**Penn Bowl 2016           Packet 15**

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**Tossups:**

1. **In one play by this author, a man hires prostitutes to call on him so he seems popular with women; another woman in that play claims to hate men enough to marry one. In another of this author’s plays, Ben’s brother fakes madness to avoid signing over his inheritance. One of his protagonists makes his lover promise to “continue to like [her] own face” in a scene where they lay out their conditions for marriage, the (\*)** ‘proviso’ scene. This author wrote about Angelica’s false marriage to Sir Sampson in order to free her lover Valentine from debt.  He also coined the phrase “Music has charms to soothe a savage breast” and a quote paraphrased as “Hell hath no fury like a woman scorned.” This author of *Love for Love* wrote about the lovers Mirabell and Millamant. For 10 points, name this Restoration playwright of *The Mourning Bride* and *The Way of the World*.

ANSWER: William **Congreve**

2. **A work whose title begins with this word says that this concept “in itself” can be freed through an “encounter,” or a sensation that cannot be thought. That work’s author, who collaborated with Felix Guattari on *Capitalism and Schizophrenia*, claimed that repetition was this thing “without a concept.” Another thinker used a variation of this word to describe how the relationships between symbols affect the structure of meaning, using a (\*)** phonetically identical misspelling of it to demonstrate the gap between speech and text; that misspelling which replaces an e with an a also puns on the temporal delay inherent to writing, and it names an essay published not long after its author’s *Of Grammatology*. For 10 points, name this term used by Jacques Derrida that refers to the distinctions between signs or two other things that are not the same.

ANSWER: **difference** [or **différance** or **différence**]

3. **This leader said that a left-wing press organ that exposed weaknesses in the army was an “abyss of treason.” Menachem Begin tried to organize the killing of this European leader. This leader was forced to form a new government after several ministers were exposed as having taken bribes from the FIBAG construction company; those ministers tried to sue the whistleblowing newspaper for treason. Under this leader’s administration, his country achieved massive (\*)** economic growth under the “social market economy” designed by his economic minister Ludwig Erhard. His country pursued the Hallstein doctrine of not maintaining diplomacy with its main eastern rival and used Marshall Plan funds to rebuild from the destruction of the Nazi regime. For 10 points, name this post-World War II Christian Democratic Chancellor of West Germany.

ANSWER: Konrad **Adenauer**

4. **One of this author’s characters is rebuked by her sister for telling a guest that they are putting out flowers in celebration of their mother’s birthday. Another of this author’s characters asks his daughter’s old tutor Arnholm to come visit because he thinks that his wife is in love with him; his wife is frightened by imagining a sailor reproaching his beloved for infidelity because she was once married to an American sailor who fled after murdering his captain and who still holds a hypnotic fixation over (\*)** Ellida. A girl created by this author travels from Lysanger to visit a man who fears the “younger generation” knocking at his door, and reminds him of his promise to build her a kingdom. She later convinces that acrophobic man to climb a steeple, from which he falls and dies. For 10 points, name this author who wrote about Hilda Wangel and Halvard Solness in *The Master Builder.*

ANSWER: Henrik **Ibsen**

5. **This man’s birth was predicted by a left-handed seer wearing a shirt decorated with shells. Nine witches stole from this man’s garden so that they would have an excuse to kill him for abusing old ladies, but supported him instead after he offered them any food they wanted. This man is hated by his father’s wife Sassouma Berete, causing him to go into exile. This man was lame as a child, but finally stood after using a cane of a thick iron rod, which his weight bent into a bow. This man’s mother Sogolon was an extremely ugly woman who had previously lived as a (\*)** buffalo. He defeated an enemy by shooting him with a white cock’s spur. This “lion child” defeated the sorcerer Soumaoro Kante and founded a kingdom whose rulers were called *mansa*. For 10 points, name this legendary hero based on the historical founder of the Mali empire.

ANSWER: **Sundiata** Keita

6. **This conflict primarily took place near the settlement of Campion. Before this conflict, the government had purchased tens of thousands of hectares of land for veterans, but failed to provide wheat subsidies as promised. At the start of this conflict, defense minister Sir George Pierce deployed a force commanded by Major GPW Meredith. One side in this war was targeted because they kept creating gaps in (\*)** rabbit fences. One soldier in this war stated that not even “dum-dum bullets” could stop the other side. Despite a pair of Lewis guns and 10,000 rounds of ammunition, this operation was largely unsuccessful, killing fewer than 1,000 enemy combatants. For 10 points, name this 1932 Australian military operation, which was fought against a certain native species of farmland-destroying birds.

ANSWER: Great **Emu War**

7. **This composer wrote a piece for a Heinrich Joseph von Collin play whose stormy opening C-minor theme contrasts with an E-major theme representing the protagonist’s mother. The last piece in a set of ten incidental pieces by this composer for male voice and orchestra is called the “symphony of victory.” He’s not Tchaikovsky, but this composer made bank from a piece scored for 193 live cannon, bands, and musket fire that premiered at a war benefit concert. This composer of the (\*)** *Coriolan* *Overture* wrote a symphony with a second movement built around a “long-short-short-long-long” theme introduced by the lower strings. The seventh symphony by this composer of incidental music to Goethe’s *Egmont* was premiered at a concert for Napoleonic War troops along with his piece *Wellington’s Victory*. For 10 points, name this composer of the *Eroica* symphony.

ANSWER: Ludwig van **Beethoven**

8. **When deriving the Aharonov-Bohm effect, it is noted that the difference in phase between the two electron beams is invariant under this operation. This operation corresponds with rotating a vector for a given quark in color space in Yang-Mills theory. This operation, which corresponds to moving between two different sections of a principal bundle, leads to the conservation of (\*)** charge according to Noether’s theorem. These operations, which form a Lie group of their associated theory, leave the action invariant. This operation involves subtracting the time derivative of an arbitrary scalar function from the scalar potential and adding the gradient of that scalar function to the vector potential. For 10 points, name this type of operation used in field theory which modifies the potentials without changing the fields.

ANSWER: **gauge transformation** [or changing your **gauge**]

9. **When multiplying dyads, these symbols’ namesake product of AB and CD can be calculated as A dot C times B dot D. In an OCaml module, this symbol goes between a function’s name and its type listing. In C++, two of these symbols form the scope resolution operator, which links to a namespace or class. Placing this symbol between G and its subgroup H indicates the number of cosets of H that fill up G, or the index of H in G. Older programming languages like ALGOL and Pascal placed this symbol**  (\*) before the equals sign for assignation. They are placed between property names and values in CSS, and they separate key-value pairs in dictionaries in Python and JavaScript. These symbols follow each case of a switch statement, and they indicate the phrase “such that” in set-builder notation. For 10 points, name these symbols denoting ratios, as in 2 to 1.

ANSWER: **colon**s

10. **An ancient fort-turned-housing complex within this region called the “Walled City” was so overrun by the 14K criminal group that it was demolished in 1993. This region’s Central and Mid-Levels districts are connected by a series of moving walkways and escalators. This city’s MTR subway system uses an Octopus Card. A Disneyland is located on the largest island of this region, which contains Lantau Peak. An ongoing bridge construction aims to cross the Lingdingyang Channel and connect this city to Zhuhai and** (\*) Macau. The economy of this area became the first of the so-called Four Tiger Economies, developing alongside Singapore, South Korea, and Taiwan. For 10 points, name this Chinese Special Administrative Region on the Pearl River Delta whose name translates to “Fragrant Harbor,” which was handed over to China in 1997 by Great Britain.

ANSWER: **Hong Kong** [or **Xiang gang**; prompt on Kowloon until “Central”]

11. **The *Paterikon* of the Caves Monastery collects stories of monks in this polity. One ruler of this polity tried to change its succession system so rule passed between brothers after deposing ruler of this polity who committed fratricide and earned the nickname “the Accursed” The rota or ladder system devised by a ruler of this policy who appointed Hilarion as the first non-Greek metropolitan of his capital. This polity’s history is described in (\*)** Nestor’s *Primary Chronicle*. One ruler of this state rejected Islam because it prohibited drinking, married the sister of Constantine VIII, Anna Porphyrogenita, and converted to Orthodox Christianity. This state was formed when Oleg moved the capital from Novgorod. For 10 points, name this Eastern European empire ruled by Rurikids such as Yaroslavl the Wise and Vladimir the Great from a city in modern-day Ukraine.

ANSWER: **Kiev**an Rus

12. **While living in this country, one character reads a lot of books because she is afraid she is turning into a monkey, and she angers her father by giving their maid Gladys a “surprise” titled for this country. That character’s sisters all have matching outfits, which Carla claims ruined their sense of identity. The protagonist of a novel named for this country takes a job helping a tennis coach to “relax,” and the guilt of the semi-prostitution leads her to break off contact with (\*)** Obinze, while in another novel, a girl who lives here thinks her name has “too many letters” and is told by a “witch woman” that she will have “a home in the heart.”. This country names a novel in which Ifemelu runs a blog called “Raceteenth,” by Chimamanda Ngozi Adichie. For 10 points, name this country where the Garcia Girls “lost their accents,” home to the house on Mango Street.

ANSWER: **America** [or the **United States**; accept **América Vicuña** or ***Americanah***]

13. **Giulio Gatti-Casazza claimed that the longest ovation he had seen at the Met was when Maria Jeritza sang this character's most famous aria while entirely lying prone. An aria signifying a letter written to this woman is introduced by a clarinet solo and begins with repeated C sharp and F sharp notes: that aria is “E lucevan e stelle.” This character, who sings the aria “Non la sospiri, la nostra casetta,” claims that she always decorated altars with flowers in an aria beginning E-flat, D-flat, B-flat, A-flat. In the aria (\*)** “Recondita armonia,” a blonde model for Mary Magdalene is contrasted with this dark-haired character, who betrays the hiding place of Angelotti. After this soprano finds out that her lover Cavaradossi’s fake execution was actually real, she commits suicide by jumping off the Castel Sant’Angelo. “Vissi d’arte” is sung by, for 10 points, what title woman of a Giacomo Puccini opera?

ANSWER: Floria **Tosca**

14. **This man was approached by an emissary of John B. Gordon after which Charles Griffin charged this man with carrying out a task that he described in his memoir *The Passing of the Armies* as taking place with an “awful stillness as if it were the passing of the dead.” After being discharged from military service, this former professor of rhetoric served as the president of Bowdoin College and the Governor of his home state of** (\*) Maine. This man ordered his troops to refuse the line, then fix bayonets and charge down a hillside to repulse Hood’s Texans on the extreme left of the Union line, an action for which he was later awarded the Medal of Honor. For 10 points, name this Union officer who led the 20th Maine against a Confederate onslaught on the second day of the Battle of Gettysburg.

ANSWER: Joshua Lawrence **Chamberlain**

15. **Peter Cohen criticized an experiment about this phenomenon for defining a lifestyle as “substitute” instead of “genuine.” That experiment placed its subjects in a space over 200 times larger than typical, and it found that the strength of this phenomenon varied if subjects were placed in a pleasant and stimulating environment versus a confining cage. A theory of this phenomenon claims it is a way to maximize (\*)** utility under full certainty and perfect information; that theory has been criticized by Ole Rogeberg as an example of how absurd choice theories are used for welfare analysis. The “personality” theory of this phenomenon relates it to mood disorders and and negative affect. Bruce Alexander studied it in Rat Park, and Gary Becker argues for a “rational” model of it. For 10 points, name this psychological phenomenon treated by various twelve-step programs.

ANSWER: **addiction** [prompt on dependence]

16. **Leon Kossoff created several pen-and-paper etchings of a painting by this artist depicting a man with an orange cape who points to himself after being mistaken for a higher ranking general. This painter created a version of *Bathsheba at her Bath* that contrasts the fully clothed title figure with a nude male statue at the back right.  In a hearing about one of his paintings, this artist claimed “painters use the same license as poets and madmen.” This artist of *The Family of Darius before Alexander* painted himself playing the (\*)** viola da gamba in a huge work showing a man pouring wine into a golden pitcher. He used three tall arches to divide an *enormous* painting which shows halberd-wielding Germans and a fully red dwarf; after an Inquisition investigation, that painting’s name was changed from the *Last Supper*. For 10 points, identify this painter of *The Wedding at Cana* and *The Feast in the House of Levi*.

ANSWER: Paolo **Veronese**

17. **One method for modelling this technique shows that it’s impossible at the plait point, and in that method an operating line is drawn on an equilateral triangle. Centrifugal contractors and mixer-settlers are used for this technique industrially, and it is modelled by the aforementioned Hunter-Nash method. One piece of laboratory equipment used to perform this technique should be vented by opening the stopper on top periodically during shaking, and like a buret has a (\*)** stopcock on the bottom. This technique, which is commonly performed on DNA and protein using a mixture of isoamyl alcohol, phenol, and chloroform, is commonly used when the partition coefficient for a particular substance is much higher for an organic phase than an immiscible aqueous phase. For 10 points, name this chemical technique in which a solute is transferred from one solvent to the other.

ANSWER: liquid-liquid **extraction** [or solvent **extraction** or **partitioning** before mention]

18. **In drug-induced pemphigus, drugs containing this chemical group, like captopril and D-penicillamine, are thought to directly haptenize desmoglein. Along with a sulfonate group, this functional group is present on one end of the chemotherapeutic Mesna, which is used as an adjuvant with cyclophosphamide. This functional group is deprotonated in the active site of calpain, papain, and several (\*)** caspases. This functional group forms a radical in the catalytic cycle of ribonucleotide reductase. This functional group is oxidized and regenerated in the function of the catalytic cycle of glutathione. This group is also oxidized by protein disulfide isomerase. For 10 points, name this chemical group present in the side chain of cysteine, which is oxidized in order to form disulfide bonds.

ANSWER: **thiol** groups [or **mercaptan** group or **SH** group]

19. **Pope Sixtus VI was the first to introduce a feast day for this event in Rome and described its main event as “miraculous” rather than using the adjective more commonly applied to it. Both Bernard of Clairvaux and St. Thomas Aquinas criticized this doctrine, the latter arguing that it could not have happened “before the infusion of a rational soul” in *Summa Theologica.* The *ex cathedra* bull that defined this doctrine argued that it follows from its subject being described as “full of grace.” That bull, *Ineffabilis Deus*, was issued on the day of the “Feast” of this doctrine - (\*)** December 8th - by Pope Pius IV. This doctrine effectively states that the person referred to as *theotokos* could not have transferred a curse inherited from Adam and Eve. For 10 points, name this doctrine which states that the Virgin Mary was never affected by original sin, because she was born without it.

ANSWER: **Immaculate Conception** of Virgin Mary [prompt on Conception of Mary or birth of Mary]

20. **In this work, a man is called a “Morris Finestein” for crying, and the narrator of this novel observes that “most of us would rather love than be loved.” A dwarf in this novel tugs on the pants leg of the man he’s infatuated with and wiggles his ears for attention. A handsome reprobate in this novel carries around the ear of a man he killed in a razor fight. Stumphy MacPhail sees the arrival of a man who later paints half of a porch bright green, and who follows another character around because he has been to the (\*)** penitentiary in Atlanta. After a ten-day marriage to the main character, Marvin Macy gets out of jail and tries to ruin her life by stealing her money; he is helped by the hunchback whom she took in, Cousin Lymon. For 10 points, name this Carson McCullers novella in which Miss Amelia creates the title melancholy eating establishment.

ANSWER: *The* ***Ballad of the Sad Cafe***

**Bonuses:**

1.  This author’s piece “From Here to Mullahcracy” outlines his preferred term for Iran’s government and appeared Lila Azameh Zanganeh’s collection *My Sister, Guard your Veil*. For 10 points each:

[10] Name this Iranian-American author of *No God but God*.

ANSWER: Reza **Aslan**

[10] This word provides the title of Aslan’s book about the life of Jesus. This word originally referred to a sect of Jews, including the dagger-wielding *sicarii*, who fought against Roman emperors like Vespasian.

ANSWER: **zealot** [accept **Zealots** or **Zelotai**]

[10] Aslan’s article “Beyond Fundamentalism” examines the modern incarnation of this Islamic concept of “struggle,” whose name is used to refer generically to Islamic holy war.

ANSWER: **jihad**

2. The Mukti Bahini was an informal military force which successfully used guerilla warfare after being called to arms by the leader of this political party. For 10 points each:

[10] Name this political party headed by Sheikh Mujibur Rahman.

ANSWER: **Awami** League

[10] The Awami League was the founding political party in this South Asian country after it became independent from Pakistan in 1971.

ANSWER: (People’s Republic of) **Bangladesh**

[10] The office of Prime Minister of Bangladesh has alternated between two women, both of whom are from political dynasties within the Awami League and the Bangladesh Nationalist Party. Name either.

ANSWER: Sheikh **Hasina** [or Khaleda **Zia**]

3. It has been hypothesized that jets of icy particles from this moon’s oceans may be the source of ice in the E ring.  For 10 points:

[10] Name this sixth-largest moon of Saturn which, like Europa, has an internal ocean underneath an icy surface.  Also like Europa, it is in an orbital resonance, which increases its orbital eccentricity.

ANSWER: **Enceladus**

[10] Tethys and Dione, other moons of Saturn, themselves each have a pair of moons of this type that occupy particular Lagrange points of their gravitational system. This adjective also names asteroids that occupy Lagrange points of larger bodies.

ANSWER: **trojan** moons [or **trojan** asteroids]

[10] Saturn’s moons Prometheus, Pan and Janus are moons of this type, which cause distortions in Saturn’s ring system like the Cassini Division by deflecting the particulate material through orbital resonance.

ANSWER: **shepherd** moons [accept **herder** moon; accept **watcher** moon]

4. Christian Anfinsen received his 1972 Nobel Prize in Chemistry for his studies of RNAase undergoing this process. For 10 points each:

[10] Name this process that creates the tertiary structure of proteins. Chaperonins aid in this process, and prions can cause Creutzfeldt-Jakob disease if they don’t undergo this process properly.

ANSWER: protein **folding**

[10] This paradox states that it would be impossible for any protein to fold within a reasonable time if it underwent  random conformation search. Exploring this paradox revealed that the necessary information for folding is contained within the primary sequence.

ANSWER: **Levinthal** paradox

[10] This molecular chaperone and a member of the HSP70 family located in the ER lumen ensures that a protein does not misfold or aggregate prior to oligomerization and folding. It is highly expressed in plasma cells.

ANSWER: **BiP** [or **Binding immunoglobulin protein** or **GRP78** or **HSPA5**]

5. In one poem, this author describes a “Spanish dancer” who is “like a gillyflower/That had put on a hat!” For 10 points each:

[10] Name this poet who wrote about that woman and claimed that he was “a sincere man” in *Versos Sencillos.* His poem “Guantanamera” was instrumental as a rallying song during the Cuban revolution.

ANSWER: Jose **Marti**

[10] This other Cuban author of *War of Time* wrote about the life of Ti Noel and his friend Macandal before, during, and after the Haitian Revolution in *The Kingdom of this World*. A musicologist, he also wrote about the meeting of Handel, Scarlatti, and Vivaldi in *Concierto Barroco.*

ANSWER: Alejo **Carpentier**

[10] In this other novel by Carpentier, siblings Sofia and Esteban die in an anti-bourgeois revolution in Madrid, while Carlos survives to bring about a successful war of independence years later.

ANSWER: ***Explosion in a Cathedral*** [or *El* ***Siglo de las Luces*** or *The* ***Century of Lights***]

6. In John Green’s *Crash Course* Youtube video on this historical time period, he asks if it “was … a thing” and then takes revisionism too far by declaring it to not be “a thing”. For 10 points each:

[10] Name this time period, which most historians would agree was indeed a thing. Starting in Italy and spreading northward, it was named after its cultural “rebirth” of arts and literature from the 14th to 17th centuries.

ANSWER: the **Renaissance**

[10] During the Renaissance, Girolamo Savonarola decided to destroy thousands of books, artworks, and cosmetics in this event. Boccaccio, being a massive Savonarola fanboy, eagerly threw his own works in.

ANSWER: the **Bonfire of the Vanities** [or **Falò delle vanità**]

[10] This 1378 to 1382 rebellion in Florence was sparked by the under-representation of laborers who did not belong to any guilds. It started after the War of the Eight Saints and saw Michele de Lando briefly take power.

ANSWER: **Ciompi** Revolt

7. This organization runs the PISA, a standardized test to compare academic ability between countries. For 10 points each:

[10] Name this organization of 35 developed countries which was originally formed in 1948 under a different name to administer post-war economic assistance to Europe from Canada, its first member, and the United States, its second.

ANSWER: **OECD** [or **Organization for Economic Cooperation and Development**]

[10] The 1999 OECD convention combating this activity done to foreign public officials is the only one to tackle its supply side. The convention imposes penalties for businessmen illegally giving money for favours via this activity.

ANSWER: **bribe**ry [prompt on corruption**]**

[10] The OECD Anti-Bribery Convention doesn’t outlaw these financial transactions in which public servants are paid by businesses to complete their enumerated duties, usually actions whose outcome is already pre-determined such as processing already-approved documents or stamping visas.

ANSWER: **Facilitation** payments [or **facilitating** payments; or **grease** payments]

8. Jorge of Burgos condemned this work because of its association with the “infidel Moors.” For 10 points each:

[10] Name this work which led to the deaths of Adelmo, Berengar, and Venantius Salvermec. Jorge had poisoned its pages because of its analysis of comedy, which he believed led to the destruction of faith.

ANSWER: the **second** volume of Aristotle’s ***Poetics*** [or **Aristotle**’s treatise on **comedy**; accept clear equivalents; prompt on Poetics]

[10] This author wrote about William of Baskerville’s attempts to solve the murders of Adelmo, Berengar, and Venantius at a Benedictine Monastery in *The Name of the Rose*.  
ANSWER: Umberto **Eco**

[10] In this other novel by Eco, the amnesiac protagonist Yambo discovers Shakespeare’s First Folio among his grandfather’s books. The shock of the discovery causes him to relive the lost memories of his childhood.

ANSWER: *The* ***Mysterious Flame of Queen Loana***

9. An essay with this term in its title begins by criticizing the historical perspectives of universalists and diffusionists. For 10 points each:

[10] Name this branch of anthropology that compares and contrasts different peoples and cultures. The aforementioned essay about this discipline asserts that societies are always “dynamic” and “in flux,” containing phenomena that are simultaneously both cause and effect.

ANSWER: **ethnology**

[10] This “Father of American Anthropology” wrote “The Methods of Ethnology” and started an anthropology department at Columbia with students like Margaret Mead and Zora Neale Hurston.

ANSWER: Franz Uri **Boas**

[10] The modern Lithuanian anthropologist Vytis Ciubrinkas has argued the “national ethnology” predominant in Eastern Europe focuses on studying this set of traditional practices, knowledge, literature, and art passed on largely through oral communication.

ANSWER: **folklore**

10. Nino Frank coined this term to describe a number of films that premiered in France in 1946, such as *Double Indemnity* and *The Maltese Falcon*. For 10 points each:

[10] Give this term used to describe films that feature private detectives and femme fatales. Philip Gaines outlined many subtypes of this genre, such as its "documentary" form, exemplified by *The Naked City*.

ANSWER: film **noir**

[10] Gaines identifies this film, directed by by Robert Aldrich, as being part of the "apocalyptic noir" subgenre. In this film, Mike Hammer escapes from a beach house after nuclear material in a briefcase explodes.

ANSWER: ***Kiss Me Deadly***

[10] This onetime wife to Orson Welles starred in many film noirs, including *The Lady from Shanghai*, which ends with her character being killed in a shootout in a hall of mirrors.

ANSWER: Rita **Hayworth**

11. This poem’s title comes from Paul’s epistle to the Romans. For 10 points each:

[10] Name this poem about men with “bones picked clean and clean bones gone” who have “stars at elbow and foot” and who, though “mad and dead as nails,” “break in the sun til the sun breaks down.”

ANSWER: “**And death shall have no dominion**”

[10] “And death shall have no dominion” is by this Welsh poet, who told the reader to “rage, rage against the dying of the light” in “Do not go gentle into that good night.”

ANSWER: Dylan **Thomas**

[10] In this other poem, Thomas recalls his childhood “young and easy under the apple boughs” and says “Time held me green and dying / Though I sang in my chains like the sea.”

ANSWER: “**Fern Hill**”

12. This event is memorialized by a field with empty chairs. For 10 points each:

[10] Name this event that destroyed the Alfred P. Murrah Federal Building in 1995. It killed 168 people, including Baylee Almon, who was the subject of a Pulitzer Prize winning photograph.

ANSWER: **Oklahoma City** bombing [accept obvious equivalents like **OKC** bombing]

[10] The Oklahoma City bombing was carried out by Terry Nichols and this man, an Army veteran who earned a Bronze Star in the Persian Gulf War. He was arrested wearing a T shirt with the motto “sic semper tyrannis” on it.

ANSWER: Timothy **McVeigh**

[10] Before being transferred to death row, McVeigh spent time at this federal supermax in Colorado, currently home to fellow bombers Richard Reid, Umar Abdulmutallab, Eric Rudolph, Ted Kaczynski and Ramzi Yousef.

ANSWER: **ADX Florence**

13. This composer’s twenty-seven piano etudes are commonly recognized as advancing the form from technical pieces to an art form in itself.  For 10 points each:

[10] Name this Polish Romantic-era composer, whose etudes include the “Revolutionary.”

ANSWER: Frédéric **Chopin**

[10] In this Chopin etude, a four-measure *lento* introduction of the melody opens into a much more difficult *allegro con brio* section evoking the “howling” phenomenon it’s often nicknamed for.

ANSWER: Étude Op. 25, No. **11** [or “**Winter Wind”**]

[10] This other popular Chopin etude is nicknamed for the fact that the repeating triplet figures in the right hand are played on a very constrained set of notes.

ANSWER: “**Black Key**s” Etude [or **Étude** Op. **10**, No. **5**]

14. This structure is unusually made of biogenic silica in diatoms. For 10 points each:

[10] This sturdy layer outside of the cell membrane is composed mainly of cellulose in plants and peptidoglycan in bacteria. Animals lack this cell component.

ANSWER: **cell wall**

[10] In some bacteria, this generally solid polysaccharide covering coats the external surface. It can be visualized using the quellung reaction, and B. anthracis strangely has one made from D-glutamic acid.

ANSWER: **capsule**

[10] This concentrated gel-like material has no ATP and is found between the cytoplasmic and outer membranes of gram-negative bacteria, of which it comprises up to 40% of the volume.

ANSWER: **periplasm** [or **periplasmic space**]

15. A review of *Batman vs. Superman* argues that only gods and animals can be deconstructionists, and its narrator regrets that the expensive CGI is wasted on him because he’s more interested in eating insects. For 10 points each:

[10] That review is a reference to this 1974 paper by Thomas Nagel which argues against reductionist theories of consciousness.

ANSWER: “**What is it like to be a bat?**”

[10] Nagel suggests that a scientist from this place would only understand a rainbow as a physical phenomenon. Saul Kripke admits that an individual from this place “might find the quus function simpler than the plus function.”

ANSWER: **Mars** [prompt on more general answers like space]

[10] In “Is Life Worth Living?” this American pragmatist wrote that the human mind might be incapable of understanding much of the universe. He also wrote *The Principles of Psychology*.

ANSWER: William **James**

16. This god sent his son Obatala to climb down from heaven on a golden chain and create land by pouring out a shell of sand. For 10 points each:

[10] Name this Yoruba creator god, the orisha of the sky, who is never directly worshipped.

ANSWER: **Olorun** [accept **Oludumare**]

[10] The Yoruba come from this country; other ethnic groups from this country with capital Abuja include the Hausa, the Igbo, and the Ijaw.

ANSWER: **Nigeria**

[10] This Yoruba trickster god once took the form of a chameleon to piss off a seamstress by taking the colors of any beautiful dress she could create; he is also the messenger god and the *orisha* of chance.

ANSWER: **Eshu**

17. One character in this work, Abby Martin, is convinced that she is the twin of Queen Victoria. For 10 points each:

[10] Name this short story sequence in which the narrator lives with Almira Todd and hears the stories of sailor Captain Littlepage and other elderly residents of Dunnet.

ANSWER: *The* ***Country of the Pointed Firs***

[10] *The Country of the Pointed Firs* was written by this non-Kafka author of *A Country Doctor,* who also wrote about Sylvy’s refusal to accept payment from an attractive hunter to find a bird in another story.

ANSWER: Sarah Orne **Jewett**

[10] In the aforementioned story Svylvy hides a heron of this color. Don DeLillo’s novel about Hitler studies professor Jack Gladney is titled after this color of “Noise”.

ANSWER: **white**

18. Name some artists who worked on album covers, for 10 points each:

[10] This member of the Independent Group designed the cover of the Beatles’ *White Album*. He also created a collage of a man with a suggestively placed Tootsie Pop in *What makes today’s homes so different, so appealing?*

ANSWER: Richard **Hamilton**

[10] This artist won a Grammy award for his design of the album cover for “Speaking in Tongues” by the Talking Heads, which involves three transparent sleeves with patterns in different colors that can be rotated. He is better known for creating “combines” such as a stuffed goat with a tire around it, his “Monogram.”

ANSWER: Robert **Rauschenberg**

[10] Coldplay used one of this artist’s paintings as the cover of their album *Viva la Vida,* although one assumes that this artist didn’t design *Liberty Leading the People* just for them.

ANSWER: Eugene **Delacroix**

19. This phenomenon was discovered by Heike Kamerlingh Onnes in 1911, and objects exhibiting this property also exhibit the Meissner effect. For 10 points each:

[10] Name this phenomenon that brings the classical electrical resistance of a material to zero, is used to build Josephson junctions, and is described by BCS theory.

ANSWER: **superconductivity**

[10] Superconductivity occurs due to phonons mediating the recombination of electrons into these bosonic particles, named for one of the namesakes of the BCS theory.

ANSWER: **Cooper pair**

[10] One of the triumphs of BCS theory is the fact that it predicts this effect, in which the critical temperature is inversely proportional to the mass of the material used to make the superconductor

ANSWER: **isotope** effect

20. You are an ancient Canaanite. Answer some questions about some of your intermittently hostile neighbors for 10 points each:

[10] Name this group of people, which had a namesake “Pentapolis” consisting of five cities. The biblical Goliath was one of these people, and Delilah betrayed Samson to these people.

ANSWER: the **Philistines**

[10] The Philistines arrived in the Levant as a part of this larger group of people who migrated around the Mediterranean during the Late Bronze Age. They probably originated in the Aegean and are mentioned in some contemporaneous Egyptian texts as enemies.

ANSWER: the **Sea Peoples** [or Les **peuples des mer**]

[10] This city of the Philistine Pentapolis, unlike Ekron or Gath, is one of the three sites on the Mediterranean coast along with Gaza and Ashdod. In July 2016, excavations here uncovered many rare Philistine burials.

ANSWER: **Ashkelon** [or **Ashqelon**; or **Ascalon**]