

1. This work describes how a modern Antigone becomes a *virgo mater* because she alone knows that Oedipus married his mother. This work notes that Mozart uses the most abstract medium to represent the "sensuous-erotic genius" of *Don Giovanni*. This book concludes that "against God we are always in the wrong" in a discourse supposedly recovered from the letters of Judge Wilhelm. One figure in this work explains how to avoid boredom with the metaphor of (*) "crop rotation". This work was compiled by the pseudonymous Victor Eremita, and it describes how Johannes seduces Cordelia in "Diary of a Seducer." For 10 points, name this philosophical work whose title contrast is between the ethic and aesthetic ways of life, written by Soren Kierkegaard.

ANSWER: *Either/Or* [or *Enten-Eller*]

<Kothari>

2. One character in this play tells a story about a fox that jumps into a ravine of strawberries and chicken honey before a snake with a knife stabs him in the middle of his forehead. The beginning stage directions state that this play is set during an English evening, in an English interior with an English fireplace near an English armchair. Late in this play, the maid Mary reads a poem in which everything catches on (*) fire. This play's characters discuss a family in which everybody is named Bobby Watson before being interrupted by the Fire Chief, who notes that the title character always wears her hair in the same style. For 10 points, name this play featuring nonsensical dialogue between the Smiths and the Martins, which was written by Eugene Ionesco.

ANSWER: The **Bald Soprano** [or La **Cantatrice Chauve**]

<Jose>

3. Losses due to a method used to increase this quantity include the hysteresis and eddy current loss. Transformers use the "mutual" form of this quantity to step-up and step-down voltages. Its presence causes current to lag voltage. This quantity is multiplied by j omega to obtain impedance. The energy stored in devices with it is equal to half this quantity times current squared because the voltage across such devices is equal to this quantity times the time-derivative of current. As it's often equal to (*) permeability times cross-sectional area over length times number of coils squared, it can be increased by inserting a core, like iron. This quantity determines the ability of an element to generate magnetic flux linkage in response to a current. For 10 points, name this quantity whose SI unit is the Henry.

ANSWER: inductance

<Voight>

4. Two molecules of this compound are a required cofactor in the rate-limiting step of cholesterol biosynthesis, a reaction catalyzed by HMG-CoA reductase. This compound reduces glutathione to minimize damage from reactive oxygen species, and neutrophils use its namesake oxidase during phagocytosis. In animals, this compound is made by the oxidative reactions of the pentose phosphate cycle. This compound and ATP convert 3PG to glyceraldehyde-3-phosphate. It has a 2 prime (*) phosphate group on its ribose sugar. This compound forms during non-cyclic, but not during cyclic, electron flow. Electrons liberated from photosystem I reduce this compound, a required coenzyme for the Calvin Cycle. For 10 points, name this dinucleotide used in photosynthesis, unlike NADH.

ANSWER: **NADPH** [or **nicotinamide adenine dinucleotide phosphate**; or **NADP+**; do not accept or prompt on "NAD+" or "NADH"]

<Silverman>

5. A black footprint in a church in this city commemorates Jorg von Halsbach winning a bet with the devil that he could build a church without visible windows. This city was home to Geiselgasteig film studios, and it contains the headquarters of Siemens and BMW. This city was the seat of the Wittelsbach dynasty, who built its Nymphenburg Palace. The Isar and Wurm rivers flow through this metropolis, once of the home of Der (*) Blaue Reiter. The sixteen "Blood Witnesses" died during the Beer Hall Putsch here. Operation Wrath of God took revenge on Black September members who murdered Israelis in this city. Napoleon made this city the capital of the Kingdom of Bavaria. For 10 points, name this German city, the site of a massacre at the 1972 Summer Olympics.

ANSWER: Munich [or Munchen or Minga]

<Bentley>

6. This painting was created in a large Paris studio found by Dora Maar, who photographed its creation. Nelson Rockefeller commissioned a tapestry version of this painting for the United Nations Building. This painting was initially exhibited alongside a mercury fountain created by Alexander Calder, and it reused a number of symbols from its artist's *Minotauromachia*. T.J. Clark argues that the pose from its artist's *Nude on Black Armchair* was reused in this painting's image of a (*) screaming head. The people are represented in this painting by a flower growing from a broken sword and a horse, which appears to the right of a bull representing fascism. For 10 points, name this Pablo Picasso painting depicting the bombing of a Spanish town.

ANSWER: Guernica

<Bentley>

7. A prayer service called the Three Hours sometimes takes place from noon to three o'clock on this holiday. The service on this holiday includes the singing of the *Improperia*, or "Reproaches." The nursery rhyme "Hot Cross Buns" is named for an English food eaten on this holiday, whose services include a controversial prayer that the Jews "acknowledge that Jesus Christ is the savior." This first day of Triduum is the most notable holiday on which worshipers meditate on the encounters with (*) Simon of Cyrene and Saint Veronica as part of the fourteen-part devotion to the Stations of the Cross. For 10 points, name this Catholic holy day which recalls the day of Jesus' crucifixion and takes place two days before Easter.

ANSWER: Good Friday

<Bollinger>

8. A member of this family gets engaged to Agnes Wainwright and admires his brother who did time for manslaughter in McAlester State Penitentiary. At a gas station with yellow pumps, this family's dog is run over by a fancy car. Vignettes interspersed among the story of this family include one about a diner run by Mae and Al, and one in which a (*) turtle gets caromed off a highway. This family travels with Ivy and Sairy Wilson. One member of this family has a stillborn baby fathered by Connie Rivers, and her brother attacks the orchard guard who kills Jim Casy. This family's matriarch dies during their trip across Arizona to farms in California. For 10 points, name this family that flees the Dust Bowl in *The Grapes of Wrath*.

ANSWER: Joad family

<Mehigan>

9. This event was compared in the press to a similar event at St. George's Fields two years prior. For thirteen years it was remembered with anniversary speeches by men like Thomas Welch and James Lovell. James Bowdoin's *Short Narrative of* this event was revised to make it look like a conspiracy. Samuel Quincy gathered eyewitness testimonies from (*) King Street to help defend men such as Thomas Preston for their role in this event. Henry Pelham's print of this event, which depicts a custom house and a linear arrangement of people on its right side, was copied and circulated by Paul Revere. For 10 points, name this March 1770 killing of Crispus Attucks and four other American colonists by soldiers in a Massachusetts city.

ANSWER: **Boston Massacre** [accept **Incident on King Street** before "King Street" is read]

<Bailey>

10. This people's Drengot family controlled the County of Aversa. A tarantula infestation in their camps forced them to abandon a siege led in part by Roger Bosso. These people set up the New Forest as a hunting preserve. They included Bohemond VI of Antioch and a crown prince who died when the White Ship sank. Their first leader, baptized under the name Robert I, was buried at (*) Rouen Cathedral. In one victory, their troops bashed on a shield wall by running up Senlac Hill. Centuries after Rollo, a leader of this people carried out the Harrying of the North. Their armies shot Harold Godwinson in the eye in an invasion prompted by Edward the Confessor's death. For 10 points, name this people who sailed from northern France under William the Conqueror.

ANSWER: <u>Norman</u>s [or people from <u>Normandy</u>; or obvious equivalents; prompt on "Vikings" or "Norse"]

<Hart>

11. Mark Morris was inspired by one of these pieces to choreograph the film "Falling Down Stairs". Unusually, the fifth of these pieces contains a completely monophonic sarabande with no block chords. The third and fourth of these pieces have two bourées, while the first two have two minuets. The fifth of them requires the A string to be downtuned to G, while the last of them is designed to be played with the addition of an E string. Pablo (*) Casals recorded the first complete set of these works in the late 1930s, and the prelude to the first of them is widely considered the signature piece of Yo-Yo Ma. For 10 points, name these pieces given BWV numbers 1007 through 1012 and composed for a solo string instrument that is not the violin by Johann Sebastian Bach.

ANSWER: the solo <u>cello suite</u>s of Johann Sebastian <u>Bach</u> [prompt on partial answer; Bach's name is not required after it is read; accept "violoncello" for "cello"]

<Rosenberg>

12. A correction to this equation includes a constant Q, a function of mass and the barrier width, when quantum tunneling is possible. The concentration of crystal defects is modelled by this equation. A microscopic version of this equation uses a transmission coefficient, multiplied by Boltzmann's constant times temperature over Planck's constant. On a linear plot generated from this equation, the x-axis is one over temperature, and the y-intercept is the log of the product of the (*) collision frequency and the steric factor. An increase of temperature of 10 degrees causes the left side of this equation to approximately double. For 10 points, name this equation which gives the reaction rate constant as a function of temperature, named for a Swedish chemist.

ANSWER: **Arrhenius** equation

<Silverman>

13. This man accepted the ambassadors Francois Bernier and Thomas Roe. While still a prince, this man commanded the force that defeated the state of Mewar. Upon his wife's death, this ruler's daughter began distributing rare gems to the poor; that daughter, Princess Jahanara, cared for him in his old age. This man's successor and son won the Battle of Samurgh against another of his sons named Dara Shikoh. This ruler commissioned the (*) Shalimar gardens in Kashmir and the ornate Peacock Throne. This man's successor, Aurangzeb, imprisoned him in the Red Fort in Agra, which this man had rebuilt. For 10 points, name this Mughal emperor whose deceased wife, Mumtaz, was honored with the Taj Mahal.

ANSWER: Shah Jahan

<Mukherjee>

14. Telemus delivered a prophecy to one of these creatures, who may have received a name meaning "big talker" after screaming to his neighbors for the first time. A god who killed these creatures was forced to spend one year as Admetus' slave - those members of this race were killed by a god who wanted to avenge his son (*) Asclepius. The most famous member of this race used a boulder to smash Acis out of jealousy when he loved Galatea. Three of them named Brontes, Steropes, and Arges forged Zeus' thunderbolts, and one of them was tricked into thinking his guest's name was "Outis," meaning "Nobody." For 10 points, name this race exemplified by Polyphemus, which had only one eye.

ANSWER: cyclops

<Jose>

15. This country's Prime Minister has tried to censor its wildly popular period drama *Magnificent Century*. In 2013, police in this country tear-gassed the "Woman in Red." A corruption scandal at its state-owned Halkbank highlighted the power struggle between the ruling party and the (*) Hizmet movement in this country, where several military officers were found guilty of being members of the Ergenekon movement and having ties to the Deep State. May 2013 protests in this country were sparked by plans to demolish one of the last green spaces in its largest city. In that same year, the PKK agreed to a ceasefire in its war for Kurdish independence here. For 10 points, in what country did Recep Erdogan suppress protests at Taksim Gezi Park in Istanbul?

ANSWER: Republic of **Turkey**

<Bentley>

16. A matrix with this property and one that is upper triangular is given by the QR decomposition. Given a linearly independent set of vectors x, a process that gives a set with this property computes a set of vectors v as v-sub-n equals x-sub-n minus the sum from i equals one to n minus one of the projection of v-sub-n along x-sub-i. That process is named for Gram & Schmidt and gives a basis that can later be normalized. The standard unit (*) vectors of the Cartesian coordinate system all have this property with respect to each other. Two vectors have this property if their inner product, or dot product in lower dimensions, is equal to zero. For 10 points, identify this property that two lines have if they are perpendicular.

ANSWER: orthogonality [or orthonormal; or perpendicular until it is read]

<Voight>

17. One poem in this genre described the cannibalism resulting from the feud between the towns of Tentyra and Ombos. Another poem in this genre describes a man who was not "one to put his life at risk for the sake of truth" purchasing a gigantic fish for the Emperor Domitian. A prose variety of this genre is named for (*) Menippus of Gadara. Samuel Johnson's "The Vanity of Human Wishes" imitates a poem in this genre which coined the phrase "bread and circuses". Another poem in this genre by the same author asks "who guards the guards themselves?" For 10 points, name this genre exemplified by the aforementioned sixteen poems by Juvenal, which ironically and sarcastically mock social mores. ANSWER: satires [or satura]

<Carson>

18. This ruler established his country's first printing press, the Print Yard, at Kitai-gorod, and aided the rise of the Stroganov family by awarding them a settlement patent along the Kama river in newly conquered Siberia. This ruler concluded the ten-year Truce of Yam-Zapolsky with Poland-Lithuania after a long failed siege of Pskov by Stephen Bathory. This man's suspicion that the Archbishop Pimen was a traitor led to the massacre of (*) Novgorod by his secret police, the Oprichniki. This ruler, who instigated the Livonian War, was succeeded by the incompetent Feodor I after he killed his son and heir-apparent. For 10 points, name this Rurikid ruler and first "Tsar of all Russia," whose epithet signified his fearsomeness.

ANSWER: <u>Ivan</u> the <u>Terrible</u> [or <u>Ivan IV</u> Vasilyevich; or <u>Ivan Grozny</u>; prompt on "Ivan"]

<Hart>

19. One character in this novel ends up in Mr. Kirwin's Irish prison after washing ashore and being accused of murder. In exchange for that character's work in the Orkneys, another character in this novel vows to move to South America and tend a garden. That character in this novel improves his French by reading *Paradise Lost* and *Plutarch's Lives* outside Felix and Agatha's cottage. This novel's protagonist becomes disillusioned with the (*) science of Paracelsus and Albertus Magnus while studying at the University of Ingolstadt. This novel's antagonist strangles Henry Clerval and Elizabeth Lavenza. Near this novel's beginning, Captain Walton picks up a doctor who is chasing his monstrous creation on a dogsled across the Arctic ice. For 10 points, name this novel by Mary Shelley.

ANSWER: Frankenstein; or, The Modern Prometheus

<Mehigan>

20. This character writes a letter saying "sorry, but I'm not interested in gold mines, oil wells, shipping or real estate". He jokes that you can't buy a bag of peanuts without someone writing a song. This character shouts that he will send crooked political boss Jim Gettys to Sing Sing. His friend, Jed Leland, eventually mails him the "Declaration of Principles" he drafted when beginning his work. This man tries to make his second wife, (*) Susan Alexander, into an opera star. This character is based primarily on William Randolph Hearst, and he drops a snow globe as he dies in his "stately home" of Xanadu at the beginning of a 1941 movie. For 10 points, name this title character of an Orson Welles film, a newspaper tycoon whose last word is "Rosebud".

ANSWER: Charles Foster **Kane** [or **Charles**; or **Charlie**]

<Cheyne>



21. The kiss-and-run mechanism proposes a way that these structures are recycled. Sar1 drives the formation of buds on these structures, and ADP ribosylation factor localizes to them in order to recruit coatomers. One class of these structures has a triskelion protein surrounding an AP complex. James Rothman won the 2013 Nobel Prize in Physiology for his discovery of V-SNAREs and T-SNAREs in the (*) docking of these structures. They have a similar shape as liposomes, and are usually coated with COPI, COPII, or clathrin. One model of the Golgi proposes that these structures move between each stack. These objects are formed in axons to release neurotransmitters into the synapse. For 10 points, name these small "bubbles" that transport molecules around cells.

ANSWER: **vesicle**s [or synaptic **vesicle**s; or **vesicle coat**s before "coated" is read]

<Silverman>

22. In the 16th century, this ethnic group included the breakaway Mac family. Charles Rigoult de Genouilly tried to subdue these people at a city which he called Tourane. The Jesuit Alexandre de Rhodes devised a writing system for these people's language. Under colonial rule, these people were the majority in the Cochinchina province. Rebels in their history include a duo that drowned themselves in the Hat river; that duo, often depicted atop war elephants, is a pair of 1st-century (*) sisters. This ethnic group defeated the Cham people of Champa to their south. The Tay Son uprising displaced this ethnicity's Le dynasty. For 10 points, name this ethnic group which freed itself from French Indochina after winning at Dien Bien Phu, the builders of Hanoi.

ANSWER: <u>Vietnamese</u> [or <u>Viet</u>; or <u>Kinh</u>; or <u>Lac</u> Viet; or Bach <u>Viet</u>]

<Jackson>

23. This character has to explain that rhinestone is "next door to glass" after she is confronted about the marital provisions of the Napoleonic Code. After catching a butcher's package that is thrown to her, this character goes to watch the bowling game between two friends from the 241st Engineers. On her wedding night, this woman is "sort of thrilled" when her husband uses a slipper to (*) smash all the light bulbs in her house. This character gives birth to a son on the night her husband rapes her sister, who loses the Belle Reve plantation. This character runs away to her neighbor Eunice to escape her violent husband Stanley, who stands in the street bellowing her name. For 10 points, name this sister of Blanche Dubois in A Streetcar Named Desire.

ANSWER: <u>Stella</u> Dubois Kowalski [prompt on <u>Dubois</u> or <u>Kowalski</u>]

<Mehigan>

24. Before this conflict, one leader claimed that the "Day of the Call" justified his actions. This war, which ended after the Battle of Medina Ridge, preceded foreign oversight in Operation Southern Watch. Three essays by Jean Baudrillard claimed this war "did not take place." This conflict's losers hit a third party with airborne (*) Scud attacks. A drug called PB is one possible cause of a namesake "syndrome" suffered by this war's veterans. On the Highway of Death, this war's loser, who called it the "mother of all battles," lost much of his Republican Guard. Norman Schwarzkopf and Colin Powell oversaw this war. For 10 points, name this war in which a U.S.-led coalition launched Operation Desert Storm to free Kuwait of Saddam Hussein's Iraqi forces.

ANSWER: Persian <u>Gulf</u> War [or First <u>Gulf</u> War; prompt on "Operation Desert Storm" until "Desert" is read; do not accept or prompt on "Operation Desert Shield"]

<Wasserman>



- 1. An Otto Dix painting titled for this group includes a small figure in a Hitler mask sitting on the back of a bent-over hag who clutches at coins and a representation of Death as a scythe-waving man in a skeleton suit. For 10 points each:
- [10] Name this group, also depicted as the segments in a circle surrounding a picture of Christ rising from his tomb in a painting in which they are accompanied by four smaller circles representing the "Four Last Things".

ANSWER: the <u>seven deadly sins</u> [or the <u>cardinal sins</u>; or the <u>capital vices</u>; or the <u>Seven Deadly Sins and</u> <u>the Four Last Things</u>]

[10] The Seven Deadly Sins and the Four Last Things was painted by this Dutch artist of The Conjuror and The Garden of Earthly Delights.

ANSWER: Hieronymous **Bosch** [accept Jeroen, Jheronimus, or Jerome for the first name and **Bos**, **van Aken**; or **Anthoniszoon** for the last name]

[10] The left side of this other Bosch triptych features three scenes of Adam and Eve in the Garden of Eden. Its outside panels depict the *Path of Life*, while its center panel shows Jesus in the clouds hovering over figures sitting atop the title conveyance.

ANSWER: The Haywain Triptych

<Jose>

- 2. In the 30s, Aimee Semple McPherson of the Foursquare Church reached a massive audience through this medium. For 10 points each:
- [10] Name this medium whose users had to provide balanced coverage of public issues until the FCC removed the "fairness doctrine" in the 80s. FDR's "fireside chats" were delivered using this medium.

ANSWER: radio broadcast

[10] This anti-Semitic Catholic priest delivered popular radio addresses opposing Franklin Roosevelt and the New Deal from Royal Oak, Michigan.

ANSWER: Father Charles **Coughlin**

[10] This doctor, another critic of FDR's New Deal, popularized a namesake national pension plan which influenced the Social Security Act.

ANSWER: Francis Townsend

<Bentley>

- 3. It is sometimes called the rotational analogue of mass. For 10 points each:
- [10] Name this quantity, which is equal to mass times the radius squared of for a point mass.

ANSWER: moment of inertia

[10] For two axes of rotation with this property, the moment of inertia around the second axis of rotation is equal to the moment of inertia around the first axis plus the mass times the distance squared around the second axis, by Steiner's theorem.

ANSWER: **parallel** [or word forms]

[10] An object's associated inertia tensor contains nine entries; the three diagonal entries are the moments of inertia, the other six off-diagonal entries are these quantities, which are notably zero if the object possesses rotational symmetry for the plane defined by the associated principal axes for each entry.

ANSWER: product of inertia

<Jose>

- 4. It was published in *L'Aurore*, a newspaper run by Georges Clemenceau. For 10 points each:
- [10] Name this epistle addressed to Felix Faure that attacks the imprisonment of Alfred Dreyfus.

ANSWER: "J'Accuse" [or "I accuse"]

[10] "J'Accuse" was written by this French author of the Le Rougon-Macquart series of novels, which includes *Germinal*.

ANSWER: Émile **Zola** [or Émile Édouard Charles Antoine **Zola**]

[10] Zola was the leading writer of this anti-Romantic French school of writing, which espoused using realism to depict everyday life. Many of its leaders, including Maupassant and Huysmans, met at Zola's Medan Villa.

ANSWER: **natural**ism [or le **naturalisme**; or word forms]

<Jose>

- 5. This molecule activates protein kinase A. For 10 points each:
- [10] Name this signaling molecule, whose levels in bacteria fluctuate based on whether glucose or lactose is being metabolized. This second messenger is synthesized by adenylyl cyclase.

ANSWER: **cAMP** [or **cyclic AMP**; or **cyclic adenosine monophosphate**]

[10] In a situation of low glucose levels but high lactose levels, cyclic AMP will bind to this protein, forming a complex which will bind to a site on the lac operon to increase transcription.

ANSWER: catabolite activator protein [or CAP; or cyclic AMP receptor protein; or CAP]

[10] Cyclic AMP in humans can help increase the activity of channels that transport an ion of this element, which is necessary for muscle contraction and makes up a large part of bones.

ANSWER: <u>calcium</u> [or <u>Ca</u>; or <u>calcium 2+</u> ion; or <u>Ca2+</u>]

<Lee>

- 6. On his most noted journey, this god retrieves the ring Draupnir from his brother and gets a ring for Fulla from Nanna. For 10 points each:
- [10] Name this son of Odin who borrowed Sleipnir for a ride to Hel.

ANSWER: **Hermod**r the Brave

[10] Hermod went to Hel to try and retrieve this brother of his, a Norse god of light who was invulnerable to everything except for mistletoe.

ANSWER: Baldr

[10] Baldr's slayer Hodr is most distinctive for having this characteristic. Orion had this characteristic until Cedalion brought him to Helios.

ANSWER: **blind**ness [or equivalents, such as **not being able to see**]

<Bollinger>

- 7. A 1613 fire destroyed the original instance of this building, which was reconstructed in 1997 on the south bank of the Thames. For 10 points each:
- [10] Name this white circular building in Elizabethan London, a theater where many of Shakespeare's plays debuted to an open-air audience.

ANSWER: Globe Theatre

[10] This pejorative nickname was given to the poorest audience members at the Globe, who paid a penny to stand in a crowd in front of the stage.

ANSWER: **groundling**s [or **stinkard**s]

[10] This group of actors, led by Richard Burbage, acted out many of Shakespeare's plays in the Globe. They changed their name to the King's Men when James I took the throne.

ANSWER: Lord Chamberlain's Men

<Jackson>

- 8. Name the following Robert Louis Stevenson characters, for 10 points each.
- [10] After meeting Billy Bones at the Benbow Inn, this teenager is recruited to serve as cabin boy on the *Hispaniola*. This narrator of *Treasure Island* later fights against his mutinous ex-mentor Long John Silver.

ANSWER: <u>Jim Hawkins</u> [or <u>James</u> Hawkins; accept any underlined word]

[10] The deaths of Sir Danvers Carew and Hastie Lanyon spur this lawyer to further investigate the mysterious relationship between his client Henry Jekyll and the brutish Mr. Hyde.

ANSWER: Gabriel John Utterson [accept any underlined portion]

[10] This title character of an 1889 Stevenson novel is the older son of the Laird of Durisdeer. He joins Bonnie Prince Charlie's uprising, while his brother Henry stays loyal to the king.

ANSWER: the **Master** of Ballantrae [or **James** Durie; prompt on "Durie"]

<Carson>

- 9. Jared Diamond argues that this process could occur because its namesake people developed farming which the pygmies and Khoisan could not do further south. For 10 points each:
- [10] Name this multi-thousand-year movement of peoples in pre-colonial Africa, by which a linguistic group originating in Cameroon and Nigeria covered the south of that continent.

ANSWER: **Bantu expansion** [or **Bantu** mass migration; or **Bantu** conquest; accept any answer indicating that many **Bantu** people are moving south over a long span of time]

[10] This nation from the Bantu family used tall cowhide shields and a spear called the *assegai* against the British in what is now South Africa. It expanded greatly under Shaka.

ANSWER: **Zulu** people [or ama**Zulu**]

[10] Traders of this ethnic group interacted with Bantu peoples in what is now Zanzibar and Kenya, influencing the Swahili language.

ANSWER: Arabs

<Jackson>

- 10. This film popularized the dolly zoom, which it used to portray the disorienting effect the title phenomenon has on Detective Scottie Ferguson. For 10 points each:
- [10] Name this Alfred Hitchcock film starring Kim Novak as the possibly-possessed Madeleine Elster and James Stewart as the aforementioned acrophobic detective.

ANSWER: Vertigo

[10] In a scene from this Hitchcock film, the camera slowly rotates around Grace Kelly's Margot, who during her ensuing attempted strangling reaches out dramatically towards the audience while reaching for a gleaming pair of scissors with which to defend herself.

ANSWER: Dial M for Murder

[10] An analysis of a particular shot in Hitchcock's *The Wrong Man* opens an influential critical essay by this French New Wave director, whose own films include the sci-fi noir *Alphaville* and the jump-cut-heavy *Breathless*.

ANSWER: Jean-Luc Godard

<Carson>

- 11. Potassium nitrate is a common component of these structures, which are used to balance charge in a galvanic cell. For 10 points each:
- [10] Name these objects that connect the cells where the two half-reactions are taking place.

ANSWER: salt bridges [prompt on partial answer]

[10] In a galvanic cell, this electrode is where the oxidation is taking place. Conventional current flows from the cathode to this electrode.

ANSWER: anodes

[10] Both the standard hydrogen and standard calomel electrodes are composed of this metal. This element is used in catalytic hydrogenation, along with palladium and nickel.

ANSWER: platinum [or Pt]

<Silverman>

- 12. John Lennon once said that "if all politicians were like [this Canadian Prime Minister], there would be world peace." For 10 points each:
- [10] Name this leader who, when asked how far he would go to resolve the secessionist October Crisis, said "Just watch me." He invoked the War Measures Act to suppress the FLQ.

ANSWER: (Joseph Philippe) Pierre Yves Elliott **Trudeau**

[10] The October Crisis took place in this Canadian province, whose predominantly French population has voted down two referenda on independence.

ANSWER: Quebec

[10] During the crisis, this Minister of Labour for Quebec was kidnapped while playing with a nephew on his front lawn. Unlike the Brit James Cross, he was killed during his abduction.

ANSWER: Pierre Laporte

<Cheyne>

- 13. For 10 points each, answer some questions about good programming practices.
- [10] Good programming practice usually involves leaving these notes in the source code that are removed during compilation. In most languages, you can begin an inline one with two forward slashes.

ANSWER: comments

[10] Establishing a naming convention for variables is a good practice. This convention for variables with multiple words keeps the first word's first letter lower case, but has every other word's first letter capitalized.

ANSWER: <u>camel</u> case [or <u>mixed</u>Case; or <u>compoundName</u>s; or <u>camelBack</u>]

[10] For a large code base, it is important to periodically do this. This process is the improvement of existing code without changing its functionality and may involve the rewriting of several classes into smaller classes.

ANSWER: **refactor**ing [or word forms]

<Jose>

- 14. This work, written in podic prosody, tells the story of man who falls in love with a woman named "noone". For 10 points each:
- [10] Identify this poem, a love story set in a place "with up so floating many bells down". It repeats different permutations of the phrase "sun moon stars rain" to show the passage of time.

ANSWER: "anyone lived in a pretty how town"

[10] "anyone lived in a pretty how town" was written by this American poet, who penned "i sing of Olaf glad and big" and famously eschewed capitalization and punctuation and used unusual typography in many of his poems.

ANSWER: Edward Estlin Cummings

[10] In a poem comparing this time period to a "perhaps hand," e. e. cummings notes that it "comes carefully out of Nowhere" and rearranges a window "without breaking anything."

ANSWER: **spring** [or "**Spring** is like a perhaps hand"]

<Bentley>

- 15. A very large one of these places was hastily constructed in Za'atari in Jordan in reaction to the Syrian Civil War. For 10 points each:
- [10] Identify these places that shelter people displaced by wars and natural disasters.

ANSWER: refugee camps

[10] The largest refugee camp in the world is the Dadaab camp in this country. A 2007 crisis in this country was sparked by an election contested by Raila Odinga and his backers in the Orange Democratic Movement.

ANSWER: Republic of **Kenya**

[10] The Sabra and Shatila massacre took place in refugee camps during a 1982 conflict named for this country.

ANSWER: <u>Lebanon</u> [or <u>Lebanese Republic</u>]

<Bentley>

- 16. This man used the term "identity theory" to describe modernity tendency to see everything as an example of an abstract in his book *Negative Dialectics*. For 10 points each:
- [10] Name this man who examined the "culture industry" in the book he wrote with Max Horkheimer, *The Dialectic of Enlightenment*.

ANSWER: Theodor W. **Adorno** [or Theodor Ludwig **Wiesengrund**]

[10] In both "Cultural Criticism and Society" and the later *Negative Dialectics*, Adorno claimed it was barbaric to write poetry as if this event had never taken place. Zygmunt Bauman and Primo Levi also wrote about the effects of this Nazi massacre of Jews.

ANSWER: the **Holocaust** [or the **Shoah**; or **Auschwitz**; prompt on "World War II"]

[10] The Holocaust also spurred Adorno to develop the f-scale to evaluate "pre-fascist traits" in *The Authoritarian Personality*, a phrase he borrowed from this 20th century German thinker. This author of *The Art of Loving* distinguished "freedom to" and "freedom from" in *Escape from Freedom*.

ANSWER: Erich Fromm

<Spencer>

- 17. A member of this family wrote the book *Extinct Birds* and provided an extensive collection of bird eggs to the Natural History Museum at Tring in England. For 10 points each:
- [10] Name this prominent banking family of Germany and Britain. Its patriarch, Mayer Amschel, profited heavily from the Napoleonic wars.

ANSWER: **Rothschild** family [or the **Rothschild**s]

[10] The British government took over the company operating this waterway after Lionel Rothschild provided them four million pound loan. Ferdinand de Lesseps planned this canal before his failures in Panama.

ANSWER: **Suez** Canal [or Qanat al-**Suways**]

[10] This first president of the French Third Republic was propped up by "liberation loans" from the Rothschilds. This rival of Francois Guizot had previously served under Louis-Philippe.

ANSWER: Adolphe **Thiers** [or Marie Joseph Louis Adolphe **Thiers**]

<Bentley>

- 18. During these events, the *apumuios*, or "averter of flies," was invoked to keep pests away from the sacrificial meat. For 10 points each:
- [10] Name these quadrennial events held in honor of Zeus.

ANSWER: Olympics [or Olympic Games]

[10] In anticipation of the Olympics, city-states would stop fighting and celebrate a sacred truce by performing these offerings of liquids.

ANSWER: **libation**s

[10] Numerous Olympic objects were deposited in places without any intention of recovery, hence serving as this kind of offering.

ANSWER: votive

<Gupta>

- 19. This composer's *Kindertotenlieder* ended up prophesying the death of his own daughter at age four. For 10 points each:
- [10] Name this Austrian composer of symphonies nicknamed "Resurrection" and "Symphony of a Thousand".

ANSWER: Gustav Mahler

[10] This symphony by Mahler contains a theme named for his wife Alma. Its finale features three so-called "hammer blows of fate".

ANSWER: Symphony No. 6 in A minor [or the <u>Tragic</u> Symphony; or word forms like "sixth"]

[10] Mahler's fifth symphony opens with a solo for this instrument, for which Johann Nepomuk Hummel wrote a celebrated concerto in E major.

ANSWER: **trumpet** [or **trombe**; or keyed **trumpet**]

<Lawrence>

- 20. The central character of this novel marries Catalina after Pancho Villa kills Regina. For 10 points each:
- [10] Name this novel about the final days and recollections of a corrupt Mexican tycoon, whose family urgently tries to discover where his will is hidden.

ANSWER: The **Death of Artemio Cruz** [or La **Muerte de Artemio Cruz**]

[10] This Mexican author of *The Death of Artemio Cruz* also wrote *Aura* and *The Old Gringo*.

ANSWER: Carlos **Fuentes** Macias

[10] Pollo Phoibee falls into the Seine in this massive Fuentes novel, whose setting shifts to various historical times including the assassination of Tiberius and Phillip II's construction of El Escorial.

ANSWER: <u>Terra Nostra</u>

<Mehigan>



21. These proteins are expressed by antigen-presenting cells such as macrophages, as they recognize pathogen-associated molecular patterns and increase the immune response. For 10 points each:

[10] Name these membrane proteins, which are named for their similarity to a protein in *Drosophila* that aids in its immune response.

ANSWER: **Toll-like receptor**s [or **TLRs**]

[10] Toll-like receptors play a role in this part of the immune system, which is the first to respond to an infection. It includes the complement system and neutrophils, and is faster than the adaptive immune system.

ANSWER: **innate** immune system [or **innate** immunity; or **non-specific** immunity]

[10] The innate immune system often responds to an infection by causing this symptom characterized by swelling and redness.

ANSWER: inflammation

<Lee>

22. This poem borrows its name from a shepherd who loses a singing match in one of Virgil's *Eclogues*. For 10 points each:

[10] Identify this poem which commemorates the author's friend Arthur Hugh Clough. It famously describes Oxford as "that sweet city with her dreaming spires."

ANSWER: "Thyrsis"

[10] "Thyrsis" was written by this Victorian-era British poet who also authored "The Scholar-Gipsy," as well as a better-known poem whose narrator hears the "eternal note of sadness" in the sea.

ANSWER: Matthew **Arnold**

[10] This aforementioned poem by Arnold describes the shore by its namesake cliffs of England, and concludes by claiming that we are "as on a darkling plain" where "ignorant armies clash by night."

ANSWER: "Dover Beach"

<Gerr>

23. This scholastic discipline was called the "study of mind" by R.G. Collingwood. For 10 points each: [10] Identify this discipline, which was described as a selection process in a 1961 study by E.H. Carr entitled "What Is [this discipline]?" It has been done by Cassius Dio and Sallust.

ANSWER: history [or historiography]

[10] Carr explores how historians select "important facts" by discussing this 49 BCE act, at which the 13th Legion's commander said "*alea iacta est*" and overstepped his *imperium* to begin a civil war.

ANSWER: Gaius Julius Caesar's army **cross**ing the **Rubicon** river [accept equivalents]

[10] Carr's essay mocks Pascal's suggestion that this Egyptian queen's nose was responsible for beguiling Marc Antony, and thus caused the end of the Roman Republic.

ANSWER: Cleopatra VII Philopator

<Rav>