

## Harvard Fall Tournament IX

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Questions by Will Holub-Moorman, Raynor Kuang, Sriram Pendyala, Robert Chu, Mark Arildsen, Catherine Wu, Roger Jin, and Vimal Konduri



Round 5

Tossups

1. **This man married the princesses Parysatis and Stateira in a mass wedding he ordered at Susa, and besieged the mountain of Pir-Sar at the end of his Cophen Campaign. Rumors of an assassination plot led him to order the deaths of Philotas and Parmenion, and he killed Cleitus the Black during a drunken quarrel. This man built a (\*) causeway to capture the Phoenician city of Tyre. The period after this ruler's death is generally termed the Hellenistic period, and it his death also spurred a series of wars between the Diadochi. This man rode the horse Bucephalus and cut the Gordian knot. For 10 points, name this student of Aristotle and conquering king of Macedonia.**

ANSWER: **Alexander the Great** [accept **Alexander III** of Macedonia; prompt on "Alexander"]

2. **The Ediacaran fossil *Arkarua adami* is contentiously classified by some as the first animal of this phylum. Phagocytic cells called coelomocytes are produced by pouches called Tiedemann's bodies in organisms of this phylum. Usually, water enters organisms in this phylum through light-colored calcareous openings called madreporites. These organisms have (\*) ampullae down the length of their radial canals, which are connected to small suckerlike podia. These coelomates use the water vascular system and exhibit radial symmetry. This phylum's name literally means "spiny skinned." For 10 points, name this invertebrate phylum including sand dollars and starfish.**

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

3. **The murder of Louis Stolz by a leper in this polity prompted an 1893 invasion. The end of this polity's occupation by Britain during the Paulet Affair is celebrated on this polity's Restoration Day. Inappropriate revolutionary activities in this polity were discussed in the Blount Report, which was contradicted by the (\*) Morgan Report. A counterrevolution by Robert Wilcox followed the passage of this polity's Bayonet Constitution. Planters led by Sanford Dole staged a coup against the monarchy of Queen Liliuokalani [lily-o-kal-AH-nee] in this polity, creating a republic annexed by the United States in 1898. For 10 points, name kingdom that later became the fiftieth U.S. state.**

ANSWER: Kingdom of **Hawai'i**

4. **The child form of this god was adopted into Greek mythology as the god of silence Harpocrates. This god assumed the form of the winged disk Behdet according to inscriptions in the Temple of Edfu, which was dedicated to this god. This god entered into various "Contentings" over 80 years with another god, one episode of which saw this god paint a stone (\*) boat to trick his rival into racing with it. This god's four sons represent the cardinal directions and were personified as canopic jars. The *wedjat* symbolizes one of this god's eyes, which was torn out in battle with his uncle Set. For 10 points, name this son of Osiris and Isis who is depicted with a falcon's head.**

ANSWER: **Horus**

5. In one tradition, this act is preceded by placing the thumb and two fingers on the foot of Christ, and a version of this action occurs on Cheese-fare Sunday. One justification for this act is taken from John 20, after Jesus is resurrected and says to his disciples, “receive the Holy Spirit.” For this act to be fulfilled, the stages of disclosure, satisfaction, and (\*) contrition must be completed, after which absolution may be pronounced. An obscuring grille and a duty to secrecy on the part of the minister ensures the privacy of this sacrament. For 10 points, name this sacrament of penance which typically begins with a person saying “Forgive me Father, for I have sinned.”  
ANSWER: confession [accept reconciliation, accept Sacrament of Penance before read]

6. This composer’s second piano concerto opens with a short solo for the French horn and closes with a five section *Allegretto grazioso* movement. This composer adopted a *chaconne* [sha-COHN] theme from a Bach cantata for the passacaglia fourth movement of his E minor fourth symphony, which opens with the violins playing descending thirds and (\*) ascending sixths. This composer wrote an orchestral overture whose finale features the tune of “Gaudeamus igitur,” and set text from the German Luther Bible in a large-scale sacred work. For 10 points, name this composer of the *Academic Festival Overture* and *A German Requiem*.  
ANSWER: Johannes Brahms

7. In its fifth chapter, this book criticizes the “solipsism” of Freudianism for elevating its title concept into a “scientific religion.” This book’s second chapter analyzes changes in publications like *Redbook* and *McCall’s*, and opens by discussing the “problem that has no name.” The author of this book went on to serve as the first president of (\*) NOW, and argued in this book that a certain group has been conditioned to search for fulfillment in homemaking. This book led to a wave of second wave American feminism upon its release in 1963. For 10 points, name this book that explored the reasons for housewives’ unhappiness in the 1950s, a work by Betty Friedan.  
ANSWER: *The Feminine Mystique*

8. In a painting of this type set on the US-Mexico border, four pipes spelling the word “FORD” billow steam onto a floating American flag. In a painting of this type by Marc Chagall, the Eiffel Tower is visible through a window and the central figure has seven fingers. Parmigianino included a (\*) convex mirror in a painting of this type, and in one by Albrecht Durer, the central figure wears a fur coat and assumes a Christ-like pose against a black background. For 10 points, name this genre of painting frequently used by Frida Kahlo and which Vincent Van Gogh used to depict himself “with bandaged ear.”  
ANSWER: self-portraits [accept self-portraits by Frida Kahlo until “Marc Chagall” is read].

9. The speaker of one poem by this author declares, “I cannot rub the strangeness from my sight / I got from looking through a pane of glass.” Another poem by this author describes “stars where no human race is” and earlier declares, “They cannot scare me with their empty spaces.” The speaker of another of this author’s poems describes “easy wind and (\*) downy flake” before referring to his surroundings as “lovely, dark, and deep.” That poem ends with the repeated statement “And miles to go before I sleep.” For 10 points, name this author of “Desert Places,” “Apple-Picking,” and “Stopping By Woods on a Snowy Evening.”  
ANSWER: Robert Frost

10. In one work by this author, a character tells the story of the cowardly “Not-I bird” while in a marketplace, and two characters offend their servant by donning ancestral clothes for a costume party. The title character of that work by this author strangles himself with chains after the suicide of his son. Another work by this author has a famous scene in which Ailatu plucks out his armpit hairs, and depicts the fight between (\*) Baroka and Lakunle for the affections of Sidi. Simon Pilkings attempts to stop the ritual suicide of Elesin Oba in another play by this author. For 10 points, name this Nigerian playwright of *The Lion and the Jewel* and *Death and the King’s Horseman*.

ANSWER: Wole Soyinka

11. Each of these curves is equivalent to a 3 by 3 symmetric matrix, whose determinant is zero if the curve is degenerate. These curves also correspond to points in the 5-dimensional projective space  $P^5$  [“p five”], meaning 5 points on a plane uniquely determine one of these curves. For a gravitational two-body problem, the two masses move in these curves with respect to the (\*) barycenter. Pappus of Alexandria is credited with discovering that any curve in this family can be generated from a focus and directrix. The eccentricity of one of these curves determines if one of these curves is a circle, ellipse, parabola, or hyperbola. For 10 points, name these curves formed by the intersection of a cone and a plane.

ANSWER: conic sections [anti-prompt (ask for less specific) on “parabola”, “hyperbola”, “ellipse” or “circle”]

12. In one film from this country, a girl stabs her stepfather during an attempted rape, after which her mother hides the body in a freezer. In a scene from a film set in this nation, a character eats a grape, causing a sleeping figure to pick up two eyeballs from a plate and place them into the palms of his hands. A film by a director from this country opens with the image of a (\*) razor slitting Simone Maruiel’s eyeball. In a film set during this country’s civil war, Ofelia is given three tasks to complete by a faun. For 10 points, name this home country of Pedro Almodovar, also the setting of *Pan’s Labyrinth* and Luis Buñuel’s *Un Chien Andalou*, which was co-created with Salvador Dali.

ANSWER: Kingdom of Spain [accept Reino de España]

13. This practice resulted in the creation of the Chinese *booï aha*, and led to the formation of the Siddi in India and Pakistan. Elmina Castle was a key site in this practice, which was authorized by Nicholas V’s papal bull *Dum Diversas*. This practice led to the formation of *quilombos*, or Maroon communities, and this practice was outlawed by the successive Rio Branco and (\*) Golden Laws during the reign of Pedro II in Brazil. This practice was opposed by William Wilberforce throughout his career. For 10 points, name this practice, opposition to which was led by Toussaint L’Ouverture in a Haitian revolt, and which involved the transportation of Africans via the Middle Passage.

ANSWER: slavery [or the slave trade, accept more specific answers]

14. Tom Perriello’s brother’s gas line was cut after his address was posted online by members of this group. This group got its start with a rant against “losers” by Rick Santelli on the floor of the Chicago Mercantile Exchange. The “Gadsden Flag” is frequently found at rallies for this group. This group supported David Brat’s 2014 defeat of Eric (\*) Cantor, and in 2013, non-profit organizations associated with this group were flagged for review by Lois Lerner’s division of the Internal Revenue Service. For 10 points, name this contemporary American conservative political movement of people who believe they are “Taxed Enough Already.”

ANSWER: Tea Party [accept Teabaggers]

15. For a 2D semiconductor with a low density-of-states, the quantum value for this quantity is equal to the density-of-states times the fundamental charge squared. Some touch screens and electronic fingerprint readers function using a “coupling” of this quantity caused by the proximity of human skin. The value of this quantity per unit length is equal to  $2\pi\epsilon_0$  over the log of the ratio of the (\*) outer to inner radii, for a coaxial cable. This quantity is proportional to area and inversely proportional to distance for parallel plates. For 10 points, name this quantity with unit farad that measures the stored charge per unit voltage, often in a namesake electronic component.

ANSWER: capacitance [accept word forms]

16. In a John Keats poem, Endymion retreats to one of these locations “of Quietude.” In *The Faerie Queene*, Sir Guyon accompanies Mammon back to one of these locations laden with riches. While in one of these locations, a character asks a doctor how many wives he has and later accuses him of (\*) sexually assaulting her in that location. While trapped in one of these locations, a character tells another that his name is “Nobody” and later drives a stake through that character’s eye. For 10 points, name these literary locations, examples of which include ones at Marabar in E.M. Forster’s *A Passage to India* and one guarded by Polyphemus in *The Odyssey*.

ANSWER: caves [accept the Marabar Caves]

17. At one point in this novel, a character shoots a pistol in a theater, causing banknotes to fall from the ceiling. At the beginning of this novel, a woman breaks a jug of sunflower-seed oil, leading another character to slip and be decapitated by a tram. That character in this novel is the head of a literary society housed in (\*) Griboyedov’s House called MASSOLIT. In this novel, a poet is sent to an insane asylum, where he meets the author of a manuscript about the execution of Yeshua Ha-Notsri. In this novel, the cat Behemoth accompanies Satan, who is disguised as a professor named Woland. For 10 points, name this novel by Mikhail Bulgakov.

ANSWER: *The Master and Margarita*

18. In the Wurtz coupling, two alkyl halides are reacted with this element to form an alkane. In the Birch reduction of benzene to produce 1,4-cyclohexadienes, the reducing agent is this element dissolved in ammonia. The borohydride salt of this element cannot reduce esters, but is commonly used to reduce aldehydes and ketones to alcohols. Both the older Castner process and the newer (\*) Downs cell process produce this element by electrolysis. Fraunhofer first saw this element’s prominent D lines in the spectrum of the sun. This element’s hydroxide is the main component of lye, and its bicarbonate is known as baking soda. For 10 points, name this second alkali metal whose chloride is table salt.

ANSWER: sodium [prompt on “Na”]

19. The Ordinance of Labourers was passed during this event to control a sharp rise in wages associated with it, and the *geisslerlieder* were sung by the Brothers of the Cross during this event. Baldassarre Bonaiuti wrote a notable chronicle of this event in Florence, which provides the frame story for a collection of a hundred stories written by Giovanni (\*) Boccaccio. This event may have been introduced to Europe via Caffa, and is usually attributed to rats carrying fleas that transmitted the *Yersinia pestis* bacteria. For 10 points, name this event which saw an outbreak of disease in the 14th century which killed over a third of Europe’s population.

ANSWER: The Black Death [accept Black Plague but prompt on any other sort of “plague”]

20. In one work, this thinker argued that the only people who should seek truth are those who “love” truth in itself. That work was responded to by another thinker in a chapter-by-chapter rebuttal framed as a dialogue between Theophilus and Philaethes. This author criticized the *Patriarcha* of Robert Filmer for supporting the (\*) divine right of kings in a work which also claims that a monarch can be overthrown if he does not protect his people. This thinker argued against innate knowledge and described the mind as a “blank slate” in his *An Essay*

*Concerning Human Understanding*. For 10 points, name this English thinker who wrote the *Two Treatises of Government*.

ANSWER: John Locke

21. A political faction that arose during a century-long series of civil wars in this modern day country was named because its members wrapped birch-bark around their legs. This country of origin of the Birkebeiner saw the XU and the Milorg resist Nazi occupation during World War II. This country surrendered to its neighbor in the 1814 Convention of (\*) Moss. The unifier of this modern-day country took the epithet "Fairhair," and was the father of Eric Bloodaxe and Haakon the Good. This country's puppet government was led by Vidkun Quisling during World War II. For 10 points, name this country, whose city of Christiania was later renamed Oslo.

ANSWER: Kingdom of Norway [or Kongeriket Norge]

## Bonuses

1. Answer the following about every college student's favorite pastime, skipping class, for 10 points each:

[10] This American director of *The Breakfast Club* created one of the more iconic days of missed school in his movie *Ferris Bueller's Day Off*.

ANSWER: John **Hughes**

[10] A recent report by Kenneth Wainstein showed that for the past 18 years, lots of athletes at this southern state school in Chapel Hill have been taking "paper classes" that don't have any meetings to skip. To be fair, it takes a lot of practice to have a shot at beating Duke.

ANSWER: University of North Carolina at Chapel Hill

[10] Mahony and Dillon skip school and encounter a creepy old dude in the story "An Encounter," which is included in this collection. In this collection's story "Grace," Tom Kernan drunkenly falls down a flight of stairs.

ANSWER: **Dubliners**

2. This country's city of Az-Zarqa was founded by Chechen immigrants. For 10 points each:

[10] Name this nation whose namesake river divides it from Israel and Palestine to the west. Its capital is Amman.

ANSWER: Hashemite Kingdom of **Jordan** [accept al-Mamlakah **al-Urdunīyah** al-Hāshimīyah]

[10] This city carved into the rocks of Jebel al-Madhbah in the southern Jordan governorate of Ma'an is the country's most popular tourist attraction. It was once the capital of the Nabataeans.

ANSWER: **Petra** [or Al-**Batra**]

[10] The strange indentation in the Jordan-Saudi Arabia border is sometimes known as this man's sneeze after a probably apocryphal story about how he drew the boundary while drunk.

ANSWER: Winston **Churchill**

3. The Atacama is the driest one of these regions on planet Earth. For 10 points each:

[10] Name these arid regions characterized by a lack of vegetation.

ANSWER: **deserts**

[10] These types of deserts form on the leeward sides of mountains, and are often geographically mid-latitude. This is because air loses its water content as precipitation as it crosses a mountain range, and is subsequently compressed and heated as it descends.

ANSWER: **rainshadow** desert

[10] These rock features, common in the Sahara desert, are small landforms with narrow bases and wide tops. They are formed by sandblasting that is most intense near the ground.

ANSWER: **yardangs**

4. Answer the following about memoirs, for 10 points each:

[10] This Founding Father described the growing success of his club, the Junto, and recounted his writing of *Poor Richard's Almanack* in an unfinished autobiography which was published in 1791.

ANSWER: Benjamin **Franklin**

[10] This Vladimir Nabokov memoir which describes his life up to the year 1940 originally had a title that referred to "Mnemosyne," [nee-mo-ZEE-nee] but his publishers were concerned that American audiences wouldn't be able to pronounce the word.

ANSWER: **Speak, Memory**

[10] This British author described his upbringing and wartime experiences in the memoirs *Boy* and *Going Solo*. This author's short story collections include *Tales of the Unexpected* and *The Wonderful Story of Henry Sugar and Six More*.

ANSWER: Roald **Dahl**

5. This poet wrote a short poem that opens with the lines “Above all summits / it is calm” on the wall of a cabin. For 10 points each:

[10] Name this German poet of two “Wanderer’s Songs,” as well as the *Roman Elegies* and poems like “Der Erlkönig” and *Hermann and Dorothea*.

ANSWER: Johann Wolfgang von **Goethe** [GUR-tuh]

[10] In this ballad by Goethe, a wizard-in-training attempts to enchant a broom to carry pails of water for him, but messes up and almost floods the workshop. Its plot inspired a scene from Disney’s *Fantasia*.

ANSWER: “The **Sorcerer’s Apprentice**” [or “Der **Zauberlehrling**”]

[10] Goethe also produced a number of famous epigrams, collaborating on a collection of them titled *The Xenien* with this playwright of *The Robbers* and *William Tell*.

ANSWER: Friedrich **Schiller**

6. Name some artists who produced depictions of Susanna and the Elders. For 10 points each:

[10] In this female artist’s depiction of the scene, her first autographed painting, a man whispers into the ear of a man wearing a red cloak, who speaks to Susanna. This woman also painted the bloody *Judith Slaying Holofernes*.

ANSWER: Artemisia **Gentileschi**

[10] This artist produced a 1647 version of the scene, but is better known for showing a company of Franz Banning Cocq in his *The Night Watch*.

ANSWER: **Rembrandt** Harmenszoon **van Rijn** [accept either]

[10] This earlier artist of the Marie de Medici cycle and the *Apotheosis of Henry IV* finished his *Susanna and the Elders* two years before his *Honeysuckle Bower*, and had a thing for painting fat women.

ANSWER: Peter Paul **Rubens**

7. NOTE TO MODERATOR: DO NOT SAY THE ALTERNATE ANSWERLINE FOR THE FIRST BONUS PART.

This morbid string quartet ends with a *presto* tarantella in D minor and was written just weeks after its composer’s *Rosamunde* quartet. For 10 points each:

[10] Name this penultimate string quartet of its composer, notable for its frequent shifts between *fortissimo* and *pianissimo*.

ANSWER: **Death and the Maiden** [or **Schubert**’s String Quartet No. **14** in D minor]

[10] This composer of *Death and the Maiden* also wrote the song cycles *Die schone Mullerin* and *Winterreise*.

ANSWER: Franz **Schubert**

[10] Like Tchaikovsky’s seventh symphony, Schubert’s eighth famously has this quality, which has led composers such as Geoffery Bush and Felix Weingartner to attempt to complete it.

ANSWER: **unfinished** [accept equivalents, like **he didn’t finish it**]

8. Because of his short stature, some of this man’s less endearing nicknames included “Millimetternich” and “the Jockey.” For 10 points each:

[10] Name this Chancellor of Austria who proclaimed himself dictator in the May Constitution. He banned the Nazi Party, but a bunch of them managed to assassinate him in the July Putsch of 1934.

ANSWER: Engelbert **Dollfuss**

[10] Dollfuss’ successor, Kurt Schuschnigg, was powerless to stop Hitler’s annexation of Austria, an event usually given this name from the German for “connection.”

ANSWER: **Anschluss**

[10] Another Austrian politician of note was the suspected Nazi Kurt Waldheim, who was Secretary-General of this international organization from 1972 to 1981. It was founded in 1945, and is currently led by Ban Ki-moon.

ANSWER: **United Nations**

9. Answer the following about suggestibility in psychology, for 10 points each:

[10] This psychologist demonstrated people's willingness to accept statements made by people of high status, a phenomenon he dubbed "prestige suggestion." He's better known for running a series of namesake conformity experiments.

ANSWER: Solomon **Asch**

[10] In a 1995 experiment, suggestions were used to implant fake childhood memories in subjects by Elizabeth Loftus. Much of Loftus' work focuses on how these people unknowingly provide false testimony about seeing crimes happen.

ANSWER: **eyewitnesses**

[10] The Gudjonsson Suggestibility Scale is used in this practice, which also makes use of the Reid and pride-and-ego down techniques. An "enhanced" form of it was famously used in Abu Ghraib.

ANSWER: coercive **interrogation** [prompt on "torture"]

10. The speaker of this poem laments how its title figure "ranked / My gift of a nine-hundred-years-old name / With anybody's gift." For 10 points each:

[10] Name this poem whose title figure "liked whate'er / She looked on, and her looks went everywhere" and is described as "looking as if she were alive."

ANSWER: "**My Last Duchess**"

[10] "My Last Duchess" is a work by this poet, who was married to the author of *Sonnets from the Portuguese*, Elizabeth Barrett.

ANSWER: Robert **Browning**

[10] The narrator of "My Last Duchess" describes one of these objects created by Fra Pandolf. Basil Hallward creates one of these objects that titles an Oscar Wilde work.

ANSWER: **painting** [accept **portrait** or **picture**]

11. The fugacity of a real gas is equal to the dimensionless fugacity coefficient multiplied by this value. For 10 points each:

[10] Name this state variable for a gas which can be measured as the force per unit area applied to the walls of its container. It is measured in the SI unit of pascals.

ANSWER: **pressure**

[10] This equation of state for real gases can be written as a cubic equation in the reduced volume. In it, the pressure from the ideal gas law is corrected by a value equal to the number density squared times the constant  $a$ , and the volume is corrected by a value equal to the number of moles times  $b$ .

ANSWER: **van der Waals** equation of state

[10] This other equation of state for gases expands the compressibility factor  $Z$  as a power series in the reciprocal of the molar volume. When truncated to its first term, it is equivalent to the ideal gas law.

ANSWER: **virial** equation of state

12. The Vedic god Indra slays Vritra, one of these creatures, to free the waters of the world. For 10 points each:

[10] Name these reptilian monsters. Saint George famously slays a Western example in Christian legend.

ANSWER: **dragons** [prompt on "serpent."]

[10] Apollo slayed the dragon Python at this site, which was known in the Greek world as the "omphalos," or navel of the world. An oracle at this site has been supposedly explained by toxic fume-induced hallucinations.

ANSWER: **Delphi**

[10] The Shinto thunder god Susano'o slays this eight-headed dragon by getting each of its heads drunk and then cutting them off.



ANSWER: **Orochi**

13. This ruler stopped in Gao on the way back from a journey after learning that his general Sagmandia had captured it. For 10 points each:

[10] Name this ruler who built a mosque every Friday on a journey in which he also distributed tens of thousands of pounds of gold to the poor he encountered, wrecking the Mediterranean economy.

ANSWER: Mansa **Musa I**

[10] Mansa Musa was a ruler of this African empire founded by Sundiata Keita.

ANSWER: **Mali** Empire [or **Nyani**]

[10] This Malian city was the site of a Great Mosque constructed in the thirteenth century, which was later rebuilt in a Sudanese architectural style by the French in 1907.

ANSWER: **Djenne**

14. Answer some questions about the First War of Scottish Independence. For 10 points each.

[10] This first King of Scotland led his forces to victory over Edward II in the Battle of Bannockburn.

ANSWER: **Robert the Bruce** [or **Robert I**, prompt on “Robert”]

[10] Earlier, Robert the Bruce was excommunicated by a pope of this name, who later lifted the excommunication following the Declaration of Arbroath. A later pope of this name issued the encyclical *Pacem en Terris*.

ANSWER: **John** [accept **John XXII** or **John XXIII**]

[10] This other key figure in the Wars of Scottish Independence led the Scottish to victory in the Battle of Stirling Bridge. He’s the subject of the movie *Braveheart*.

ANSWER: William **Wallace**

15. Answer the following about popular ways of hearing music in twentieth-century America. For 10 points each:

[10] This radio network broadcasted weekly performances from its in-house symphony, which was led by Arturo Toscanini for seventeen years. Its famous “three note chime” was first broadcast over its Red and Blue networks in 1929.

ANSWER: **National Broadcasting Company** Radio Network

[10] This ABC television program hosted for most of its existence by Dick Clark featured teenagers dancing to lip-synced performances by its musical guests.

ANSWER: **American Bandstand** [accept **Bandstand**]

[10] This cable channel launched in 1981 featured television personalities known as “VJs,” who would play popular music videos. This channel famously does not play music videos anymore.

ANSWER: **MTV** [or **Music Television**]

16. Proteins are the most abundant macromolecule in the cell. For 10 points each, name some things about how they’re made:

[10] Proteins are composed of peptide chains of these 20 “building block” molecules that contain side chains along with two namesake functional groups.

ANSWER: **amino acids**

[10] This amino acid is the only one in humans that is not chiral, because of its single hydrogen side chain.

ANSWER: **glycine** [prompt on “G” or “Gly”]

[10] The binding of this complex to a peptide being synthesized results in elongation arrest. This complex is also responsible for directing the ribosome to the endoplasmic reticulum.

ANSWER: **Signal Recognition Particle**

17. When applied to metals, the Drude model can be used to derive this law. For 10 points each:

[10] Name this law, which sets the voltage drop across a resistor as equal to the current flowing through the resistor times its resistance. In other words, it says  $V$  equals  $I$  times  $R$ .

ANSWER: **Ohm's** law

[10] For a time-invariant AC circuit, Ohm's law is modified to read  $V$  equals  $I$  times  $Z$  where  $Z$  is this quantity, the complex generalization of resistance. This quantity can be calculated through the use of phasor diagrams.

ANSWER: **impedance**

[10] This electrical circuit, named after an English inventor, measures an unknown resistance using a galvanometer and a variable resistor to help balance two legs of a circuit so that no current flows through a wire joining the two legs.

ANSWER: **Wheatstone bridge**

18. One character in this novel kills another with a scythe after overhearing him tell his daughter Milly that he wished she were a mare after she shows him their newborn child. For 10 points each:

[10] Name this novel framed as a conversation between two roommates at Harvard, one of which is named Shreve.

ANSWER: ***Absalom, Absalom!***

[10] *Absalom, Absalom!* is narrated to Shreve by Quentin, a member of this central family of *The Sound and the Fury*.

ANSWER: **Compson** family

[10] This creator of the Compson family wrote *The Sound and the Fury* and *Absalom, Absalom!*

ANSWER: William **Faulkner**

19. In the Catholic Church, weddings are prohibited during this holiday's namesake Triduum. For 10 points each:

[10] Name this holiday which occurs one week after Palm Sunday and is celebrated by many Protestant churches with a sunrise service.

ANSWER: **Easter**

[10] This church celebrates Easter as the "feast of feasts," in addition to twelve Great Feasts. This church is the second-largest Christian church, and the largest in Greece.

ANSWER: **Eastern Orthodox** Church [prompt on "Orthodox"]

[10] Eight of the Great Feasts celebrate Jesus, while the other four celebrate Mary, who is known in Eastern Orthodoxy by this Greek term meaning "mother of God."

ANSWER: **Theotokos**

20. This man was a commander of the Hearts of Oak militia before becoming George Washington's aide-de-camp. For 10 points each:

[10] Name this politician who, after the war, would go on to become the first Secretary of the Treasury. He believed the federal government should fund the national debt and supported the creation of a national bank.

ANSWER: Alexander **Hamilton**

[10] Paying for these policies required levying often-unpopular taxes, including one that sparked this namesake rebellion in the Pennsylvania backwoods that was put down by a federalized militia under "Lighthorse Harry" Lee.

ANSWER: **Whiskey** Rebellion

[10] Hamilton also wrote and presented to Congress this economic analysis, which prescribed a regime of moderate tariffs and bounties to encourage internal improvements and industry. This document laid the foundation for Henry Clay's later American System.

ANSWER: **Report on** the Subject of **Manufactures**