1. In Miledi's oocyte expression assay, mRNA is injected into *Xenopus*, and then this quantity is measured to determine expression levels. The *Drosophila* Shaker mutation was in a protein that regulates this value. Proteins that respond to changes in this quantity have six alpha helices and an N-terminal "ball" or "inactivation segment." Patch clamps measure this quantity. The Goldman equation gives this quantity as a function of concentration of three ions. This quantity increases during depolarization, decreases during hyperpolarization, and during the refractory period, remains below the resting level of negative 60 millivolts. It determines whether or not potassium channels are open. For 10 points, name this quantity which changes during an action potential.
ANSWER: **membrane potential** [or **membrane voltage**; prompt on partial answer]

2. In this play, a man complains about seeing a maid at a library and tells a woman that girls should not learn to read. A character in this play confronts his lover in her dressing room after learning that she had been singing and dancing in his absence. This play climaxes at King's-Mead-Fields, where one character is upset to learn the identity of "Delia," the object of his love letters. In this play, Lucius O'Trigger convinces Bob Acres to challenge "Ensign Beverly" to a duel over Lydia Languish, unaware that he is actually Jack Absolute. For 10 points, name this play that features the mangled speech of Mrs. Malaprop, a work of Richard Sheridan centered on some competing suitors.
ANSWER: The ***Rivals***

3. This president founded Arienespace and replaced his prime minister with Pierre Messmer due to opposition to the "New Society." As prime minister, this man negotiated an end to a student crisis at the Grenelle conference. This man was sent to conduct secret negotiations with the FLN in Algeria in 1961. He convinced de Gaulle to adopt key reforms that diffused the student strikes of 1968. He is the namesake of a center for the arts designed by Renzo Piano and Richard Rodgers. For 10 points, name this successor to de Gaulle and Prime Minister of France from 1969 until 1974.
ANSWER: Georges **Pompidou**

4. In one play by this author, Fred Clarke, a Senator's son, endeavors to convince the title character to blame her assault on a black man; the political bent of that play enacts the call he made for "committed literature" in *What is Literature?* In another play he wrote, the ruler of Argos removes a boulder once a year to let ghosts haunt his city. This author, who created the sex worker Lizzie in *The Respectful Prostitute,* wrote a play in which Orestes refuses to feel guilt for killing Clytemnestra. This writer used a room decorated with Second Empire Furniture as the backdrop for Garcin's realization that "Hell is other people." For 10 points, name this author of *The Flies* and *No Exit*.
ANSWER: Jean-Paul **Sartre**

5. The Met's collection includes a series of scenes from the life of this man painted by Francesco Granacci. Salai was the model for the final painting by Leonardo da Vinci, which depicts this man pointing upwards. Caravaggio painted eight total depictions of this man, including one in which the only instance of the artist's signature is spelled out in this man's blood. This man was frequently painted holding either a staff or a very thin cross and wearing a camel's-hair shirt. This boy brings water in *Christ in the House of His Parents,* and he is the leftmost person in da Vinci's *Madonna of the Rocks.* For 10 points, name this saint who usually shows up in Western art with his mother Elizabeth or as a decapitated head presented by Salome.
ANSWER: **John the Baptist** [prompt on **John**]

6. A doorbell in this film appears to set off a distortion-producing device inside a different house. Early on, the camera tilts down signs reading "HURT," "AGONY," "PAIN," "LOVE-IT," as the protagonist jogs through woods. Another character poses as a disfigured body to divert an ambulance to an airport. This film's villain is shot after a tense sequence seen from the perspective of his night vision goggles. This film alternates overhead shots of a screaming woman with low angle shots of a man holding a rope and bucket. The male star of this Jonathan Demme film ate a liver with fava beans and a nice chianti. For 10 points, name this 1991 film in which FBI agent Clarice Starling hunts serial killer Buffalo Bill with the help of Hannibal Lecter.
ANSWER: The ***Silence of the Lambs***

7. William Cullen Bryant died after a fall following a speech in which he dedicated a bust of this man in Central Park. This man started a boys school and published a newspaper called *Apostleship of the People* while in exile in London. The anarchist Mikhail Bakunin founded the International Brotherhood in part to resist the political movements inspired by this man, who published the journal *Thought and Action*. He rose to prominence by publishing an open letter to Charles Albert calling for a constitutional government for Piedmont, and later in his career he sent Felice Orsini to start an unsuccessful revolt in Carrara. Among this man's proposals were to create a "Holy Alliance of the Peoples" to combat monarchies and create a United States of Europe. For 10 points, name this revolutionary Italian leader of the Risorgimento who founded Young Italy.
ANSWER: Guiseppe **Mazzini**

8. A microscopic mechanism that causes this phenomenon is called microvoid coalescence, and in one regime, the strain energy release rate caused by this process is equal to the J integral. The "conchoidal" type of this phenomenon begins at a swelling called the "bulb of percussion". Considering the surface-energy increase caused by this process leads to a derivation of Griffiths' criterion for it. This phenomenon occurs in three different modes: opening, in-plane, and out-of-plane. This phenomenon is marked by an X on the end of a stress-strain curve, and it happens more easily in brittle materials than ductile materials. For 10 points, name this phenomenon in which an applied stress causes a material to break in two.
ANSWER: **fracture** [or **crack**ing]

9. This man's chief herdsman, Doeg, was responsible for murdering many priests. While relieving himself in a cave, he has the very end of his robe cut off by one of his enemies. The question "is this man among the prophets?" refers to incidents in which he joined ecstatic prophets playing music. This person becomes irritated at a chant about him only slaying

"thousands" as opposed to his future son-in-law slaying "tens of thousands." He married his daughter Michal off to a man who supplied him with two hundred Philistine foreskins. This man, the father of Jonathan, is calmed by a shepherd boy's harp playing. That youth killed Goliath in service of this ruler, but this man eventually tried to kill David. For 10 points, name this ruler from First Samuel, the first king of Israel.
ANSWER: **Saul**

10. In this city, William Barbour sympathized with the demands of 400 rabbis who were organized by Hillel Kook. A 1997 event was held in Philadelphia to address the sexism of another event held in this city, which ran parallel with the National Day of Absence. Graphic novel author John Lewis was the youngest speaker at another event held in this city, which was dominated by the "Big Six." Despite concerns about his homosexuality, Bayard Rustin was appointed deputy organizer of that event in this city. Louis Farrakhan called for the Million Man March in this city, in homage to an earlier event here, "for Jobs and Freedom," which was organized by Asa Philip Randolph. For 10 points, name this city, home to a 300,000-strong 1963 march attended by Martin Luther King Jr.
ANSWER: **Washington, D.C.** [or **D.C**; or **District of Columbia**]

11. Jeffrey Eugenides repeatedly denied that this other author was the basis for the manic-depressive Leonard Bankhead in Eugenides' book about Brown University grads, *The Marriage Plot.* He called himself a "semi-agoraphobe" in an essay about his time aboard the *Zenith,* a grating cruise ship. Michael Pietsch helped edit and finish a novel by this author set largely in a Peoria, Illinois IRS office. This author of "A Supposedly Fun Thing I'll Never Do Again" also wrote about an addictive film produced by James Incandenza, whose son Hal attends the Enfield Tennis Academy. For 10 points, name this frequently bandana-clad author who left *The Pale King* unfinished at the time of his suicide and wrote *Infinite Jest.*
ANSWER: David Foster **Wallace**

12. This country's coastal Sawa people host the aquatic Ngondo festival. This country has mined bauxite in the city of Edéa, near a namesake geologic "line" of volcanoes which runs northeast-to-southwest into the ocean and includes the island of Bioko. This country's namesake "ghost shrimp" live in the Wouri river estuary. This country, which, like Togo, was transferred from German to French control after World War I, trades through its port of Douala on the Bight of Biafra. For 10 points, name this country which has helped a neighboring country fight Boko Haram after resolving a boundary dispute with Nigeria to its northwest.
ANSWER: Republic of **Cameroon**

13. 168 orientation-preserving automorphisms exist for this man's namesake Riemann surface quartic. This man proposed classifying geometries according to group theory and projective geometry in his 1872 manifesto, the Erlangen program. While at Gottingen, this man served as a doctoral adviser to Grace Chisholm Young, the first female mathematics Ph.D. recipient there. An immersion of another object named for this man resembles a twisted figure 8. That object only requires six colors for map coloring, making it the sole exception to the Heawood conjecture, and is a one-sided 2-manifold with no boundary that is non-orientable, like the Mobius strip. For 10 points, name this German mathematician who devised a namesake bottle.
ANSWER: Felix **Klein** [or Christian Felix **Klein**]

14. A text set in this place is framed by Echecrates's questions for a person who was there. An occupant of this place dreams of a woman clad in white who says to go to Phthia three days hence. One conversation in this locale concerns whether tallness is inherent to Simmias, or if Simmias is merely relatively tall compared to others. A woman named Xanthippe breaks down crying in this place, a few days after her husband describes himself as too thoroughly nurtured by his city's laws to defy its judgment against him. This is the setting of a discussion of the immortality of the soul in the *Phaedo*. For 10 points, name this place from which Crito proposes an escape in his namesake dialogue, where Socrates drank hemlock.
ANSWER: **Socrates' prison** cell [accept any answer indicating the **prison** of ancient **Athens**; or Socrates' **deathbed**; prompt on **prison**; prompt on **jail**; prompt on **Athens**]

15. When Bernard of Italy challenged this man's right to the throne, he had Bernard blinded, a procedure from which Bernard died. A conspiracy against this man was successful at exiling his wife, Judith of Bavaria. This man's mother was Hildegard, and his brothers Charles the Younger and Pippin of Italy died before he became king. One of this man's sons defeated the other after the arrival of Count Guerin of Chalon in the Battle of Fontenoy. This man reformed the divisions in his empire with the *Ordinatio imperii*. After this man's death, his land was divided in the Treaty of Verdun among Lothair, Louis the German, and Charles the Bald. For 10 points, name this fourth monarch of the Carolingian Empire, the grandson of Pepin the Short and the son of Charlemagne.
ANSWER: **Louis the Pious** [or **Louis I of France**; or **Louis the Debonair**; or **Louis the Fair**]

16. The Brookings-SSRC Project was a major effort led by Lawrence Klein in this discipline. The hedonic index is a popular metric in this discipline. Popular approaches to this discipline include the Cowles Commission and LSE approaches. The coiner of the modern sense of this term was the co-winner of the first Nobel Prize in Economics, Ragnar Frisch. A robust technique in this discipline, which measures interdependencies between time series, is vector autoregression. This field of economics uses the OLS method to estimate parameters in linear regression models. For 10 points, name this approach of applying computer science and statistics to economics.
ANSWER: **econometric**s [prompt on **economic**s; prompt on **macroeconomic**s; prompt on **microeconomic** s]

17. A composer based in this city employed an unusual augmented seventh to separate the two parts of his *Quid non ebrietas.* That man, Adrian Willaert, founded this city's namesake music school. A composer working in this city produced the influential *Sacrae symphonie,* which motivated Heinrich Schutz to move here and become his pupil. This city was home to a convent for abandoned girls where the so-called "Red Priest" served as a violin teacher. Monteverdi was the chief proponent of the opera of this city, home to a theater nicknamed "The Phoenix." Organ music flourished in this city in part due to the two choir lofts of St. Mark's Basilica. For 10 points, name this city where the barcarolle developed from the folk songs sung by gondoliers.
ANSWER: **Venice**

18. A namesake parameter of this theory is normalized by the Racah parameter on the x-axis of Tanabe-Sugano diagrams. That parameter's relation to the pairing energy determines whether complexes are "high spin" or "low spin" in this theory. Oddly, the neutral molecule carbon monoxide induces the largest value for that parameter, placing it rightmost on the spectrochemical series, which reveals the limitations of this theory as it predicts the opposite due to being an ionic model that disregards covalent interactions. This theory is used to explain the color and magnetic properties of coordination compounds. For 10 points, name this Hans Bethe-developed theory that describes the electronic structure of d-block transition metals.
ANSWER: **crystal field theory** [or **CFT**]

19. The protagonist of this novel resolves, "One day I would be a better hand at the game. One day I would learn how to laugh" after being played music by Handel distorted on a gramophone. A woman who dissuades this novel's protagonist from a plan to commit suicide on his fiftieth birthday later appears as his male, childhood friend at a costume ball. This novel opens with a preface narrated by its protagonist's landlady's nephew and includes an interpolated "Treatise" on the title character written by the Immortals. At its climax, the protagonist stabs Hermine after finding her naked on the floor with Pablo in the Magic Theater. For 10 points, name this Herman Hesse novel that compares Harry Haller with the title wild animal.
ANSWER: *Steppenwolf* [or Der *Steppenwolf*]

20. Pelias murdered his evil stepmother Sidero in a temple to this deity, who held a grudge against Pelias afterwards. After this deity poisoned the water supply of Aegina, the island was repopulated by ants that were turned into humans. This goddess was once trapped by a magical throne. This goddess blinded Tiresias for his opinion in the great sex enjoyment debate. Chelone was transformed into a tortoise for refusing to attend the wedding of this goddess, which happened soon after she was seduced in the form of a cuckoo. She once tossed Hephaestus out of Mount Olympus. For 10 points, name this goddess who was vengeful against the many mistresses of her husband Zeus.
ANSWER: **Hera** [or **Juno**]

21. In this novel, a woman divorces her second husband after finding him having sex with the maid Babette. A 48-year-old Senator in this novel falls into the snow and dies from a rotten tooth extraction shortly after reading a chapter of *The World as Will and Idea.* In this novel, Erica's failed marriage to Herr Weinschenk echoes her mother's two failed marriages to Herr Permaneder and Herr Grunlich. Christian's sexual deviance puts him at odds with his brother Tom in this novel, whose other major characters include the pair's sister, Tony. In this novel, Johann and Jean the Consul foster a dynasty that ends with Hanno's death from typhoid. For 10 points, name this Thomas Mann novel recounting generations of a merchant family in Lübeck.
ANSWER: *Buddenbrooks*

22. Charles Steidel discovered a pair of emitters of this phenomenon, one of which was dubbed the "Newfound Blob". A cloud within Cetus called "Himiko" is noted for emitting this line strongly, and a type of galaxy named for this distant phenomenon are used to study dark matter distribution and show this phenomenon due to bursts of star formation. It has a wavelength of around 1215 angstroms, which is equal to 4 over three times the Rydberg constant. In quasar spectra, the region next to the Gunn-Peterson trough contains a series of lines caused by this transition, known as its namesake forest. For 10 points, name this spectral line that is caused by the electronic transition from the $n = 2$ to $n = 1$ state in a hydrogen atom.
ANSWER: **Lyman-alpha** line [prompt on **ultraviolet** or **UV**]

23. The American president in office during this event rationalized not flying the flag at half-staff because he hadn't lowered the flag for "school children killed in Belfast." It did not take place in Norway, but a military operation during this event, codenamed Operation Sunshine, failed miserably when media crews broadcast the preparations on television. A group of participants in this event named themselves after a 1970 war between Jordan and the PLO. In the aftermath of this event, Ahmed Bouchiki was killed as part of Operation Wrath of God after being mistaken for Ali Hassan Salameh in Lillehammer, Norway. This event began when eight terrorists belonging to Black September snuck into the apartment complex that housed the Israeli wrestling team. For 10 points, name this event which marred the 1972 Summer Olympic Games in a certain German city.
ANSWER: **Munich Massacre** [or 1972 **Black September Munich** attack until "Black September" is read; or **1972 Munich Olympic Games attack**; or logical equivalents; prompt on partial answer]

1. The attempt against this man's life succeeded only because he decided to visit hospitalized victims of another attack against him. For 10 points each:
[10] Name this Austro-Hungarian ruler whose assassination along with his wife Sophie triggered the start of World War I.
ANSWER: Archduke Franz **Ferdinand**
[10] Ferdinand's assassin Gavrilo Princip was a member of this secret Serbian society. Another member of this group tried to kill himself following the aforementioned failed bombing by jumping into the Miljacka River, but survived because the river was only five inches deep.
ANSWER: **Black Hand**
[10] As inspector-general, Franz Ferdinand complained constantly about the lack of loyalty and money coming from this segment of the army, exacerbating tensions within the empire.
ANSWER: **Hungarian** army units [or **Honvédség**]

2. Identify some sleep disorders, for 10 points each.
[10] This condition is marked by a person entering REM sleep almost immediately upon falling asleep, which contributes to sudden episodes of extreme drowsiness during the day.
ANSWER: **narcolepsy** [or **narcoleptic**]
[10] A ventilator mask which causes a positive pressure airflow into the windpipe is necessary to treat this disorder, when the normal breathing pattern during sleep is interrupted. It is frequently caused by relaxation of neck muscles in older patients.
ANSWER: sleep **apnea**
[10] People with this condition have the extremely unpleasant phenomenon of experiencing loud noises while falling asleep. This disorder is hypnagogic, which means it takes place during the transition towards sleep.
ANSWER: **exploding head** syndrome [prompt on "hypnagogic hallucination"]

3. Answer the following about the recently-deceased British Marxist historian Eric Hobsbawm, for 10 points each.
[10] Hobsbawm wrote about the "long" version of this century, which extended outside its calendrical bounds from the French Revolution to World War I. Germany unified in this century.
ANSWER: **19th** century CE [or **1800s** CE; accept answers indicating "AD" in place of "CE"]
[10] A rogue from this place named Salvatore Giuliano is a key example in Hobsbawm's historical study of bandits. A social code called *omerta* developed here.
ANSWER: **Sicily** [or **Sicilia**; prompt on **Italy**]
[10] Hobsbawm advised this Labour Party leader, who served as Leader of the Opposition after Michael Foot during the late premiership of Margaret Thatcher and the early premiership of John Major.
ANSWER: Neil Gordon **Kinnock**

4. This novel's narration alternates between first-person "I," second-person "you," and third-person "he." For 10 points each:
[10] Name this 1962 novel whose title character is banished from Coyuca for killing his uncle Pedro. Then, he kills Gonzalo, the brother of his future wife Catalina, to inherit land from his father-in-law Don Gamaliel.
ANSWER: The **Death of Artemio Cruz** [or La **muerte de Artemio Cruz**]
[10] *The Death of Artemio Cruz* is by this Mexican author.
ANSWER: Carlos **Fuentes**
[10] This other novel set during the Mexican Revolution focuses on Demetrio Macias, who summons up a rebel group and joins Pancho Villa's army. It was written by Mariano Azuela.
ANSWER: The **Underdogs** [or Los **de abajo**]

5. This inland sea was formed by the encroachment of a finger of the Cordilleran Ice Sheet into the Idaho Panhandle, forming a two thousand foot ice dam on the Clark Fork River. For 10 points each:
[10] Identify this glacial lake in Montana whose catastrophic floods shaped much of the Northwest, including the Channeled Scablands.
ANSWER: Glacial Lake **Missoula**
[10] This is the technical term given to the Missoula floods and other catastrophic releases of water from subglacial reservoirs or ice-dammed lakes. They frequently occur to Lake Grímsvötn (KRIMS-voet-uhn), located under Vatnajökull (VAHD-na-yoe-kutl).
ANSWER: glacier **outburst flood**s [or sub-glacial lake **outburst flood**s; or GL**OF**s; or **jökulhlaup**; prompt on **flood**s]
[10] The jökulhlaups (YOE-cull-louieps) experienced by Vatnajökull (VAHD-na-yoe-kutl) are usually a result of eruptions of the subglacial variety of these geologic structures, which melt the ice.
ANSWER: **volcano**s

6. At the end of this play, Alexandra leaves her mother and her plans for their future in Chicago after the tragic death of her father. For 10 points each:
[10] Name play in which Benjamin and Oscar Hubbard steals bonds from Horace, the husband of their sister Regina.
ANSWER: The **Little Foxes**
[10] *The Little Foxes* was written by this American playwright who also wrote about an evil girl named Mary in *The Children's Hour.*
ANSWER: Lillian **Hellman**
[10] In *The Little Foxes,* the Hubbard brothers plan to construct one of these facilities, another of which is owned by John Thornton in Elizabeth Gaskell's *North and South.*
ANSWER: **cotton mill** [prompt on **mill**; prompt on **factory**]

7. Moderator note: Do not reveal alternate answers to the first part. Near the end of this symphony's first part, the full force of the chorus declaims "Accende lumen sensibus." For 10 points each:
[10] Name this 1906 symphony, a setting of both the hymn "Veni Creator Spiritus" and the closing words of Goethe's *Faust,* that is scored for an extremely large orchestra.
ANSWER: "**Symphony of a Thousand**" [or **Symphony No. 8 in E-flat major**; or **Mahler's 8th** symphony; accept **Mahler's E-flat major** symphony]
[10] This late-Romantic Austrian composer of the *Symphony of a Thousand* could have beaten the curse of the ninth had he chosen to regard his *Das Lied von der Erde* as a symphony.
ANSWER: Gustav **Mahler**
[10] An alto solo sings Nietzsche's "Midnight Song" in a movement representing "What Man Tells Me" in this symphony, easily Mahler's longest even without its originally-envisioned seventh movement.
ANSWER: Symphony No. **3** [or **Third** Symphony]

8. One piece of this type by this artist was created for the set of Erik Satie's *Socrate,* and was recreated forty years later just before the artist's death. For 10 points each:
[10] Name this artist-specific kind of piece, examples of which include *Mountains and Clouds, The Four Elements,* and a *Mercury Fountain* intended as a memorial for a siege during the Spanish Civil War.
ANSWER: Alexander **Calder's mobile**s [or **mobile**s by Sandy **Calder**; prompt on **Calder sculpture**s; prompt on partial answer]
[10] The best-known of Calder's mobiles is this painted steel wire and sheet aluminum construction that hangs from the ceiling at the MoMA.
ANSWER: ***Lobster Trap and Fish Tail***
[10] Although Calder was the artist best known for creating mobiles, the term was actually coined by this French sculptor of many readymades who signed a urinal "R. Mutt."
ANSWER: Marcel **Duchamp**

9. For 10 points each, answer these questions about women from the Ulster Cycle of Irish myth.
[10] This hero of the Ulster Cycle defeats the evil queen Medb at the Cattle Raid of Cooley.
ANSWER: **Cu Chulainn**
[10] This woman became pregnant with Cu Chulainn after staying in the house of the sun god Lugh, where her kinsmen were resting while hunting a flock of birds.
ANSWER: **Dechtire** [or **Deichtine**]
[10] Dechtire's brother, Conchobar mac Nessa, marries this beautiful woman and kills her true love Naoise. She smashes her head on a stone.
ANSWER: **Deirdre**

10. The United States denied this man a visa in 2005 for his role in failing to stop a riot that killed approximately 1,000 Muslims following a 2002 train fire in Godhra. For 10 points each:
[10] Name this former chief minister of Gujarat who was elected the new prime minister of India in May 2014.
ANSWER: Narendra **Modi**
[10] Narendra Modi is a member of this party, which advocates a policy of hindutva in opposition to the secularist policies of Congress. Two-time prime minister Atal Bihari Vajpayee was also a member of this party.
ANSWER: **BJP** [or **Bharatiya Janata Party**; or **Indian People's Party**]
[10] The chief campaigner of the Congress Party in the 2014 Indian elections was this member of a political dynasty. Labeled a "reluctant prince," he represented Amethi in Parliament.
ANSWER: **Rahul Gandhi** [prompt on **Gandhi**; prompt on **R. Gandhi**]

11. This kind of material consists of atoms in two different phases of matter: liquid and Bose-Einstein condensate. For 10 points each:
[10] Name this type of material first discovered by Heike Kammerlingh Onnes.
ANSWER: **superfluid**
[10] Kammerlingh Onnes first discovered superfluidity in the liquid form of this element, whose 3 and 4 isotopes have, respectively, one and two neutrons.
ANSWER: **helium** [or **He**]
[10] At the lambda point, there is a discontinuity in the graph of this quantity vs. temperature. The lambda point is so named because of the shape when this quantity is plotted vs. temperature.
ANSWER: **heat capacity** [or **specific heat** capacity; or **thermal capacity**]

12. These two words were used to justify the Supreme Court's decision to uphold the AAA's criminalization of farmers exceeding their own quota in the 1942 decision *Wickard v. Filburn*. For 10 points each:
[10] Name this three-word-phrase that appears in a clause of Article One of the Constitution. This clause allows the Federal Government to pass laws not expressly listed among the powers mentioned in the Constitution.
ANSWER: **necessary and proper** clause [or **elastic** clause; or **basket** clause; or **coefficient** clause; or **sweeping** clause]
[10] In this 1819 case, the Supreme Court ruled that the Necessary and Proper clause allowed Congress to create a National Bank, and that a certain state lacked the ability to tax it.
ANSWER: ***McCulloch** v. Maryland* [or ***Maryland v. McCulloch***]
[10] Though she wasn't referring to the Clause, Ruth Bader Ginsburg lamented the ban of a "necessary and proper" surgical procedure in her dissent in this 2007 decision upholding the Partial-Birth Abortion Ban Act.
ANSWER: *Gonzales v. **Carhart*** [or ***Carhart** v. Gonzales*]

13. Towns of this civilization included Dholavira and Kalibangan, the latter of which was located on the now-dry Ghaggar-Hakra River. For 10 points each:
[10] Name this ancient civilization that may have been the first to use indoor plumbing and grow cotton, and which largely settled around a namesake Asian river.
ANSWER: **Indus** Valley Civilization [or **Harappa**n Civilization]
[10] This city excavated after Harappa was the largest city of the civilization, with a population that may at one time have been over 40,000.
ANSWER: **Mohenjo-daro**
[10] Mohenjo-Daro is the site of this structure, which was almost three meters deep and had a bitumen lining.
ANSWER: **Great Bath**

14. A "Sama" is a ritualized form of dhikr practiced among members of this branch, whose orders include the Mevlevi and Bektashi. For 10 points each:
[10] Identify this mystical branch of Islam, some of whose followers practice a type of meditation which involves whirling around in a circle.
ANSWER: **Sufi**sm
[10] A popular Sufi practice is to visit these locations belonging to their favorite Sufi guru. The one belonging to Muhammad has a green dome above it.
ANSWER: **tomb** [or **grave**; accept reasonable equivalents]
[10] Salafis and others often accuse Sufis of this practice, which roughly translates as "polytheism". More precisely, this is the sin of worshipping or ascribing godlike attributes to idols, and is the only unforgivable crime in Islam.
ANSWER: **shirk**

15. Education is a positive one of these things, and corporate pollution is a negative one. For 10 points each:
[10] Name this economic phenomenon by which a transaction has an effect on a third party.
ANSWER: **externality** [or **externalities**]
[10] The effects of a negative externality are supposed to be corrected by levying one of these taxes on a transaction that causes a negative externality.
ANSWER: **Pigouvian** taxes
[10] Ronald Coase, whose theorem deals with the effect of externalities on efficiency, also wrote about the "nature" of this entity, the basic actor studied in microeconomics.
ANSWER: the **firm**

16. Lagrange showed that as long as the value d isn't a square number, then this equation has an infinite number of solutions. For 10 points each:
[10] Name this Diophantine equation of the form x squared minus d y squared equals 1.
ANSWER: **Pell**'s equation
[10] The Pell numbers can be derived by setting d equal to this value, then rearranging. This number is the order of the heat equation and wave equation.
ANSWER: **2** [or **second**]
[10] This Indian mathematician invented the chakravala method of solving Pell's equation and other indeterminate quadratic equations. He also names a formula for computing the area of cyclic quadrilaterals from their side lengths and created rules for working with the number zero.
ANSWER: **Brahmagupta**

17. This person sits high atop a chariot in the final painting of a series in the Ducal Palace of Mantua. For 10 points each:
[10] Name this military leader whose standard bearers, vase bearers, captives, and musicians also figure into that Mantegna series about his *Triumphs*.
ANSWER: Gaius **Julius Caesar** [prompt on **Caesar**]
[10] This other painter created a head of Julius Caesar as a study for a *Tribute* to the Roman. This "faultless painter," whose name means "son of a tailor," depicted the Madonna and child standing atop a pedestal decorated with harpies.
ANSWER: Andrea del **Sarto** [or Andrea **d'Agnolo** di Francesco di Luca di Paolo del Migliore; or Andrea **Vannuchi**]
[10] In 1524, Del Sarto fled Florence and took refuge from the plague in a Camaldolese convent. He thanked the church by painting them one of these scenes of Mary cradling the dead Jesus.
ANSWER: *Pieta*

18. William Wordsworth's preface to *Lyrical Ballads* criticized a sonnet by this poet for using imagery of the god Phoebus. For 10 points each:
[10] Name this alumnus of Eton College, who reminded readers that "all that glisters [is not] gold" in an ode for a cat that drowned in a tub of goldfish.
ANSWER: Thomas **Gray**
[10] Gray wrote that "the paths of glory lead but to the grave" in this poem, which opens as "the curfew tolls the knell of parting day" near the title gloomy locale.
ANSWER: "**Elegy Written in a Country Churchyard**"
[10] After noting that "Some mute inglorious Milton here may rest," Gray writes that someone like this leader, "guiltless of his country's blood," might rest in the churchyard.
ANSWER: Oliver **Cromwell**

19. Terrence McNally wrote two short plays about this author's namesake "syndrome," by which people collapse upon being overwhelmed by art. For 10 points each:
[10] Name this author who wrote about Fabrice del Dongo's imprisonment during and after the Napoleonic wars in *The Charterhouse of Parma.*
ANSWER: **Stendhal** [or Marie-Henri **Beyle**]
[10] In Stendhal's *The Red and the Black,* Julien Sorel has to choose between two institutions symbolized by the title colors. Specify which institution is symbolized by each color.
ANSWER: **red** represents the French **army** AND **black** represents the Catholic **church** [prompt on answers such as the **army** and the **clergy** which do not specify which color is which]
[10] At the end of *The Red and the Black,* Mathilde does this to a specific part of Julien Sorel's dead body.
ANSWER: she **kiss**es his severed **head** on the brow [prompt on **kissing**]

20. This country is home to Ostroh Castle and the Livadia Palace. For 10 points each:
[10] Name this country, where the Sophia Cathedral and the massacre site Babi Yar are found in the environs of its capital.
ANSWER: **Ukraine**
[10] This autonomous region in Ukraine has its capital at Simferopol and juts into the Black Sea. The namesake "Tatars" of this region were expelled by Stalin.
ANSWER: the **Crimea**n Peninsula
[10] Crimea was once home to a surviving dialect of this ethnic group's namesake language, whose major written text is a Bible translated by Ulfilas.
ANSWER: **Goth**s

21. The ninth section of this poem is filled with exclamations, such as "Throb, baffled and curious brain! Throw out questions and answers!" For 10 points each:
[10] Name this poem which asks "What is the count of the scores or hundreds of years between us?" and begins "Flood-tide below me! I see you face to face!"
ANSWER: "**Crossing Brooklyn Ferry**"
[10] "Crossing Brooklyn Ferry" is part of this Walt Whitman collection, a large chunk of which consists of "Song of Myself."
ANSWER: *Leaves of Grass*
[10] In "Song of Myself," Whitman answers a child asking, "What is the grass?" with a series of speculations culminating in this famous final six-word definition.
ANSWER: "the **beautiful uncut hair of graves**"