used to visualize the (\*) bid-rent curve, and features an outer ring called a “commuter zone.” These entities are based around a central business district, and are often divided according to industrial and residential land use. For 10 points, name these urban areas, where suburbs are located outside of.

ANSWER: cities [accept central business districts or CBDs prior to “nuclei”; prompt on urban areas before mention; prompt on metropolis or similar answers; do NOT accept or prompt on “towns”] <JA>

13. In this novel, a profession of love is made by writing the first letters of sentences with chalk. One character in this novel takes the lead in a horse race before the horse’s back breaks. This novel contrasts the dysfunctional marriage of Oblonsky and Dolly with the healthy relationship of (\*) Kitty and Levin. The opening sentence of this novel describes how “each unhappy family is unhappy in its own way.” Due to guilt over alienating her son and her affair with Count Vronsky, the title character of this novel throws herself under a train. For 10 points, name this novel by Leo Tolstoy.

ANSWER: Anna Karenina <WG>

14. In one work, this philosopher imagined a group of builders naming four slabs with different letters of the alphabet. This philosopher referenced the use of toy cars in Parisian traffic courts to illustrate a correspondence theory of language. He imagined someone writing the letter “S” when he has a certain sensation in a work in which he posited his (\*) “beetle in a box” thought experiment to show the incoherence of private languages. This author stated “that of which we cannot speak, we must pass over in silence.” For 10 points, name this Austrian-British philosopher who wrote *Philosophical Investigations* and *Tractatus Logico-Philosophicus* (“trak-TAH-tuss LAH-jik-koh-FIL-uh-SOPH-uh-kuss”).

ANSWER: Ludwig Wittgenstein [or Ludwig Josef Johann Wittgenstein] <NS>

15. This battle was part of an offensive against Eretria in revenge for the burning of Sardis, where the defenders were aided by troops from Plataea under Arimnestos. Cynaegirus lost his hand while trying to prevent a trireme from leaving shore during this battle. The religious Carneia festival prevented the army of (\*) Sparta from aiding in this battle. Miltiades led the winning side against the armies of Darius I in this battle. To prevent confusion, the victorious side at this battle sent the runner Pheidippides to deliver the result of it. For 10 points, name this 490 BC Athenian victory over the Persians which names a 26.2 mile race.

ANSWER: Battle of Marathon <GP>

16. A bonus track on this artist's most recent album begins each verse with the line "knock knock, let the devil in." The phrase "that's how much we have in common" is repeated on another track from that album, whose cover art is taken from that of the Beastie Boys album *Licensed to Ill*. This rapper included the songs "Not Alike" and "Venom" on his 2018 surprise-release album (\*) *Kamikaze*. Shortly afterward, this artist wrote the song "Killshot" in response to a Machine Gun Kelly diss track that mocks his songs "Not Afraid" and "Stan." For 10 points, name this Detroit-based rapper whose better-known hits include "Lose Yourself" and "The Real Slim Shady."

ANSWER: **Eminem** [accept **Slim Shady** before mention; accept Marshall **Mathers** III] <JA>

17. One class within this phylum, homoscleromorpha ("homo-SKLAIR-oh-morpha"), unusually has basement membranes. Members of this phylum use grey cells for immunity. These organisms use choanocytes ("co-ANN-nuh-sites") to move food past microvilli ("MY-kro-VILL-eye"), which absorb nutrients in the process of filter-feeding. These organisms use calcium-carbonate containing (\*) spicules ("SPY-cools") for structural support, and their bodies contain a gelatinous matrix called a mesohyl ("MESS-oh-hill"). They lack symmetry and internal organs. For 10 points, name this phylum of simple sessile, aquatic organisms.

ANSWER: **porifera** [or **sponges**] <EM>

18. In the *Gylfaginning*, Harr tells Gangleri ("gan-GLARE-ee") that this figure resides in Thrudvangar ("THROOD-van-ger") in a hall with 540 rooms. As this deity describes how he removed the frostbitten toes of her husband Aurvandil ("or-VAHN-dill"), Groa botches a spell that would remove a piece of whetstone from his head. This deity used an ox's head as bait during a fishing trip with the giant (\*) Hymir, in which this god fails to kill Jormungandr. Loki caused the dwarf Brokkr to make the handle of this god's most famous possession too short; that weapon is a hammer that always returns to its owner. For 10 points, name this wielder of Mjolnir, the Norse god of thunder.

ANSWER: **Thor** <JA>

19. One rebellion in this country that began on Ramadan was led by Yoruba slaves and was known as the Malê revolt. It's not Uruguay, but Giuseppe Garibaldi fought alongside a secessionist movement in this country during the Ragamuffin War. This country's first monarch declared its independence in the Cry of (\*) Ipiranga, and the Golden Law ended slavery in this country in 1888. This country's first monarch was Dom Pedro I, who declared its independence from Portugal. For 10 points, name this largest country in South America whose former capital was Rio de Janeiro.

ANSWER: **Brazil** [accept **Empire of Brazil**] <GP>

20. In one poem, this author describes how his heart grew "ashen and sober" after Psyche reveals to him the tomb of a lost lover. Another of this man's poems states that Death has "reared himself a throne" in a place around which the "melancholy waters lie." This author of "The City in the Sea" and "Ulalume" wrote about how a "gush of euphony voluminously wells" from the namesake (\*) tinkling objects in "The Bells." The narrator hears a "rapping at [his] chamber door" in this man's most famous poem, which describes an "ebony bird" visiting upon a "midnight dreary." For 10 points, name this American author of "The Raven."

ANSWER: Edgar Allan **Poe** <JA>

## PACKET 14 BONUSSES

1. This woman sings “America” playing Anita in the 1961 film version of *West Side Story*. For 10 points each:

[10] Name this actress. She dates Dr. Leslie Berkowitz despite her veteran daughter Penelope’s reservations in the show *One Day at a Time*.

ANSWER: Rita **Moreno**

[10] Rita Moreno often guest stars on this telenovela-inspired show featuring Gina Rodriguez as the title romance novelist, who is accidentally artificially inseminated.

ANSWER: ***Jane the Virgin***

[10] Moreno plays Cuban matriarch Lydia on this streaming service’s aforementioned show *One Day at a Time*. Other shows from this service with a red logo include *Stranger Things* and *Bojack Horseman*.

ANSWER: **Netflix** <OL>

2. A constant-volume type of these devices contains a sample in a tray, suspended in a cell called a bomb, which is surrounded by water. For 10 points each:

[10] Name these devices that measure the heat released by a chemical reaction. Isothermal titration (“tie-TRAY-shun”) and differential scanning varieties of these instruments are quite sensitive.

ANSWER: **calorimeters** (“kal-uh-RIM-i-ters”)

[10] The first law of thermodynamics states that the change in this quantity is equal to the heat transferred to a system plus the work done on the system.

ANSWER: **internal energy** [prompt on **energy**]

[10] Bomb calorimeters are often calibrated using this organic compound, which consists of a benzene ring with a single attached carboxyl group.

ANSWER: **benzoic acid** [or **benzoate**] <EM>

3. A work in this form repeats the line “I will not see it!” and commands, “Tell the moon to come, for I do not want to see the blood.” For 10 points each:

[10] Identify this genre of a poem set “At five in the afternoon,” whose subject, bullfighter Ignacio Sanchez Mejias, lies on a “coffin of wheels.”

ANSWER: a **lament** [accept “**Lament** for the Death of a Bullfighter”]

[10] “Lament for the Death of a Bullfighter” was written by this Spanish author of the poetry collection “Gypsy Ballads.” His *Rural Trilogy* contains a play in which Leonardo is killed by the Groom after running away with the Bride.

ANSWER: Federico **Garcia Lorca**

[10] Garcia Lorca depicted this author as a figure with a “beard of butterflies” with “thighs pure as Apollo’s.” Much of the nature imagery in that ode titled for this man was inspired by his *Leaves of Grass*.

ANSWER: Walt **Whitman** <NS>

4. [NOTE TO MODERATOR: EMPHASIZE THE WORDS IN QUOTATIONS]

The “natural” type of these scales are built by starting on the sixth degree of its relative major scale. For 10 points each:

[10] Identify these type of scales, other variations of which include the harmonic and melodic types. These scales tend to sound more serious and dark than their “major” counterparts.

ANSWER: **minor** scales

[10] The natural minor scale is also referred to as the Aeolian type of these music constructs. The Dorian example of these pitch systems is similar to the Aeolian type, but its sixth note is a major sixth, not a minor seventh, above the first note.

ANSWER: **modes**

[10] This composer used the Phrygian mode, the third of the seven modern modes, for his composition *Phrygian Gates*. This American composer also wrote *Nixon in China*.

ANSWER: John Coolidge **Adams** <NS>

5. Soldiers from this country were sent overseas to fight in a civil war during Operation Carlota. For 10 points each:

[10] Name this country whose Communist government sent troops to aid the MPLA in Angola. This country’s communist government came to power after a revolution overthrowing military dictator Fulgencio Batista.

ANSWER: **Cuba** [Accept Republic of **Cuba**]

[10] 700 Cuban troops stationed in this Caribbean country were removed by a 1983 American invasion in Operation Urgent Fury. The New Jewel Movement in this country was led by Maurice Bishop.

ANSWER: **Grenada**

[10] Cuba received both monetary and military aid from this country, under its premier Nikita Khrushchev. This country placed nuclear weapons in Cuba leading to the Cuban Missile Crisis with the United States.

ANSWER: **Soviet Union** [Accept **Union of Soviet Socialist Republics** and **U.S.S.R.**, prompt on ‘Russia’] <GP>

6. [NOTE TO MODERATOR: DO NOT READ THE PARENTHETICAL IN THE FIRST BONUS TO TEAMS]

This substance is secreted by type II (“two”) alveolar cells, and results in an increased value for compliance. For ten points each:

[10] Name this substance largely composed of the lipid DPPC, which, as its name implies, lowers the surface tension in alveoli.

ANSWER: pulmonary **surfactant** [do NOT reveal “pulmonary”]

[10] Surfactant is found in this organ, the primary site of gas exchange in the body. This organ contains the bronchioles, which transport air and experience inflammation in asthma.

ANSWER: **lungs**

[10] The alveoli are at the end of these tubules, which are the smallest branches of the lung’s two main bronchi. The respiratory syncytial virus can damage these structures.

ANSWER: **bronchioles** [accept terminal **bronchioles** or respiratory **bronchioles**] <AG>

7. After performing his most notable task, this man installed Dictys as ruler of the island of Seriphos. For 10 points each:

[10] Name this hero who was ordered to perform an impossible quest after failing to present a wedding gift to Polydectes.

ANSWER: **Perseus**

[10] Polydectes ordered Perseus to receive the head of this monster, the only mortal Gorgon. Perseus used this woman's severed head to turn the court of Polydectes to stone.

ANSWER: **Medusa**

[10] Perseus used one of these items to view Medusa without being struck by her petrifying gaze. In a famous example of *ekphrasis*, Homer describes the concentric design of one of them belonging to Achilles.

ANSWER: **shields** <GP>

8. A play from this period of English history features a "china scene," in which Horner, Lady Fidget, and Lady Squeamish frequently speak using double entendres. For 10 points each:

[10] Name this period, during which William Wycherley wrote his play *The Country Wife*. During this period, literature flourished under the reign of Charles II in the 17th century.

ANSWER: The English **Restoration** [or **Restoration** Comedy]

[10] Aphra Behn, a female writer during the Restoration, wrote *Oroonoko*, a short novel about a "royal" one of these people. Olaudah Equiano wrote a narrative about his time in bondage as one of these people.

ANSWER: a **slave** [or *Oroonoko*; or, *The Royal Slave*; or a **slave** narrative]

[10] This Restoration playwright wrote a comedy in which Leonidas rebels against Polydamas and becomes King of Sicily, entitled *Marriage a la Mode*. He also wrote the poem *Annus Mirabilis*.

ANSWER: John **Dryden** <NS>

9. Edward Codrington won the Battle of Navarino during this country's war for independence. For 10 points each:

[10] Name this country, which was led in its war for independence by the Filiki Eteria. This country was finally recognised as independent from Ottoman rule in 1830 through the London Protocol.

ANSWER: **Greece** [or **Ellas**; or **Elliniki** Dhimokratia; or **Hellenic** Republic]

[10] The Filiki Eteria was founded by Greeks who supported Alexander Ypsilantis, who served as a cavalry officer in this empire. This country's Baltic Fleet had a base at St. Petersburg.

ANSWER: **Russian** Empire [or **Russia**; or **Rossija**; or **Rossiya**; or **Rossiyskaya** Federatsiya; or **Russian** Federation]

[10] Greece became a monarchy in 1832, with this Bavarian prince as its first ruler. This monarch from the House of Wittelsbach was deposed in 1862.

ANSWER: **Otto** [Accept **Othon**; or **Otto** of Greece] <GP>

10. Marshall Sahlins' *Stone Age Economics* argues that hunter-gatherers were the original one of these entities. For 10 points each:

[10] Name this two-word phrase which titles an 1958 book that popularized the term "conventional wisdom." That book, by J.K. Galbraith, investigates how private wealth has grown without growing the wealth of the public sector.

ANSWER: **affluent society** (or the original **affluent society**)

[10] *The Affluent Society* argues against using this quantity as a measure of societal well-being. This quantity is defined as the total value of all goods and services produced in a country in a given time period.

ANSWER: **GDP** [or **Gross Domestic Product**]

[10] GDP is related to this quantity by Okun's law, and the Phillips curve is a plot of this quantity and inflation rate. This quantity has a frictional form, describing people who are between jobs, while its general form includes anyone without a job.

ANSWER: **unemployment** rate <GC>

11. Answer the following about Hollywood films of 1936, for 10 points each:

[10] Although 1936 was in the sound era, this actor revived his silent film character the Little Tramp and his iconic mustache and bowler hat for the movie *Modern Times*.

ANSWER: Charlie **Chaplin** [or Sir Charles Spencer **Chaplin**]

[10] *Cain and Mabel* was this kind of comedy movie popular in the '30s which often featured fast-talking, witty banter between the male and female leads. Other films in this genre include *It Happened One Night* and *Bringing Up Baby*.

ANSWER: **screwball** comedies

[10] *Swing Time* and *Follow the Fleet* were hit films for this actor and dancer. His on-screen partner Ginger Rogers was said to do everything he did, "but backwards and in high heels."

ANSWER: Fred **Astaire** [or Frederick **Austerlitz**] <WG>

12. A character in this story pointlessly asks a Black man for a match while sitting under a "No Smoking" sign. For 10 points each:

[10] Name this short story, in which Julian criticizes his mother's desire to live in an "old world" filled with racism on their way to a "reducing class" at the YMCA.

ANSWER: "**Everything that Rises Must Converge**"

[10] This Catholic author of "Everything that Rises Must Converge" wrote about a grandmother's death at the hands of the Misfit in "A Good Man is Hard to Find."

ANSWER: Flannery **O'Connor**

[10] Flannery O'Connor was a member of an American literary movement named for this region and being Gothic, adding a sinister edge to fiction set in this region, which includes O'Connor's home state of Georgia.

ANSWER: the **South** [or **Southern Gothic**] <OL>

13. This phrase was popularized by Alyssa Milano, who took inspiration from civil rights activist Tarana Burke. For 10 points each:

[10] Name this two-word hashtag that has been used to share stories and spread awareness of sexual harassment. It gained popularity after accusations directed at film executive Harvey Weinstein.

ANSWER: **#MeToo**

[10] In late 2017, this man came out as gay after Anthony Rapp accused him of making advances when Rapp was 14. In December, this actor released a creepy video titled "Let Me Be Frank" after being charged with sexual assault.

ANSWER: Kevin **Spacey** [or Kevin Spacey **Fowler**]

[10] Lou Anna Simon resigned as the president of this university after it was revealed that one of its staff doctors, Larry Nassar, had sexually abused hundreds of young gymnasts.

ANSWER: **Michigan State** University [or **MSU**] <WG>

14. Wilhelm Wien ("VEEN") developed an equation relating the wavelength of radiation emitted from these objects to their temperature. For 10 points each:

[10] Name this type of ideal object that absorbs all incoming electromagnetic radiation. The power radiated by these objects can be found via the Rayleigh-Jeans ("RAY-lee-JEENZ") law.

ANSWER: **blackbody** [or **blackbodies**]

[10] Max Planck solved this dilemma in classical mechanics, in which the Rayleigh-Jeans law drastically overestimates the power of blackbody radiation at frequencies shorter than visible light.

ANSWER: **ultraviolet catastrophe** [prompt on partial answer]

[10] Wien's relation between the emission wavelength and temperature of a blackbody is named for this physical property. This property's scalar counterpart is distance, and it is the antiderivative of velocity.

ANSWER: **displacement** <JA>



15. This musician collaborated with Billy Strayhorn on his most famous standard. For 10 points each:

[10] Name the jazz pianist and composer whose band most famously played standards such as “Take the A Train” and “It Don't Mean a Thing (If It Ain't Got That Swing)”.

ANSWER: Duke **Ellington**

[10] Ellington's album *Ellington Uptown* features a symphonic jazz composition named after this historically African American neighborhood of Manhattan, home to jazz venues like the Cotton Club and the Savoy Ballroom.

ANSWER: **Harlem**

[10] A live album by Ellington and his band is entitled “Ellington at” this New England jazz festival hosted at Fort Adams State Park. At this festival in 1971, college students protested the Vietnam War during Dionne Warwick's performance of “What the World Needs Now is Love.”

ANSWER: **Newport** Jazz Festival <NS>

16. This event took place due to a violation of the Butler Act. For 10 points each:

[10] Name this 1925 court case, where a Tennessee high school teacher was put on trial for teaching his students about evolution.

ANSWER: **Scopes** Monkey Trial [or The State of Tennessee v. John Thomas **Scopes**]

[10] This man served as counsel for the prosecution during the Scopes Trial. This former Secretary of State resigned following the sinking of the Lusitania and gave the “Cross of Gold” speech during his 1896 presidential run.

ANSWER: William Jennings **Bryan**

[10] *Two answers required.* Scopes was defended by Clarence Darrow, who had previously represented these two men for the murder of Bobby Franks. These two University of Chicago students murdered Franks to commit the “perfect crime.”

ANSWER: Nathan **Leopold** & Richard **Loeb** (LOWB) <GP>

17. A building made of this material is transported from Sydney to Bellingen, 400 kilometers up the coast of New South Wales. For 10 points each:

[10] Name this material. Lucinda gambles that Oscar cannot transport a church made of this material in the novel *Oscar and Lucinda*. Lucinda also buys a factory that produces this material in the beginning of the novel.

ANSWER: **glass**

[10] This Australian novelist penned *Oscar and Lucinda* and also fictionalized the Australian outlaw Ned Kelly in his novel *True History of the Kelly Gang*.

ANSWER: Peter **Carey**

[10] Carey's novel *Jack Maggs* was inspired by Abel Magwitch, a character in this Charles Dickens novel. In this novel, the orphan Pip lives with Mrs. Havisham and longs for Estella.

ANSWER: **Great Expectations** <NS>

18. The sum of two random variables following this distribution also follows this distribution, according to Cramér's decomposition theorem. for 10 points each:

[10] The central limit theorem claims that the sum of independently distributed random variables approaches what distribution?

ANSWER: **normal** distribution [or the **Gaussian** distribution; prompt on **bell curve**]

[10] Normal distributions are often defined by their means and by this quantity, which is definitionally the square of the standard deviation.

ANSWER: **variance** [prompt on **sigma squared**; don't accept or prompt on "covariance"]

[10] When the standard deviation is unknown, a distribution named for this letter, which is characterized by its degrees of freedom, is used instead of the normal distribution. The test named for this letter is used instead of the z-test for small samples.

ANSWER: **t** [accept Student's **t** distribution or Student **t** test] <VS>

19. A painting by John Waterhouse depicts this woman sitting on a log in a white dress next to a lily pond. For 10 points each:

[10] Identify this figure who lies face up in a river in a painting by John Everett Millais. In that painting, Elizabeth Siddal models as this deceased figure.

ANSWER: **Ophelia**

[10] Elizabeth Siddal also modeled for the painting *Beata Beatrix* by an artist with this last name who also *The Blessed Damozel*. The sister of that artist with this surname, Christina, was the model for the Virgin Mary in *The Girlhood of Mary Virgin*.

ANSWER: **Rossetti** [accept Dante **Rossetti** or Christina **Rossetti**]

[10] John Everett Millais and Dante Rossetti were two artists from this English movement which sought to resurrect classicism by rejecting a certain Renaissance painter's art.

ANSWER: **Pre-Raphaelite Brotherhood** [accept **PRB**] <NS>

20. During this monarch's reign, Wenzel Kaunitz allied the kingdom with France in the Diplomatic Revolution of 1756. For 10 points each:

[10] Name this monarch, whose succession to the throne of Austria was allowed after many European powers accepted Charles VI's Pragmatic Sanction. She lost Silesia to Frederick the Great in the Seven Years War.

ANSWER: **Maria Theresa** [or **Maria Theresia** Walburga Amalia Christina]

[10] Maria Theresa dispatched Gerard van Swieten to investigate rumours about these figures. These figures are often associated with Transylvania, with a famous fictional one being inspired by the cruelty of Vlad the Impaler.

ANSWER: **vampires**

[10] This son of Maria Theresa enacted many liberal reforms, such as liberating the serfs. His attempt to exchange the Netherlands for Bavaria was stopped by Frederick the Great's Furstenbund alliance.

ANSWER: **Joseph II** [prompt on **Joseph**] <GP>