2019 Wayzata Academic Invitational Tournament
Written by Ashwin Halepet, Amogh Kulkarni, Brian Lin, Bryanna Shao, Cece Shao, and Ben Weiner Head edited by Carsten Gehring, with Rob Carson, Geoffrey Chen, Tora Husar, Joe Kammann, and Brian Sachs
Packet 8

## Tossups

1. This figure hid his organs in the mountains before letting a maiden kill him four times. This character is killed by the Spider People, who use his skin to give colors to all the animals. After this character fakes his death to kill other animals, ( ${ }^{*}$ ) Skunk steals the big carcasses from this character and leaves only the tails behind. This character's life is spared after he offers to make new horns for Buffalo Bull. After his death, this man's wife, Changing Bear, kills all but one of her brothers in retaliation. For 10 points, name this canine trickster in Native American mythology.
ANSWER: Coyote <AK> Ed. TH
2. In the introduction to this work, two pianos simultaneously play ascending and descending C major scales before concluding with unison G major chords. Another section of this composition imitates piano students badly playing their scales. In this work's fourth section, the lower strings play a slowed-down version of (*) Offenbach's Galop Infernal. A movement of this work that was used for a ballet performed by Anna Pavlova follows one in which xylophones quote the composer's own Danse Macabre. For 10 points, name this suite that includes "Tortoises," "Fossils," and "The Swan," by Camille Saint-Saëns [kah-mee san-sahns].
ANSWER: The Carnival of the Animals [accept Le carnaval des animaux] <CS> Ed. RC
3. The "destructive" form of this technique is often applied to coal and occurs through a pyrolysis reaction. The optimal number of equilibrium stages in this technique, called theoretical plates, can be determined using the McCabe-Thiele method. Oil refineries transform crude oil into (*) petroleum products by using the fractional form of this process. A mixture of $96 \%$ ethanol and $4 \%$ water cannot be separated using this process, as that mixture is an azeotrope. For 10 points, name this lab technique that separates by boiling liquid mixtures.
ANSWER: distillation [accept destructive distillation; accept fractional distillation] <AH> Ed. GC
4. Over 4,000 of these works were written by Richard Wright. A master of these types of works who used a pen name meaning "cup of tea" is Issa. An anthology of these works organized around the seasons is titled Monkey's Raincoat. These (*) poems are collected in a journal describing travels with Sora called Narrow Road to the Deep North. The author of that travelogue wrote one of these poems that describes the sound a frog makes when it jumps into a pond. For 10 points, what Japanese form of poetry with a three-line, 5-7-5 syllable structure was often written by Basho?
ANSWER: haiku [prompt on "poem" before mention] <BS> Ed. JK
5. Community justice courts called gacaca ran for ten years to prosecute crimes that occurred during this event. Romeo Dallaire led a response to this event and received French assistance in Operation Turquoise. A key participant in this event was the youth wing of the MRND party, known as the Interahamwe. President ( ${ }^{*}$ ) Paul Kagame has denied responsibility for the plane crash that started this event, which was sparked by the assassination of President Juvénal Habyarimana. For 10 points, name this 1994 event in which hundreds of thousands of Tutsis were killed by Hutus.
ANSWER: Rwandan genocide [accept equivalents] <BL> Ed. TH
6. This organization was criticized for permitting ancestor worship in the Chinese rites, which were introduced by Matteo Ricci. Titus Oates fabricated a plot about this group assassinating Charles II of England. Members of this order use the text (*) Spiritual Exercises as a guide for their training. Members of this organization like Francis Xavier partook in missionary work in India, and this organization founded Georgetown University. Pope Paul III approved the formation of, for 10 points, what Catholic order founded by Ignatius of Loyola whose membership includes Pope Francis?
ANSWER: Jesuits [or Society of Jesus; prompt on "Catholic Church"] <BL> Ed. TH
7. This man described a scenario in which a helicopter suddenly drops a bunch of money to propose an alternative to quantitative easing. This man's k-percent rule advocates for increasing the money supply by a set amount each year. A book by this man and Anna (*) Schwartz blamed the introduction of the gold standard for causing the long depression of the 1870s. This man stated that "inflation is always and everywhere a monetary phenomenon." For 10 points, name this Nobel laureate who wrote Capitalism and Freedom and who was a member of the Chicago school of economics.
ANSWER: Milton Friedman <BL>Ed. GC
8. This statement applies to any set of variables that obey a canonical commutation relationship. Formally, this statement is written as "the product of the standard deviations of a pair of conjugate variables is greater than or equal to the reduced Planck constant over two." This statement is named after a scientist who formulated the (*) matrix mechanics formulation of quantum mechanics. The observer effect is often confused with, for 10 points, what principle of quantum mechanics that states it is impossible to simultaneously measure both the position and momentum of a particle?
ANSWER: Heisenberg uncertainty principle [or Heisenberg uncertainty principle] <BW> Ed. GC
9. In this novel, two characters use cigars to bribe their way onto a hospital train. A character in this novel makes pancakes during a bomb raid and finds his mother is sick with cancer when visiting home. In this novel, the protagonist kills the printer Gerard Duval, and (*) Katczinsky is killed by shrapnel. Before dying in this novel, Kemmerich asks for his boots to be given to Müller. Corporal Himmelstoss is cruel to his men before becoming a cook in this novel. The title phrase of this novel is the army report from the day Paul Bäumer dies. For 10 points, name this World War I novel by Erich Maria Remarque.
ANSWER: All Quiet on the Western Front [accept Im Westen nichts Neues] <CS> Ed. JK
10. A national park in this state contains the Kolob Canyons and features a vantage point called Angels Landing. Visitors walking along the Queens Garden Trail in a park in this state can see such features as Thor's Hammer. A national park in this state is home to a canyon known as the (*) Fiery Furnace; that park in this state is serviced by the town of Moab [moh-ab]. A national park in this state has features named "Landscape" and "Delicate" that are made of curved red sandstone. For 10 points, name this western American state home to Bryce Canyon, Zion, and Arches National Parks.
ANSWER: Utah <BL> Ed. BS
11. This painting was stolen on the first day of the 1994 Olympics, and a man formerly convicted of stealing Vampire, a work by the same artist, was charged with the crime. A poem in the frame of one version of this work describes the speaker "shivering with anxiety." This work is part of the (*) Frieze of Life and depicts two men in black emerging from its left side. Nacreous clouds common in Scandinavia or the eruption of Krakatoa are theories for the swirling orange sky in this painting. A distended figure clutching his head performs the title action in, for 10 points, what Edvard Munch painting?
ANSWER: The Scream [accept Der Schrei der Natur; accept Skrik] <CS> Ed. TH
12. In this religion, the Daena appears to souls who were good in life, who are then guided to the House of Song. An important symbol in this religion is the Faravahar. In this religion, Atar is a visible form of the creator god. This religion is practiced in South Asia by Parsees. In this religion, Ahriman and the $\left.\mathbf{(}^{*}\right)$ Spenta Mainyu are the embodiment of the destructive and creative spirits, respectively. The primary text of this religion is the Avesta, and this religion worships the creator god Ahura Mazda. For 10 points, name this Persian religion, named after its prophet.
ANSWER: Zoroastrianism [or Zarathustrianism; accept Mazdayasna] <AH> Ed. JK
13. The $S$ variant of this protein is caused by a mutation in the gene that codes for the beta chain of this protein. This protein is mutated in thalassemias [tha-luh-sem-ee-us]. The Bohr and Haldane effects describe how changes in pH and carbon dioxide level, respectively, affect the function of this protein. This protein consists of (*) four rings of porphyrin bound around a single metallic atom. A point mutation in this protein can cause sickle cell anemia. For 10 points, name this iron-containing protein that is used for oxygen transport and is found in red blood cells.
ANSWER: hemoglobin [accept S-hemoglobin] <BW> Ed. GC
14. On this show, two characters are forced to relocate to Coral Palms, Florida, after being threatened by Jimmy "The Butcher" Figgis. Characters on this show despise Keith Pembroke from Major Crimes, whom they nickname "The Vulture." The Pontiac Bandit, Doug Judy, has a crush on (*) Rosa Diaz on this show. During this show's fifth annual Halloween heist, an engraved cummerbund was used for Amy Santiago and Jake Peralta's engagement. For 10 points, name this sitcom following a New York City police precinct that stars Andy Samberg.
ANSWER: Brooklyn Nine-Nine <CS> Ed. JK
15. In one story by this author, "the joy that kills" is the cause of Mrs. Mallard's death after she sees her husband alive. In another story by this author, Armand Aubigny burns letters revealing that he is part black. This author of "The Story of an Hour" and (*) "Désirée's Baby" wrote a novel that opens with a squawking parrot and features the piano-playing Mademoiselle Reisz [rice]. In that novel by this author, the protagonist cheats on Léonce with Robert LeBrun and commits suicide by walking into the Gulf of Mexico. For 10 points, name this author who wrote about Edna Pontellier in The Awakening. ANSWER: Kate Chopin <BS> Ed. JK
16. This man left his mentor's organization after learning of his extramarital affairs with multiple secretaries. This man described the assassination of John F. Kennedy as "chickens coming home to roost." In a speech, this man stated that "you sure don't catch hell 'cause you're an American . . . you catch hell because you're a black man." This speaker of the "Message to the Grass Roots" and (*) "The Ballot or the Bullet" dropped his last name to represent his lost tribal name upon joining the Nation of Islam. For 10 points, name this leader of the Black Power movement who was assassinated in 1965.
ANSWER: Malcolm X [or Malcolm Little; accept El-Hajj Malik El-Shabazz] <BW> Ed. TH
17. A character in this play exclaims, "Had I your tongues and eyes, I'd use them so that heaven's vault should crack," after a character's death. A blind character in this play claims that "as flies to wanton boys are we to the gods" before jumping off an imaginary cliff. A character in this play disguises himself as Tom ( ${ }^{*}$ ) O'Bedlam. Another character in this play commits suicide after poisoning her sister to win over Edmund, who is killed by Edgar. For 10 points, name this Shakespearean tragedy in which the title ruler divides his lands between his daughters Regan, Goneril, and Cordelia.
ANSWER: King Lear <AK> Ed. JK
18. In reaction to the colorization of this film, one furious critic asked, "Why not put arms on the Venus de Milo?" A character in this film holds the protagonist at gunpoint, to which he replies that she "would be doing him a favor." In this film, that character pursues letters that have been entrusted to the protagonist by $\left(^{*}\right)$ Ugarte and is told "we will always have Paris." "As Time Goes By" is played by the pianist Sam at the request of Ilsa in this film. For 10 points, name this film in which Humphrey Bogart plays café owner Rick Blaine in the title Moroccan city.
ANSWER: Casablanca < BW> Ed. JK
19. The last leader of this empire was assassinated at a military parade by Pushyamitra, who established the Shunga empire to replace this empire. A minister of this empire who served under Bindusara was Chanakya, who wrote the Arthashastra. The Indika was written by Megasthenes, a (*) Greek diplomat who visited this empire. One ruler of this empire gave Seleucus I 500 war elephants, and another ruler of this empire built a lion capital originally found at Sarnath and converted to Buddhism after the Kalinga War. For 10 points, name this ancient Indian empire ruled by Chandragupta and Ashoka the Great.
ANSWER: Mauryan Empire [or Mauryan Dynasty] <AK> Ed. TH
20. The built-in "lang" attribute in this language can be used to discern what language a given phrase is in. The canvas element was added to the latest version of this language. Any program in this language must begin with a DOCTYPE declaration, while the rest of the program relies on tags, which are placed within $\left(^{*}\right)$ angle brackets in this language and can be used to create heads and line breaks. This language, created by Tim Berners-Lee, is augmented by CSS and can embed Javascript programs. For 10 points, name this markup language that is used to build most web pages.
ANSWER: HTML [or hypertext markup language] <BL> Ed. GC
Tiebreaker: A work by this composer begins with an E minor French overture before changing to E major for the tenor recitative [REH-suh-suh-TEEV]. Another of his works is divided into three suites, the first of which, in F major, includes a popular air and bourrée [boo-RAY] and the second of which, in D major, contains an "Alla Hornpipe"; that work by this composer premiered on the (*) River Thames. George II is said to have started the tradition of standing during a chorus of one of this man's works that repeats, "And he shall reign for ever and ever." For 10 points, name this German composer of Water Music who included the "Hallelujah Chorus" in his oratorio Messiah. ANSWER: George Frideric Handel [or Georg Friedrich Händel] <CS> Ed. RC

## Bonuses

1. Arrested protesters in this city were detained in the San Uk Ling prison, where alleged abuse has led to the hospitalization of several inmates. For 10 points each:
[10] Name this Asian city where riots broke out in June 2019 after an extradition bill was passed.
ANSWER: Hong Kong [or Xiang Gang]
[10] Protesters have demanded the resignation of this chief executive of Hong Kong. She has widely been seen as a puppet of the Communist Party.
ANSWER: Carrie Lam [or Làhm Jehng Yuht-ngòh]
[10] This social media platform, operated by the Chinese company Bytedance, has been accused of suppressing videos of the Hong Kong protests. Its Chinese counterpart is the app Douyin [doe-yin]. ANSWER: TikTok <BL> Ed. BS
2. Answer these questions about trees in mythology, for 10 points each.
[10] This world tree in Norse mythology serves as an axis mundi and links the nine realms. The serpent Nidhogg gnaws at the roots of this tree.
ANSWER: Yggdrasil
[10] In Greek mythology, the dragon Ladon guards a tree bearing these items in the garden of the Hesperides. Eris threw one of these specific fruits at the wedding of Peleus and Thetis.
ANSWER: golden apple [prompt on "apple"]
[10] In a Slavic myth, this sorcerer's soul was hidden in a needle that was inside an egg inside a duck inside a rabbit inside a chest buried under a tree. This sorcerer was killed by Prince Ivan.
ANSWER: Koschei [kosh-SHAY] the Deathless <AH> Ed. TH
3. This action first occurred in Guangdong in 1991. For 10 points each:
[10] Name this achievement that has since occurred in 1999, 2015, and, most recently, July 2019, when a team captained by Alex Morgan defeated the Netherlands 2-0 in Lyon.
ANSWER: United Ştates Women's National Team winning the FIFA Women's World Cup [accept equivalents for United States; accept answers containing either "soccer" or "football" to specify the sport; prompt on answers not specifying either which country won or which gender the players are]
[10] Along with Alex Morgan and Carli Lloyd, this forward and outspoken LGBT and women's rights advocate captained the USWNT during the 2019 tournament. She also won the Golden Boot and Golden Ball awards.
ANSWER: Megan Anna Rapinoe
[10] After scoring the winning penalty kick for the United States in the 1999 World Cup final, Brandi Chastain did this specific action while celebrating. This action made the cover of Sports Illustrated but was criticized for being unfeminine.
ANSWER: removing her shirt [accept clear equivalents, such as taking her shirt off] <BW> Ed. JK
4. Topological mixing occurs in systems displaying this behavior. For 10 points each:
[10] Name this behavior in which small changes in initial conditions can drastically alter the evolution of the system. The butterfly effect is an example of it.
ANSWER: chaotic [accept word forms]
[10] A double one of these systems is a canonical example of chaos. Foucault names one of these systems that tracks the rotation of Earth.
ANSWER: pendulums [or double pendulum; or Foucault pendulum]
[10] This man's namesake "attractor," which resembles a figure eight, is a chaotic set of solutions to his namesake system.
ANSWER: Edward Lorenz [accept Lorenz attractor; accept Lorenz system] <AH> Ed. GC
5. This character puts a red-hot boiled potato down Bill Driscoll's back and attempts to scalp him. For 10 points each:
[10] Name this character, who is kidnapped from Summit, Alabama, in an attempted ransoming. Bill and Sam end up paying two hundred and fifty dollars to return this character to his father.
ANSWER: Red Chief [accept Johnny Dorset; accept "The Ransom of Red Chief"; prompt on "Dorset"] [10] This writer of "The Ransom of Red Chief" is known for his twist endings. His short story "The Gift of the Magi" follows Della as she finds a present for Jim.
ANSWER: O. Henry [accept William Sydney Porter]
[10] In this O. Henry story, Soapy attempts to get arrested to spend the cold winter in jail, but when he decides to change his life and find purpose, he is arrested for loitering.
ANSWER: "The Cop and the Anthem" <CS> Ed. JK
6. This statement serves the same purpose as the french "C.Q.F.D." and the German "w.z.b.w." For 10 points each:
[10] Name this three-word Latin phrase, or its abbreviation, that translates as "what was to be shown." It is commonly found after the completion of a mathematical proof.
ANSWER: quod erat demonstrandum [or qed]
[10] Constructing a mathematical proof often involves assuming the truth of some of these statements, despite the fact that they have not been proven. Euclidean geometry is based off five of these statements. ANSWER: axioms [or postulates]
[10] A controversial axiom in the theory of these objects is the axiom of choice. These objects are an unordered collection of elements, and the empty one has no elements.
ANSWER: sets [or set theory; or empty set] <BW> Ed. GC
7. This leader commanded the winning side at the Battle of Carchemish, which saw a decisive victory against an Egyptian and Assyrian army. For 10 points each:
[10] Name this son of Nabopolassar, the Babylonian king who allegedly constructed the Hanging Gardens.
ANSWER: Nebuchadnezzar II [prompt on "Nebuchadnezzar"]
[10] In the Bible, Nebuchadnezzar II ordered the destruction of this Jewish religious structure when he captured Jerusalem. This structure was originally constructed by the son of King David.
ANSWER: Solomon's Temple [accept First Temple; accept Beit HaMikdash; prompt on "Temple in Jerusalem"]
[10] Events during the reign of Nebuchadnezzar II were recorded using this script, which was used to write Sumerian and Akkadian. This writing system was originally used to write the Enuma Elish, and it was first developed in the city of Uruk.
ANSWER: cuneiform <BL> Ed. TH
8. While serving as assistant secretary of the navy, Theodore Roosevelt telegraphed the earliest orders for this American victory. For 10 points each:
[10] Name this decisive 1898 naval battle that saw Patricio Montojo's fleet defeated by an American naval squadron and ended Spanish influence in the Philippines.
ANSWER: Battle of Manila Bay [accept Batalla de Bahia de Manila; accept Battle of Cavite]
[10] This only US admiral of the navy in history commanded American forces at the Battle of Manila Bay. He gave the famous order to "fire when you are ready" to Charles Gridley, the commander of the Olympia.
ANSWER: George Dewey
[10] Roosevelt sent Dewey orders to prepare for an attack at Manila Bay 10 days after the sinking of this US warship in Havana Harbor, an event dramatized by William Hearst and Joseph Pulitzer.
ANSWER: USS Maine <BL> Ed. TH
9. This composer set five poems by Yevgeny Yevtushenko in his choral Thirteenth Symphony, which is titled Babi Yar. For 10 points each:
[10] Name this Soviet composer who was repeatedly accused of "formalism"; after the first such denunciation, he subtitled his Fifth Symphony "A Soviet Artist's Response to Justified Criticism." ANSWER: Dmitri (Dmitriyevich) Shostakovich
[10] Shostakovich's Seventh Symphony was written during the 872-day siege of, and was titled for, this Russian city. The symphony's "invasion" theme symbolizes the attacking Wehrmacht [VAIR-makt].
ANSWER: Leningrad [accept Leningrad Symphony; do not accept or prompt on "St. Petersburg"] [10] Shostakovich composed both 15 symphonies and 15 works in this genre, the popular eighth of which is built around the "DSCH" motif and is dedicated to "victims of fascism and the war."
ANSWER: string quartets <BW> Ed. RC
10. This man designed a monument that includes a skeletal personification of Death holding up an hourglass as a memento mori. For 10 points each:
[10] Name this sculptor of The Tomb of Pope Alexander VII. That tomb is in the same building as this man's Baldacchino [ball-duh-KEY-noh], which is situated above that building's high altar.
ANSWER: Gianlorenzo Bernini
[10] Bernini's Baldacchino is largely made of this material. Benvenuto Cellini's [chay-LEE-nee] Perseus with the Head of Medusa is also made of this material.
ANSWER: bronze
[10] This Bernini sculpture depicts an angel pointing a spear toward the title woman. Golden rays appear in the background of this work, which is located in the Cornaro Chapel.
ANSWER: Ecstasy of St. Theresa [or St. Theresa in Ecstasy; or Transverberation of St. Theresa; or
L'Estasi di Santa Teresa; or Santa Teresa in Estasi] <BS> Ed. TH
11. This work discusses three stages that an individual undergoes: "thrown-ness," existence, and "fallenness." For 10 points each:
[10] Identify this book that proposes the concept of Dasein to refer to the concept of "being there."
ANSWER: Being and Time [or Sein und Zeit]
[10] Being and Time was written by this German philosopher, a student of Edmund Husserl.
ANSWER: Martin Heidegger
[10] Heidegger supported this political ideology, as did many other German thinkers at the time.
Heidegger's anti-Semitic Black Notebooks are considered to support this ideology.
ANSWER: Nazism <AK> Ed. GC
12. This technique makes use of a polymerase from Thermus aquaticus. For 10 points each:
[10] Name this process that is used to amplify DNA. Its three steps are denaturing, annealing, and elongation.
ANSWER: polymerase chain reaction [accept PCR]
[10] The specific DNA primer used in PCR is often identified using this sequence alignment algorithm found on the NCBI website. It is also often used to compare the similarity of nucleotide sequences.
ANSWER: BLAST [or basic local alignment search tool]
[10] Taq polymerase is used in PCR due to it having a high resistance to extreme values of this quantity. Thermophiles by definition live at extremely high values of this quantity.
ANSWER: temperature [or heat] <BW> Ed. GC
13. This author wrote an allegorical work where he meets a lion, a leopard, and a she-wolf. For 10 points each:
[10] Name this author who walks through the gates of Hell, which are marked "abandon all hope, ye who enter here." Virgil guides this author through the nine circles of Hell in his Inferno.
ANSWER: Dante Alighieri
[10] In the second circle of Hell, Dante encounters a woman who had an affair with her brother-in-law, leading to both being killed by her husband, Gianciotto. Give the name of either the woman or her brother-in-law.
ANSWER: Paolo Malatesta or Francesca da Rimini [accept Francesca da Polenta; prompt on "Malatesta" or "da Rimini" or "da Polenta"]
[10] This woman leads Dante through Paradise in The Divine Comedy. She is the inspiration for Dante's La Vita Nuova.
ANSWER: Beatrice di Folco Portinari [accept either underlined answer] <BS> Ed. JK
14. The word Bismillah, meaning "in the name of God," appears in this work 114 times. For 10 points each:
[10] Sharia law is interpreted using hadith and this holy text of Islam, which was revealed to the prophet Muhammed.
ANSWER: Quran [accept Koran]
[10] The Quran is divided into 114 of these, which in turn are divided into verses called āyāt. The second and longest one of these is named for a cow.
ANSWER: sura
[10] This term refers to people who can recite the Quran from memory. These people follow tajweed, a set of rules for proper pronunciation.
ANSWER: $\underline{\text { hafiz }<B S>E d . ~ J K ~}$
15. In this opera, a woman's tarot cards foretell her death. For 10 points each:
[10] Name this opera by Georges Bizet. This work's first act begins outside a cigarette factory where the title character flirts with a group of soldiers before being arrested for attacking another woman with a knife.

## ANSWER: Carmen

[10] This aria from the first act of Carmen is based on "El Arreglito," a piece by Sebastián Iradier. Carmen sings that "love is a rebellious bird" in this aria, which shares its name with a popular Cuban dance.
ANSWER: "Habanera" [or "L'amour est un oiseau rebelle"]
[10] Carmen convinces this admirer to free her from arrest by singing a seguidilla. He sings the duet
"C'est toi? C'est moi!" with Carmen before stabbing her when she rejects him for Escamillo.
ANSWER: Don José <BS> Ed. TH
16. In a novel by this man, a teenager attempts to date his friend's sister Sonoko but is disappointed that he can't bring himself to love her. For 10 points each:
[10] Name this writer who described the homosexual Kochan in Confessions of a Mask. He committed seppuku in 1970 after launching a failed coup.
ANSWER: Yukio Mishima [accept Hiraoka Kimitake]
[10] Mishima's final works were this tetralogy, which includes the novels Spring Snow and Runaway Horses. This tetralogy describes the life of Shigekuni Honda and his attempts to save incarnations of his friend Kiyoaki.
ANSWER: The Sea of Fertility tetralogy [accept Hojo no Umi]
[10] In another novel, Mishima described Mizoguchi, who tries to burn down this type of religious structure after being told to kill the Buddha.
ANSWER: temple [accept Temple of the Golden Pavilion; accept Kinkaku-ji; prompt on "Golden Pavilion"] <BL> Ed. JK
17. After a struggle for power against his brother Radu the Handsome, this man sought aid from Matthias Corvinus, the king of Hungary, who instead framed him for treason and kept him as a prisoner for 12 years. For 10 points each:
[10] Name this Wallachian voivode who terrified the Turks by burning villages and killing people at the stake.
ANSWER: Vlad the Impaler [or Vlad III; or Vlad Dracula; or Vlad Tepes; prompt on "Vlad"; prompt on "Dracula"]
[10] This sultan was surprised by Wallachian troops during the Night Attack at Targoviste [ter-GOH-vish-te], after which Vlad impaled 20,000 Turks. This sultan also invaded Serbia and captured Constantinople. ANSWER: Mehmed II [accept Mehmed the Conqueror; accept "Mehmet" in place of "Mehmed"] [10] Wallachia later became part of this country after it entered a union with Moldavia. Transylvania later decided to join this country, then ruled by King Ferdinand I.
ANSWER: Kingdom of Romania <BL> Ed. TH
18. This man resigned from power to allow his handpicked successor, Manuel González, to step in but retook power in 1884 after González disappointed him. For 10 points each:
[10] Name this leader who was overthrown by Francisco Madero in 1911. He originally seized power after the Battle of Tecoac.
ANSWER: Porfirio Díaz
[10] Díaz's dictatorial rule of this country was known as the "Porfiriato." Diaz had earlier helped instate Benito Juarez as president of this country.

## ANSWER: Mexico [or United Mexican States; or Estados Unidos Mexicanos]

[10] José Yves Limantour led this group of technocrats who advised the Díaz regime from 1895 onward. Members of this group, such as Justo Sierra and Manuel Romero Rubio, were inspired by August Comte's positivist philosophy.
ANSWER: Científicos [or $\underline{\text { scientists }}$ ] <AK> Ed. TH
19. The system of interest remains at a constant value of volume in the "bomb" form of this technique. For 10 points each:
[10] Identify this technique used to measure the heat evolved by a chemical reaction. It is often conducted using a pair of nested coffee cups.
ANSWER: calorimetry [accept bomb calorimetry; accept coffee-cup calorimetry; accept calorimeters]
[10] In coffee-cup calorimetry, instead of volume, this quantity is constant. This quantity is measured in pascals.
ANSWER: pressure
[10] Bomb calorimeters are typically calibrated using this molecule, which contains a $\mathrm{C}_{6} \mathrm{H}_{5}$ ring attached to a COOH group.
ANSWER: benzoic acid [or benzenecarboxylic acid] <BL> Ed. GC
20. This character's bride Elizabeth dies on the eve of their wedding. For 10 points each:
[10] Name this scientist whose creation kills his friend Henry Clerval. This man refuses to make another creation, saying their "joint wickedness might desolate the world."
ANSWER: Dr. Victor Frankenstein [accept either underlined answer]
[10] This ship captain rescues Victor Frankenstein in the Arctic. Frankenstein's frame narrative centers on this man's letters to his sister, Margaret.
ANSWER: Captain Robert Walton
[10] This author of The Last Man, an apocalyptic novel about Lionel Verney, wrote Frankenstein. ANSWER: Mary Wollstonecraft Shelley <CS> Ed. JK

