- 1. In one opera in which this character appears, the first act begins and ends with peasants calling for his death. Later in that work, Alladine surreptitiously kisses this man's forehead, and the other title character borrows a knife to cut him free. Earlier, that character hears "The Five Maids of Orlamonde" sung by such characters as Selysette and Melisande, and tries to help them escape from this man. Another work about this character begins with a "Bard's Prologue" in which the audience is asked "Where is the stage? Who is looking at you?" Elsewhere in that work, this character asks another, "Are you afraid?" just before that work's "blood motif" is heard. That opera also sees the brass play parallel major triads at the opening of the fifth door. For 10 points, name this title character of a Bartok opera who takes Judith to his castle. ANSWER: Duke **Bluebeard** [I suppose one should also accept **Barbe-bleue** or **Kekszakallu**]
- 2. The greatest member of this dynasty was killed at the Battle of Durnkrut while marching on Vienna to regain his possession. One member of this dynasty was nicknamed "the Restorer" for his military campaigns winning back land that had been captured by a neighboring country, though he was later forced to give up most of those lands by Holy Roman Emperor Henry III. Another member of this dynasty was stripped of most of his lands at the Diet of Regensburg for refusing to recognize Rudolf of Hapsburg's election as king of Germany. This dynasty included a man who destroyed the Slavnikovci, a rival family to this dynasty, and briefly supported Henry the Wrangler against Otto II; that king was Boleslav the Pious. In addition to Bretislav I and Ottokar II, this dynasty included a Christianizer who was murdered by his brother Boleslav I, Wenceslas. For 10 points, identify this dynasty the ruling house of Bohemia from the 9th century until 1306.

ANSWER: **Premyslid** dynasty or house

3. These beings were believed to gain their strength from sucking the sexual organs of their creators, who would stand in ceremonial dress that hid his face. If one of these beings turned on its creator, the only way to escape it would be to admit to having created it, an act so shameful that most would rather perish than do so. These creatures were give pieces of their intended victims' fingernails or hair in order to aid them in tracking those victims down, and incorporating the use of bird bones into their creation was believed to give them the power of flight, while seal bones conferred the power to swim. Varieties of this beings included the "intestine eater" *naligateq* and the "mountain wanderer" *qivittoq*. These beings were typically created as composites of various objects, such as rocks, seaweed, and the body parts of other animals, all wrapped in hide, by an *angakoq*, or shaman. For 10 points, identify these enchanted monsters of Inuit mythology.

ANSWER: tupilak

4. These materials can be characterized by Dill's ABC parameters and also by the measurement one over the log of Q-sub-f divided by Q-sub-o, their namesake contrast. A commonly used type of these materials undergoes a Wolff rearrangement by a keto-carbene intermediate to form a ketene, which reacts with water to form a carboxylic acid, and is then immersed in TMAH. HMDS may be applied before them as an adhesion promoter and some types require the use of an edge bead remover. LIGA usually uses the PMMA or SU-8 types of these materials. In industry, chemically amplified ones are used, which don't bleach like that commonly used type of these materials. That commonly used type forms a red dye as a byproduct, which helps eliminate standing waves, consists of a Novolac and a diazoquinone, and is the DNQ one. It is necessary to use a soft-, or pre-, and hard-, or post-, bake with these materials. In general, they usually consist of an inactive resin and a PAC or PAG, and they are removed with developer. For 10 points, identify these materials spun on top of a wafer before it undergoes lithography.

ANSWER: photoresist

5. One of these works is dedicated "In memoriam" to Charlie Parker, who is fictionalized in that work as the jazz musician Johnny. In another of these works, Pierre, who had raped Michele, is murdered with a shotgun by Roland. In addition to "The Pursuer," these works include one in which Somoza attempts to kill Morand, but is killed himself as a sacrifice to the titular "Idol of the Cyclade." Another one of these works takes the form of a letter to a woman named "Andrea" and ends with the narrator's suicide by jumping out of a window along with the small bunnies that he has vomited up. The narrator Michel initiates an investigation based on the results of the title action that he performs on a photograph of a couple in the park in one of these works, while in another, the narrator stares so long at the title creatures in the zoo that he becomes one of them. For 10 points, identify these works which include "Secret Weapons," "Letter to a Young Lady in Paris," "Blow-Up," and "Axolotl."

ANSWER: **short stories** of Julio **Cortazar**

6. In an article titled "Conceiving Beyond Our Means," Robert van Gulick used a thought experiment of the doppelganger of Lake Erie to argue that while this concept is real, "no metaphysical implications follow" from it. Ned Block and Robert Stalnaker argued that the inability to perform a conceptual analysis of consciousness did not lead to dualism in a paper titled after conceptual analysis, dualism, and *this* concept. David Chalmers has argued that this idea cannot be overcome by the phenomenal concept strategy because "no account of phenomenal concepts is both powerful enough to explain our epistemic situation... and tame enough to be explained in physical terms." This concept was first introduced by in a paper titled "Materialism and Qualia," by Joseph Levine, who argued that this concept represented our inability to understand how physical phenomena are linked to subjective mental states. For 10 points, identify this philosophical concept used to designate the epistemic distance between physicalism and consciousness.

ANSWER: explanatory gap

7. Bezard et. al. explained the stratospheric cooling lasting for about a month following this event, during which synchrotron radiation intensity was seen to increase by 10 to 40%. Crawford, McLow, and Zanhle used a light curve model together with plume observations to deduce the diameters of the objects involved in this event. One result of this event was the first observation of lithium in an outer solar system body, and this event resulted in the formation of cloud bands along the -44 degree parallel, where this event occurred. The Hubble Telescope was one of the instruments used to observe this event, which consisted of entry, explosion, and splash phases, the second of which released a maximum of 3 times 10 the 27th ergs of energy. Also observed by the ROSAT satellite and the Galileo mission in 1994, for 10 points, identify this event during which fragments of a doubly-eponymous comet impacted the largest planet in the Solar System.

ANSWER: collision between **Shoemaker-Levy 9** and **Jupiter** [accept anything mentioning those two bodies]

8. While teaching sociology in St. Louis, this figure represented the AUAM, and spent six months in a New Jersey prison for refusing to serve in the military during World War I. For a brief time, this figure was an undercover union spy for William Z. Foster, and after World War II, he acted as an independent advisor to Generals Lucius Clay in Germany and Douglas MacArthur in Japan. In his 1953 book, *A New Slavery*, this man repudiated his previously rosy view of the USSR, expounded upon in his earlier *Liberty Under the Soviets*, and he was radicalized by attending a speech given by Emma Goldman. This man's most famous work involved the organization he established with, among others, Jane Addams and Norman Thomas, and from whose executive committee he purged Elizabeth Gurley Flynn for belonging to the Communist

Party. For 10 points, identify this American who founded an organization that early in its existence defended Sacco and Vanzetti as well the Scottsboro boys, the American Civil Liberties Union. ANSWER: Roger Nash **Baldwin**

9. This character asserts that "To die before being painted by Sargent is to go to heaven prematurely," in a story in which he discourses with a partner called "the Other" on the Academy. Composing a poem on peace, this character begins it with the lines "When the widgeon westward winging/ Heard the folk Vereeniginging" and after being the target of a reform effort by a woman named Amabel, he leads the children of the local choir in a procession in honor of Bacchus. This character states that there should be classes on Christmas gift-giving so that he never receives another "Prince of Wales" prayer book again, and he is first encountered attending Mrs. McKillop's garden-party, where he causes a scene by asking "What did the Caspian Sea?" and later regrets not wearing the apricot tie with the lilac waistcoat. For 10 points, identify this witty British dandy, the subject of a series of stories by Saki.

ANSWER: Reginald

- 10. One of this man's religious reforms was the elimination of fires intended to announce the new month, which along with other reforms he promulgated via his *bet din*. This man is generally acknowledged to be the last of the great *tanaim*, and hist most important work became the subject of commentaries by scholars called *amoraim*. In the aggadic tradition, this man was held to be friendly with a Roman named Antoninus, whose conversations with this man were meant to illustrate this man's wisdom. This man was the greatest disciple of Jacob ben Korshai, and was himself the son of Simeon Gamaliel and a descendant of Hillel, by virtue of which he held his ceremonial title. This man is best known for compiling a text that would centuries later inspire a series of commentaries, as well as a similarly-named text, by Maimonides; that text is a topical arrangement of Talmudic oral law. For 10 points, identify this rabbi who lived in the 2nd century C.E. and is responsible for editing the *Mishnah*, known as "the Prince." ANSWER: Iudah Ha-Nasi [accept either name; prompt on "the Prince" before mention]
- 11. In a 1992 paper, Marsden et. al. demonstrated that in symmetrical Hamiltonian systems, these phenomena can occur without a transfer-of-stability. A "resonance" example of this phenomenon occurs in the heavy top system when the angular velocity drops below the critical value. For the bead on a rotating hoop system, this phenomenon occurs when the ratio of gravitational acceleration to the centripetal acceleration drops below 1. The limit of the ratio of intervals between these phenomena as their number goes to infinity is the Feigenbaum constant, and they are manifested as period-doublings in the logistic map. These phenomena occur during the emergence of new limit cycles, and examples of them include the transcritical, pitchfork, and Hopf varieties. For 10 points, identify this phenomenon in which varying a parameter results in an increase of the number of solutions in a dynamical system. ANSWER: **bifurcation**
- 12. The lower-right-hand corner of this painting includes depictions of Titian, Michaelangel, Giulio Clovio, and Raphael, and the artist of this work depicted himself in the background as a tall man wearing a red turban. A Hellenistic sculpture known as *The Sleeping Ariadne* inspired the reclining female figure in the lower left of this painting, who leans on a cage containing some doves whose eggs lie broken on the floor. Two naked children and a woman carrying water are shown in the center right of this painting, with one of the children playing with some gold coins. This painting, owned by the Minneapolis Institute of Arts, is actually the second in a series of six paintings on the same theme performed by the artist, and is considered the most important work from its artist's Roman years, a demonstration of his Venetian Mannerism. The central figure of this painting is clad in blue and red and wields a whip, which he uses to beat the other title figures of this work. For 10 points, identify this painting by El Greco which depicts an

episode from the Gospels in which Christ evicted a certain group of people, saying that "you shall not make my Father's house a house of trade."

ANSWER: <u>Christ</u> Driving the <u>money-changers</u> from the <u>Temple</u> [accept anything that mentions Christ, a trading profession, and the Temple]

13. One champion of this group described it as a "flower" in opposition to another philosopher's "contemptuous phrase," and argued that it is moved by an "instinct invisible as well as just" and will counteract "the myrmidons of a new despotism." Another work argues that the title form of armed struggle is the preferred form of fighting of this group, and represents "Blanquism" which "injures the revolution;" that work, *Guerilla Warfare*, was written by Lenin. In another work, this group was described as a groop of "vagabonds, discharged soldiers... escaped galley slaves, swindlers, ragpickers, beggars - in short, the whole indefinite, disintegrated mass," from which the Society of December 10 was formed by Louis Bonaparte. Originally coined by its formulator while writing a critique of Max Stirner in *The German Ideology*, for 10 points, identify this group described as "social scum" and a "dangerous class" susceptible to becoming a "bribed tool of reactionary intrigue" in the *Communist Manifesto* by Marx.

ANSWER: <u>lumpenproletariat</u> [do not accept or prompt on "proletariat"]

14. In a postscript to this work, its author writes that it was partly inspired by a book called *W.C.*, the manuscript of which the author had burned. While his friend is sick, the narrator of this work sits by her bed smoking cigarettes and reading aloud any report of crime or violence in the newspaper. This work's narrator and his friend break a girl named Marcelle out of a sanatorium, but Marcellle hangs herself after imagining that the narrator is someone called "the Cardinal." To avoid a police investigation, the two leave for Spain, where they take up with a man named Sir Edmund and watch the matador Granero being killed in a bullfight, which causes one of the characters in this work to have an orgasm. Afterwards, Sir Edmund, the narrator, and Simon rape and murder the priest Don Aminado, after which Simone uses the title body part for sexual gratification. For 10 points, identify this pornographic novella, this most famous work of Georges Bataille.

ANSWER: The Story of the Eye or L'histoire de l'oeil

15. In order to oversee legal cases involving foreigners, this ruler established the Mixed Courts, which had both local and foreign judges. Among the internal improvements ordered by this ruler were the Dar al-Ulum teachers' college and the Dar al-Kutub library, and in 1866 this ruler set up a 75-member parliamentary body called the *Majlis shura al-nuwwab*, or "Assembly of Delegates." This ruler fought a war with Abyssinia and annexed the Bar al-Ghazal region of Sudan to his nation. After the Caisse de la Dette was placed in charge of this ruler's country following his nation's bankruptcy, this man was deposed in favor of his son Tawfiq. This ruler's reign saw his nation lend labor to a project headed by Ferdinand de Lesseps. The first ruler of his dynasty to use the title "Khedive" to distinguish himself from other Ottoman governors, for 10 points, identify this son of Ibrahim Pasha and grandson of Muhammad Ali whose reign over Egypt saw the construction of the Suez Canal.

ANSWER: Khedive Isma'il

16. In one work in this series, the newspaper editor Caroline Sanford travels to the title location at the behest of George Creel, who chairs the Committee for Public Information. Another work in this series consists of the memoirs of Charles Schuyler, who is himself the illegitimate son of the title character of this series' first work. The first of these novels to be written is the penultimate chronologically, and this series begins with a novel also narrated by Schuyler, who is hired by William Leggett to investigate whether Martin Van Buren is the title character's illegitimate son. Perhaps the best known novel in this series covers the last term of its title character before he is assassinated by John Wilkes Booth, and is

titled *Lincoln*. Including the novels *Burr*, *Washington D.C.*, 1876, and the middle novel which sometimes gives this series its name, for 10 points, identify this heptalogy of historical novels written by Gore Vidal. ANSWER: Narratives of **Empire** or **American Chronicle**

17. This document was partially based on two articles, one by John Chamberlain in the *Richmond Times-Dispatch*, and another by Thomas Shepard in *Look* magazine decrying what Shepard called "the Disaster Lobby." This document disapprovingly quotes William Kunstler's injunction to "learn to fight in the streets, to revolt, to shoot guns," and suggests that national television networks should be "kept under constant surveillance." This document suggests that the organization for which its recipient, Eugene Sydnor, works is uniquely positioned to combat this document's central concern, including by establishing "a staff of highly qualified scholars who believe in the system," and demanding equal time for pro-business speakers on college campuses. Those who are accused of carrying out the subtitular activity, abetted by the media, include Ralph Nader, Herbert Marcuse, and various other "Communists" and "Marxists." Subtitled "Attack of American free enterprise system," for 10 points, identify this 1971 document sent to the chairman of the Education Committee of the U.S. Chamber of Commerce by a future Supreme Court Justice.

ANSWER: Powell memorandum or letter

18. Violence during this event erupted in the so-called "Battle of Orgreave," and during this event, some participants caused the death of cab driver David Wilkie by dropping a concrete block onto his car. Prior to this event, Ian MacGregor was appointed chairman of the body which precipitated this event. Neil Kinnock has recently said that his biggest regret about this event was his own failure to call a national ballot, while accusing the man who headed this event of "suicidal vanity." This action was prompted by the announcement that 20 pits were scheduled for closure, and spread across the country when Arthur Scargill announced that the recent walkouts at Cortonwood colliery and others would be a nationwide action. Resulting in an increase in popularity for the government of Margaret Thatcher, for 10 points, identify this event lasting nearly a year, during which a certain group of industrial workers refused to work.

ANSWER: 1984-85 $\underline{\mathbf{U}}$ nited $\underline{\mathbf{K}}$ ingdom $\underline{\mathbf{miner}}$ strike [accept anything that indicates that there are miners who are striking in the UK, prompt on partial answers]

19. One major building designed by this architect is six stories tall and contains a recessed Romanesque entrance archway, as well as a notable grand staircase with a vaulted ceiling supported by Corinthian columns and flanked by shield-bearing gargoyles, also designed by this architect. This architect's design of the Ming Quon home led to a commission for a building that mixed a Renaissance floor plan with traditional Chinese elements. While working under John Galen Howard, this architect created the preliminary design for both the Sather Gate and the Greek Theatre on the Berkeley campus, and this architect's other Bay Area work includes the bell tower at Mills College, the Chinatown YWCA, and the aforementioned Berkeley Women's Club. This architect's most famous work features the twin towers of the Casa Grande in the Mediterranean style as well as the thrice-rebuilt Neptune Pool surrounded by classical colonnades, and is located in San Simeon. For 10 points, identify this architect responsible for the design and construction of Hearst Castle.

ANSWER: Julia Morgan

20. Although not EPO, when this protein binds to the b, or long, isoform of its receptor, JAK2 is activated and phosphorylates said receptor at Tyr985 and Tyr1138, leading to the recruitment of STAT3. Minokoshi, et al. found that this protein activates AMPK, leading to the inhibition of acetyl-CoA carboxylase, reduction of malonyl-CoA levels, and an increase in fatty acid oxidation. Homozygous mutant Zucker rats

feature a mutation in this protein's receptor. Of the neurons that project from the arcuate nucleus into the lateral hypothalamic area, this hormone increases the number of neurons that secrete proopiomelanocortin and decreases the number of neurons that secrete neuropeptide Y by regulating expression of Fos and SOCS-3. db/db mice are homozygous for a mutation in this hormone's receptor, and it is the product of the Ob gene. For 10 points, identify this hormone released from adipose tissue that reduces appetite and regulates hunger along with ghrelin.

ANSWER: **leptin** [or **ob** protein until "Ob" is read]

1. A long critique of this book was written by the historian Nicholas Dujmovich, who argued that the episode from which its title was taken never actually occurred as described. For 10 points each: [10] Identify this 2007 book by journalist Tim Weiner which chronicles the history of the CIA. According to Weiner, its title refers to what Eisenhower thought he would be leaving to his successor.

ANSWER: **Legacy of Ashes**: The History of the CIA

[10] The exchange that Weiner claims featured the titular phrase was supposed to have taken place between Eisenhower and this man, who served as Director of Central Intelligence from 1953 to 1961.

ANSWER: Allen Welsh **Dulles** [prompt on partial answer]

[10] Together with Frank Wisner, Dulles personally organized and ran this operation, which was intended to influence journalists and persuade them to support CIA positions.

ANSWER: Operation Mockingbird

2. The only reliable method for producing these compounds is the Huisgen 1,3-dipolar cycloaddition of azides and alkynes. For 10 points each:

[10] Identify these aromatic heterocycles with three nitrogen atoms and two carbon atoms in a five-membered ring. Unlike its isomer, all the nitrogens in the ring of this compound are in a row.

ANSWER: **1,2,3-triazole**s [prompt on **triazole**s; do not accept "1,2,4-triazoles"]

[10] The 1,3-dipolar cycloaddition of azides and alkynes to form 1,2,3-triazoles is a common example of a reaction in this field of chemistry introduced by the awesome K Barry Sharpless.

ANSWER: **click** chemistry

[10] The other half of Sharpless's Nobel was awarded to William Knowles and Ryoji Noyori for their work on an asymmetric version of this reaction, using rhodium-based and ruthenium-based catalysts, respectively.

ANSWER: **hydrogenation**

3. He performed the *primo uomo* roles in the Danish Royal Opera's recent productions of Handel's *Giulio Cesare* and *Partenope*. For 10 points each:

[10] Name this German singer, a Baroque specialist who notably sang "Dido's Lament" on his 2010 Henry Purcell album. *O Solitude*.

ANSWER: Andreas Scholl

[10] Andreas Scholl is a singer of this type, with a highly trained falsetto range that allows him to sing higher than male singers usually do. Baroque music written for castrati is often sung nowadays either by singers of this type or by women.

ANSWER: countertenor

[10] Scholl's vocal range is well-suited to the music Handel wrote for this singer, which includes the role of Giulio Cesare. This man was an alto castrato, unlike Farinelli, who was a soprano.

ANSWER: **Senesino** [or Francesco **Bernardi**]

4. In the degenerate version of this formalism, when two eigenstates have identical eigenenergies the submatrix corresponding to them has to be diagonalized to avoid infinities. For 10 points each: [10] Identify this formalism useful in physics in which the solutions of a system experiencing a potential small relative to the original Hamiltonian are expanded in eigenstates of that original Hamiltonian.

ANSWER: **perturbation** theory

[10] In time-dependent perturbation theory, the time evolution operator can be calculated by iteratively finding elements of this namesake series, which expands that operator in powers of the perturbation.

ANSWER: **Dyson** series

[10] For long times, Fermi's golden rule gives an easy way of calculating this quantity for any two states of a system.

ANSWER: **transition probability** [accept logical equivalents]

5. This work argues that the rising inequality in the United States is a product of specific political decisions, against what the authors call the "skill-biased technological change" account, among others. For 10 points each:

[10] Identify this work of political science which argues that most of the economic gains since the 1970s have gone to a small fraction of the population, resulting in the title situation rather than a broad spreading out of wealth.

ANSWER: <u>Winner-Take-All Politics</u>: How Washington Made the Rich Richer and Turned Its Back on the Middle Class

[10] Winner-Take-All Politics was a collaborative effort by two political scientists, one from Yale and the other from Berkeley. Name either.

ANSWER: Jacob <u>Hacker</u> and Paul <u>Pierson</u>

[10] One of the political decisions that Hacker and Pierson see as partly responsible for rising inequality is the Gramm-Leach-Bliley Act, which repealed parts of this Depression-era legislation that forbid the merger of investment and commercial banks.

ANSWER: **Glass-Steagall** Act or the **Banking Act of 1933**

6. These genealogies are attached to the beginning of a *hadith* and elucidate all the people who heard the *hadith* up to those who heard it personally from Muhammad. For 10 points each:

[10] Identify these chains of *hadith* authentication, whose name comes from the Arabic word for "support."

ANSWER: isnad

[10] A valid *isnad* is a key aspect of this practice of Islamic jurisprudence.

ANSWER: figh

[10] The practice of *fiqh* may also be guided by these commentaries on the Qur'an, the earliest of which date back to Muhammad himself.

ANSWER: tafsir

7. This novel's main character works on a book called *The Legend of King Krogold* and comes under the influence of Courtial des Pereires, who cultivates vegetables by electrocuting the ground the grow in. For 10 points each:

[10] Identify this novel in which Ferdinand Bardamu narrates the story of his own youth. It ends with Ferdinand joining the army, thus forming a prequel to the author's first work.

ANSWER: **Death on the Installment Plan** or **Mort a credit**

[10] *Death on the Installment Plan*, together with the book written before it, but set after its events, *Journey to the End of Night*, were both written by this French author.

ANSWER: Louis-Ferdinand **Celine** or **Destouches**

[10] Much like Celine himself, Ferdinand is forced to flee Paris after being denounced as a Nazi collaborator in this final novel of Celine's wartime trilogy, which began with *Castle to Castle*.

ANSWER: **Rigadoon** or **Rigodon**

8. The objects at the center of this event purported to show how the Catholic Mass was leading people into idolatry, and attacked the doctrine of real presence. For 10 points each:

[10] Identify this event of 1534, in which the title objects were put up in public in six French cities.

ANSWER: Affair of the **Placards**

[10] This Huguenot, a satirist who also published the *Book of Marchauntes*, attacking ecclesiastical abuses, is generally believed to have been the author of the placards.

ANSWER: Antoine Marcourt

[10] In the face of heresy, this ruler performed an about-fact, reversing his earlier policies of toleration and shutting down many Huguenot publishers. For much of his life, he was engaged in a war with Holy Roman Emperor Charles V.

ANSWER: Francis I

9. A section of this collection titled "Prose of Departure," is written in the form of *haibun*, interspersing prose and poetry. For 10 points each:

[10] Identify this poetry collection which also contains a one-act play titled "The Image Maker," as well as the poems "Losing the Marbles" and "Morning Glory."

ANSWER: The **Inner Room**

[10] This American poet dedicated *The Inner Room* to Peter Hooten, a young actor with whom he was in love.

ANSWER: James Ingram Merrill

[10] Merrill is probably best known for this mammoth work, a poem written with the help of oija seances with his partner David Jackson.

ANSWER: The **Changing Light at Sandover**

10. The title structure of this painting stands on a hill dwarfing the tiny human village below. For 10 points each:

[10] Identify this painting which depicts what appears to be a gigantic fountain brimming with water.

ANSWER: The **Titan's Goblet**

[10] *The Titan's Goblet* was painted by this American landscapist better known for depicting the progression of civilization in his *The Course of Empire*.

ANSWER: Thomas Cole

[10] According to the art historian Ellwood Parry, Cole's painting of *The Titan's Goblet* may have been influenced by his viewing of a J.M.W. Turner painting depicting these two mythological characters, the first of whom is mocking the second from aboard a ship.

ANSWER: <u>Ulysses</u> [or <u>Odysseus</u>] and <u>Polyphemus</u>

11. This philosophical anthology opens with papers from Moritz Schlick and Rudolf Carnap, both of which argue in their own way that philosophical problems are really problems of the title variety. For 10 points each:

[10] Identify this influential collection of philosophical papers divided into four sections, two of which concern the metaphilosophical problems of ideal and ordinary language philosophy.

ANSWER: The **Linguistic Turn**

[10] *The Linguistic Turn* was edited by this philosopher, who expanded on the ideas expressed in the introduction to the volume in his later work, *Philosophy and the Mirror of Nature*.

ANSWER: Richard McKay Rorty

[10] *The Linguistic Turn* also contains the essay "Analysis, Science, and Metaphysics," by this philosopher, who studied Kant's *Critique of Pure Reason* in his book, *The Bounds of Sense*, and argued that it was natural to try and hold people accountable for their actions in the paper "Freedom and Resentment." ANSWER: Peter Frederick **Strawson**

12. A creature at the left of this work has back spines, a long proboscis, and is wielding a club with which it

beats the title character. For 10 points each:

[10] Identify this engraving in which the title character stands passively while eight creatures rend his clothes, hit him with sticks, and pull his hair.

ANSWER: The **Torment of St. Anthony** [accept The **Temptation of St. Anthony**

[10] The *Torment of St. Anthony* was created by this German engraver and painter. Albert Durer copied the hairy demon of his *St. Anthony* for *Knight, Death, and the Devil*, and even traveled to study with this artist, but this man had died by the time Durer got there.

ANSWER: Matthias **Schongauer**

[10] Schongauer's most famous painting is this one for the church of St. Martin in Colmar, where he lived. It shows two angels holding a crown above the title character, who holds the infant Jesus amidst the title flowers.

ANSWER: Madonna in the Rose Garden [prompt on any partial answer]

13. One play by this author is set in a hotel surrounded by a war, and contains a scene in which lan rapes Cate. For 10 points each:

[10] Identify this author of *Blasted*, who also wrote a play in the form of fragmentary scenes, whose title, *4.48 Psychosis* refers to the time when she would awake at night while suffering from depression. She committed suicide before it was performed.

ANSWER: Sarah Kane

[10] Kane wrote a play which adapts the myth of this woman, who fell in love with her stepson Hippolytus. Other adaptations of her myth include on by Racine.

ANSWER: Phaedra

[10] Though somewhat less than universally admired by critics, Kane did have a fan in this fellow playwright of the radio drama *Family Voices*.

ANSWER: Harold **Pinter**

14. Two types of this method are high-throughput sequencing, or HITS, and photoactivatable-ribonucleoside enhanced, or PAR.

[10] This method of studying *in vivo* protein-RNA interactions first cross-links RNA-binding proteins and their target RNA sequences within the cell using UV radiation and then co-immunoprecipitates the proteins and RNA.

ANSWER: UV <u>CLIP</u> [or <u>cross-linking and immunoprecipitation</u>]

[10] Immunoprecipitated proteins can be analyzed with this blot, sometimes called the protein immunoblot. This variation on a technique named for Edwin Southern is *not* used to investigate post-translational modification.

ANSWER: **western** blot [do not accept "eastern blot"]

[10] The DNA input to the Southern blot is created by these enzymes that recognize and cut DNA near a specific nucleotide sequence that is named for them. A commonly studied one of these enzymes from *E. coli* is EcoR1.

ANSWER: <u>restriction</u> enzymes [or <u>restriction</u> endonucleases]

15. A museum devoted to this organization was opened in 1990 by ASTAK, which centered its exhibit around "House 1," this organization's headquarters. For 10 points each:

[10] Identify this organization, which at the time of its demise counted over 2.5 percent of the East German population among its informants.

ANSWER: **Stasi** or the **Ministry for State Security** or **Saatssicherheit**

[10] For most of its existence, the Stasi was run by this man, who escaped trial for his time as head of the Stasi, though he was tried and convicted for the 1931 murder of two police officers.

ANSWER: Erich Mielke

[10] The Stasi had a military arm named for this man, who headed the Cheka from its inception until its restructuring in 1922, and who orchestrated the Red Terror of 1918.

ANSWER: Felix **Dzerzhinsky**

16. This book opens with the assertion that "in its extreme manifestations," the title concept "practices the horrors of the Nazi regime," and ascribes to it "massacres in Indochina, Indonesia, the Congo." For 10 points each:

[10] Identify this book broken up into three sections, with the first concerned with "the Left" under the title regime.

ANSWER: Counterrevolution and Revolt

[10] *Counterrevolution and Revolt* was written by this German-American philosopher, better known for his *Eros and Civilization* and *One-Dimensional Man*.

ANSWER: Herbert **Marcuse**

[10] The second part of *Counterrevolution and Revolt* is concerned with this human practice, which Marcuse praises for preserving the tradition of protest and the "negation of that which is 'given,'" and argues that its break with bourgeois traditions in both its "serious" and "popular" forms is nearly complete.

ANSWER: art

17. A favorite thing to do in the 16th century was to chronicle the history of the people you just finished conquering. Identify some dudes who did that, for 10 points each.

[10] Under orders from Peruvian viceroy Francisco de Toleda, this Spaniard composed his monumental *History of the Incas*, which chronicled the lineage and the mythology of the Incan emperors.

ANSWER: Pedro Sarmiento de Gamboa

[10] This son of a Spaniard and an Incan noblewoman collected the stories told to him by his Incan relatives into his *Royal Commentaries of the Incas*, generally considered the most accurate history of the Incas. He also wrote an account of de Soto's Florida expedition.

ANSWER: Inca <u>Garcilaso</u> de la Vega [or Gomez <u>Suarez</u> de Figueroa]

[10] This chronicler of the Incas wrote the now-lost *Historia Occidentalis* cited by Garcilaso. A Jesuit, he advocated for the rights of the Peruvian natives, to little avail.

ANSWER: Blas **Valera**

18. While at the palace of Utgard-Loki, Thor wrestled with one of these beings; since he was so powerful, he only went down on one knee, even though this being represented death. For 10 points each:

[10] Identify these types of beings, one example of which is the Badb aspect of Morrigan.

ANSWER: **crone** [accept **old woman** or **grandmother** or any other obvious equivalents]

[10] Perhaps the most famous mythological crone is this woman of Russian folklore who lives in a hut that walks around on chicken legs.

ANSWER: **Baba Yaga**

[10] The mother of Siggeir was a crone who turned into a wolf every night to devour one of the brothers of this hero; this Volsung eventually killed her by smearing his face with honey and then biting off her tongue when she tried to lick it off.

ANSWER: **Sigmund**

19. This writer is best known for his *koshokubon* or "novels of sensuality" which include *Life of the Amorous Man* about a guy named Yonosuke who is looking for the perfect courtesan, and *Five Women Who Loved Love*. For 10 points each:

[10] Identify this first major Japanese novelist since Lady Murasaki, who was active during the Genroku period.

ANSWER: Ihara Saikaku

[10] Together with Matsuo Basho and this playwright, Saikaku formed a triumvirate of the great Genroku writers. This dude was all about people who love stuff and are always killing themselves in places like Sonezaki and Amijima.

ANSWER: **Chikamatsu** Monzaemon or Sugimore **Nobunori**

[10] Like basically everyone else of any importance in pre-modern Japanese literature, much of Saikaku's work was translated into English by this Columbia scholar, whose *Major Plays of Chikamatsu* surely cemented Chikamatsu's reputation in the Anglophone world.

ANSWER: Donald Lawrence **Keene**

20. A typical problem in this framework is to use feedback from the outputs to the inputs in order to allow the system to compensate and achieve the correct output, a technique known as the "closed loop." For 10 points each:

[10] Identify this general theoretical framework for making dynamical systems produce a specified output.

ANSWER: **control** theory

[10] This type of common controller is given by a constant times the error, plus a constant times the rate of change of the error, plus a constant times the cumulative error.

ANSWER: **p**roportional-**i**ntegral-**d**erivative loop controller

[10] The optimal control is the one that maximizes the Hamiltonian, according to the appropriately name maximum principle formulated by this Russian mathematician.

ANSWER: Lev Semyonovich **Pontryagin**