# Bulldog High School Academic Tournament 2016 (XXV): "Pencil and paper ready..."

Written by Yale Student Academic Competitions (Stephen Eltinge, Adam Fine, Isaac Kirk-Davidoff, Moses Kitakule, Laurence Li, Grace Liu, Olivia Noble, Jacob Reed, Basil Smitham, Connor Wood, Haohang Xu, and Cathy Xue)
Edited by Jacob Reed

## **Packet 14 Tossups**

- 1. This technique is used in the first step of a Gibson assembly. A precursor to this technique was developed by Michael Smith. This technique sometimes uses an enzyme from *Pyrococcus furiosus* called *Pfu*. It is often used in forensics to study short tandem repeats. This technique can be used to study gene expression through its "reverse (\*) transcription" variety. This procedure is performed with a thermocycler. In this procedure, which starts with denaturing and annealing, *Taq* polymerase and primers are used to amplify a specific sequence. For 10 points, name this technique invented by Kary Mullis, which creates many copies of a bit of DNA.

  ANSWER: PCR [or polymerase chain reaction; accept more specific answers like RT-PCR] < JR>
- 2. The floorplans of these buildings is often an eight-by-eight grid of squares. They are built around a garbha griha and are topped by shikharas or vimanas. These buildings are the goals of tirthas and are located in kshetras. The center of these buildings is often empty, symbolizing (\*) Purusha. Pujas are often performed publicly to murtis in them. Famous examples of these buildings include Prambanan and the Angkor Wat. Sections of them often symbolize the pursuits of artha, moksha, and dharma. For 10 points, name these buildings where deities like Brahma and Shiva are worshipped.

ANSWER: <u>Hindu temple</u>s [or <u>mandir</u>s; or <u>prasada</u>s; if they say just "temples," prompt by asking "In which religion?"] <JR>

- 3. This calendar year is the traditional date for both Iceland's conversion to Christianity and the founding of Oslo. In this year, Olaf Tryggvason was killed, marking the beginning of Danish hegemony in Scandinavia. In the year before this one, the great scholar Gerbert became the first French pope, Sylvester II. In this year, Charlemagne's tomb was opened by Otto III. At the end of this year, Saint (\*) Stephen was crowned the first king of Hungary. This year usually marks the division between the Early and High Middle Ages. For 10 points, name this year that did not mark the end of the world, despite being the beginning of a new millennium.

  ANSWER: 1000 A.D. [or 1000 C.E.; do not accept "1000 B.C." or "1000 B.C.E."] < JR>
- Functions described by this adjective are the solutions to Laplace's equation. A quantity named for this adjective gives the average speed of a trip taken in two equal segments, and equals the geometric mean squared divided by the arithmetic mean. A system named for this adjective decays exponentially if it is over-(\*) damped. This term refers to the integer multiples of the fundamental frequency, which are the dominant partials or overtones. This adjective describes the divergent series "one, plus one-half plus one-third...." For 10 points, give this adjective that also describes simple oscillators like a mass on a spring.

ANSWER: <u>harmonic</u> [accept word forms] <AF/JR>

4. [*Note to moderator: please read the gray-highlighted text SLOWLY*]

5. During this century, landscapes like *The Jewish Cemetery* and *The Embarkation of the Queen of Sheba* were painted. Classicizing artists like Salomon Ruisdael ("ROWSE-dahl") and Claude Lorrain worked during this century. An artist from this century depicted a large curtain in front of a woman standing in front of a huge map, holding a book and a (\*) trumpet, and being painted by the artist. That artist from this century depicted yellow and blue clothing in paintings like *Woman Reading a Letter*, *The Milkmaid*, and *The Art of Painting*. For 10 points, name this century when *View of Delft* and *Girl With a Pearl Earring* were painted by Jan Vermeer. ANSWER: 1600s [or seventeenth century] < JR>

6. [Note to moderator (do not read this out loud!): there are a lot of pronunciation guides later in this question; it may be helpful to look over them before starting]

A poet from this country included poems like "Nothing Twice" in her early collection *Calling Out To Yeti*. Another poet from this country analyzed the collaborationist mentality in his book *The Captive Mind*. This country's national epic, about its post-Napoléon occupation, was published in 1834, and is called *Pan* (\*) *Tadeusz* ("tah-DAY-ush"). An author originally from this country spurred the Yiddish literary movement with stories like "Gimpel the Fool." For 10 points, name this country home to Wislawa Szymborska ("vee-SWAH-va shim-BORE-skah"), Czeslaw Milosz ("CHEH-swahff MEE-woash"), and Adam Mickiewicz ("miss-kee-AY-vitch"), which Isaac Bashevis Singer remembered in *A Day of Pleasure: Stories of a Boy Growing Up in Warsaw*. ANSWER: Republic of Poland [or Rzeczpospolita Polska] <JR>

7. Otus and Ephialtes were tricked into killing each other by chasing one of these creatures. The mother of Oisin and wife of Finn Mac Cool was cursed to take on the form of this creature. Four of these animals eat from the branches of Yggdrasil. Lakshman and (\*) Rama's attempts to capture a golden one of these animals leaves their home unguarded, allowing Ravana to capture Sita. Artemis once sacrificed one of these creatures in place of Iphigenia, and Actaeon was turned into one of these animals and chased down by his hunting hounds. For 10 points, name this frequently antlered woodland animal.

ANSWER: <u>deer</u> [accept <u>doe</u>, <u>stag</u>, or <u>hind</u>] <CX>

8. During this conflict, the United States tried to enforce an embargo by holding the German ship *Ypiranga*. The U.S. also interfered in this conflict by occupying a port in the Tampico Affair. During this conflict, Henry Lane Wilson was implicated in several assassinations during the Ten Tragic Days. The continuation of this conflict gives its name to Plutarco (\*) Calles's party, the PRI. This conflict included the presidencies of Venustiano Carranza, Victoriano Huerta, and Francisco Madero. For 10 points, name this war in which Porfirio Díaz was ousted with the help of Emiliano Zapata and Pancho Villa.

ANSWER: the Mexican Revolution [or Revolución Mexicana; prompt on "Mexican Civil War"] < JR>

9. This technique is performed in a slate container covered with a thin layer of mercury, to produce sodium hydroxide in the Castner–Kellner version of the chloralkali process. Several elements were first isolated using this technique by Sir Humphry Davy. This technique is performed on a solution of molten (\*) cryolite and aluminum oxide in the final step of the Hall–Héroult process. Faraday's laws of this technique state that it produces mass in proportion to the amount of transferred charge. For 10 points, name this process of driving a reaction with an electric current, which is used to separate water into hydrogen and oxygen.

ANSWER: <u>electrolysis</u> [accept "<u>Castner–Kellner</u> process" or "<u>chloralkali</u> process" <u>before</u> they are mentioned] <JR>

10. This character's strength is bet against a sack of gold dust "the size of a bologna sausage" and worth sixteen hundred dollars. The novel's epigraph foreshadows how, in this character, "old longings nomadic leap" and part of him awakens "from its brumal sleep." This character is sold to (\*) François and Perrault, and then to the incompetent Charles, Hal, and Mercedes. This character is saved by and saves John Thornton. He is beaten by the "man in the red sweater" after being forced to leave Judge Miller's house in the Santa Clara Valley. For 10 points, Spitz is killed by which dog, who escapes the Klondike Gold Rush in Jack London's *The Call of the Wild*?

ANSWER: Buck <JR>

11. One streamer of this game, Massan, was accused of viewbotting by Reckful. Tempostorm hosts a weekly Meta Snapshot for this game, and Ostkaka won its 2015 World Championship. This game recently featured the "Unite against Mechazod!" event as part of its Tavern Brawl mode. Strategies in this game include comboing Force of Nature with Savage Roar and flooding the board with Secrets like Noble Sacrifice. This turn-based game is built on a (\*) Magic: The Gathering-like mana curve system, and players of it can choose from nine classes including Rogue and Hunter. For 10 points, name this game subtitled Heroes of Warcraft, an online card game created by Blizzard.

ANSWER: *Hearthstone*: Heroes of Warcraft <LL>

12. This number is the total spin of a triplet state. Using the reduced mass allows systems to be treated as if they had this many bodies. In relativity, this is the hypothetical maximum value of beta. Thermal expansion usually varies with this power of (\*) temperature. This value is the index of refraction of a vacuum. The restoring force for an ideal spring is proportional to this power of the displacement. This is the power of height in the formula for gravitational potential energy. Frequency times period gives this value. For 10 points, name this exponent of x in a linear function of x.

ANSWER: one [or first] <AF/JR>

- 13. These people were the subjects in Renée Baillargeon's "drawbridge" study. The "avoidant" and "disorganized" attachment styles of these subjects were demonstrated in Mary Ainsworth's "strange situation" experiment. These people's vision was tested by Eleanor Gibson's "visual cliff." Studies involving these people often use the "preferential (\*) looking" method. Studies have shown that these people do actually understand object permanence, which Piaget predicted not to occur until near the end of their sensorimotor stage. For 10 points, name these human subjects who are too young to participate in traditional experiments.

  ANSWER: infants [accept babies; prompt on "children"; do not accept or prompt on "toddlers"] <AF>
- 14. A lieutenant of this man who wins a victory in Syria declares, "Better to leave undone, than by our deed acquire too high a fame when him we serve's away." In a moment of anger, this man declares "Triple-turn'd whore! 'tis thou hast sold me to this novice." In another appearance of this man, he declares, "Cry 'Havoc!' and let slip the dogs of war." This repeatedly calls another character an (\*) "honorable man," before reading the will of a dead man and inciting a crowd of Plebeians against Cassius and Brutus. This man delivers Caesar's Funeral Oration. For 10 points, name this man who, with Cleopatra, titles Shakespeare play.

ANSWERS: Mark Antony [or Marcus Antonius; accept Antony and Cleopatra; accept either first or last name]

- 15. One piece in this genre was originally intended for a patriotic collection called "Vaterländischer Künstlerverein." Another piece in this genre was Beethoven's Opus 35, and, although it's not a symphony or ballet, is often nicknamed "Prometheus" or "Eroica." Glenn (\*) Gould is most famous for his recordings of a piece in this genre. A piece in this genre is Beethoven's longest for piano and is named for Anton Diabelli. A piece in this genre is the basis for the myth that Mozart wrote "Twinkle, Twinkle Little Star." For 10 points, a Bach piece nicknamed "Goldberg" is in what genre, in which a theme is presented and then repeatedly reinterpreted? ANSWER: theme and <u>variations</u> [accept more specific sets of variations like <u>Diabelli Variations</u>] <JR>
- 16. A work in this language was the source for a Shakespeare comedy about two pairs of identical twins. The rediscovery of a playwright in this language sparked the Elizabethan trend of writing extremely bloody tragedies. That playwright in this language also described the "Pumpkinification" of his former boss. In this language, "memory," "disposition," and (\*) "invention" were laid out as part of the five canons of rhetoric. The comedy *Menaechmi* was written in this language. An orator in this language used Demosthenes as the model for his *Philippics*. For 10 points, name this language spoken by Quintilian, Plautus, and Cicero.

ANSWER: <u>Latin</u> [or <u>Latina</u>] <JR>

- 17. This scholar attacked "pure" Ciceronian Latin in his Ciceronianus. Late in his life, this thinker defended free will in De libero arbitrio. He attempted to get a job as the tutor of Charles V by writing the Education of a Christian Prince. He produced a Greek New Testament called the Textus Receptus. In another book by this post-Classical author of the (\*) Enchiridion: Handbook of a Christian Knight, the title character describes being raised by Inebriation and Ignorance, and ironically praises the corruption and abuses of the Catholic Church. For 10 points, name this Dutch humanist friend of Thomas More and author of The Praise of Folly.

  ANSWER: (Desiderius) Erasmus of Rotterdam [or Desiderius Erasmus Roterodamus] <JR>
- 18. This is the largest of three lakes known for their diverse populations of cichlid ("SICK-lid") fish. Outflow from this lake creates hydroelectricity at the Owen Falls Dam. This lake lies to the east of Lake Kivu and Lake Edward. It was named by John Hanning Speke. This lake's largest inflow is the (\*) Kagera River, and it lies in between the "arms" of the Great Rift Valley. The three countries bordering this lake share Swahili as an official language, and were founding members of the East African Community. It lies to the north of Lakes Tanganyika and Malawi. For 10 points, name this source of the White Nile, the largest lake in Africa. ANSWER: Lake Victoria [or Nalubaale; or Nam Lolwe; or Nyanza] < MK/JR>
- 19. One opera based on this story includes the waltz-aria "Je veux vivre." This story inspired a lengthy "Scène d'amour" in a choral symphony by Berlioz. Frederick Delius adapted this story in a "Village" setting. In a ballet inspired by this story, the masked ball scene features a "Dance of the (\*) Knights." This story was the inspiration for *West Side Story* and a "fantasy overture" by Tchaikovsky. It was adapted as Charles Gounod's second-most famous opera, Prokofiev's most famous ballet, and Franco Zeffirelli's most famous movie. Vincenzo Bellini adapted it as *The Capulets and the Montagues*. For 10 points, name this Shakespeare tragedy about two "star-crossed lovers."

ANSWER: *Romeo and Juliet* [or *Roméo et Juliette*] <CX/JR>

20. One side in this battle took a rare sighting of the Aurora Borealis as a sign that God was on their side. For tending to the opposite side's troops, Richard Rowland Kirkland became known as the "angel" of a location in this battle where James Longstreet had earlier repulsed the charge of Edwin Sumner. Two weeks after this battle, the Union began an unsuccessful offensive known as the "Mud March." In this battle, the Union repeatedly charged Marye's Heights. This battle ended a Union advance on (\*) Richmond, and, after it, Joseph Hooker replaced Ambrose Burnside as commander. For 10 points, name this late 1862 battle, a decisive victory for Confederate forces in Northern Virginia.

ANSWER: Battle of **Fredericksburg** <AF>

## Tiebreaker

21. Bohr–Sommerfeld quantization was first proposed to explain the trajectories of these particles. As an example of confirmation bias in physics, Richard Feynman often cited a measurement of this particle's properties that used an incorrect value for the viscosity of air. This particle is the lightest of the charged (\*) leptons, a class that it shares with the muon and the tau particle. These particles were first discovered when they were deflected by an electric field in a cathode ray tube, an experiment which won J.J. Thomson the 1906 Nobel Prize in Physics. For 10 points, name these negatively charged particles that orbit the nuclei of atoms.

ANSWER: electrons <SE>

#### **Packet 14 Bonuses**

- 1. Fragments of these objects make up the hill "Monte Testaccio" in Rome. For 10 points each:
- [10] Name these hugely popular storage vessels of the Ancient Mediterranean. These mid-sized containers were usually used to store wine.

ANSWER: <a href="mailto:amphorae">amphorae</a>

[10] Amphoras, like many other Greek ceramics, were usually decorated in these *two* colors. Around 500 BC, there was a switch in which one of these *two* colors was used for the figures and which for the background.

ANSWER: red AND black [accept orange instead of red, since that's what it looks like]

[10] Amphoras are usually classified as this kind of container, which has a narrow neck and an open top. Nowadays, they're mostly used to display cut flowers.

ANSWER: vases <JR>

- 2. This electorate was ruled alongside Poland in the time of Augustus the Strong. For 10 points each:
- [10] Name this German state ruled from Dresden.

ANSWER: Electorate of **Saxony** [or Kursachsen]

[10] Due to its ties to Poland, Saxony became embroiled in this long and destructive European conflict of the early eighteenth century. The power of Sweden began to decline after this war's Battle of Poltava.

ANSWER: the **Great Northern War** [prompt on just "Northern War"]

[10] This westernizing tsar led Russia to victory in the Great Northern War, which allowed him to build his namesake former capital city on the Baltic coast.

ANSWER: <u>Peter the Great</u> [or <u>Peter I</u>; or <u>Peter Alexeyevich</u>; or <u>Pyotr Veliky</u>; or <u>Pyotr I</u>; or <u>Pyotr Alexeyevich</u>; prompt on just "Peter" or "Pyotr"] <JR>

- 3. The hyacinth flower was created from the blood of Hyacinthus, who was killed by a wayward one of these objects thrown by Apollo. For 10 points each:
- [10] Name this frisbee-like object that was thrown in one of the events of the Ancient Olympics.

ANSWER: discus

[10] Like the hyacinth, the red anemone grew where the blood of this man hit the earth. Persephone tried to woo this man.

ANSWER: Adonis

[10] Another flower in Greek mythology was named for this youth, who spurned Echo and many other nymphs, since he just liked to stare into a pool of water.

ANSWER: Narcissus <CX>

- 4. This writer always tried to find the precise word—"le mot juste"—to fit each situation. For 10 points each:
- [10] Name this author, whose Three Tales include "A Simple Heart."

ANSWER: Gustave Flaubert

[10] In "A Simple Heart," the servant girl Felicité becomes obsessed with one of these animals named Loulou ("loo-loo"). In *Treasure Island*, one of these animals named Captain Flint sits on the shoulder of Long John Silver. ANSWER: parrots

[10] Flaubert was the mentor of this other French short story writer. He wrote about the Franco-Prussian war in stories like "Mademoiselle Fifi."

ANSWER: Guy de Maupassant < JR>

- 5. Answer some questions about fungi, for 10 points each.
- [10] These single-celled fungi include the model organism *Saccharomyces cerevisiae*. That one of *these* organisms is used in brewing and baking.

ANSWER: yeasts

[10] Multicellular fungi are organized into these filamentous structures. The aggregate of these structures is called the mycelium.

ANSWER: hyphae

[10] Sexual reproduction takes place in two main stages—name *either*. In the first one, two parent cells fuse together, while in the second of these steps, their nuclei fuse.

ANSWER: plasmogamy OR karyogamy <JR>

- 6. The music video for this song begins with a silent scene of a baby being born. For 10 points each:
- [10] Name this song whose chorus repeatedly asks, "where'd you get that body from?" It also contains the clever line "I'll be your honey, never expire."

ANSWER: "Daddy"

[10] "Daddy" is the latest single by this artist of "Hangover" and "Gentleman." His most famous song features an invisible horse-dance.

ANSWER: **PSY** [or **Park** Jae-sang]

[10] That most famous hit by PSY is this 2012 K-Pop song featuring HyunA. It has by far the most views of any YouTube video.

ANSWER: "Gangnam Style" <AF>

- 7. Answer some questions about East Asian sweets, for 10 points each.
- [10] Ice cream flavored with this kind of tea is popular in Japan and elsewhere. Like white tee, but unlike oolong and black tea, this kind of tea has oxidized very little.

ANSWER: green tea [accept matcha]

[10] Asian desserts are often sweetened with a paste made from a red variety of this kind of plant part. Another one of these plant is often called "haricots verts" ("ah-ree-coh vehr").

ANSWER: <u>beans</u> [accept <u>red bean</u> paste; accept <u>adzuki bean</u> paste; accept <u>green bean</u>s]

[10] Red bean paste is stuffed into a pancake-like cake in a popular Japanese sweet. The name of that dessert is "dora"—or: "gong"—followed by this word, which roughly means "grilled," "toasted," or "pan-fried."

ANSWER: yaki [accept dorayaki] ["Teriyaki" very roughly means "shiny-grilled"] <JR>

- 8. Answer some questions about Russian nationalism in music, for 10 points each.
- [10] Ironically, just about *every* nationalist school used this scale, which is often associated with Asian music. The black keys of the piano give this kind of scale.

ANSWER: **pentatonic** scale

[10] Russian composers often explored "exotic" orchestration. For instance, Borodin's *In the Steppes of Central Asia* makes prominent use of this lower-pitched cousin of the oboe that is not bent back on itself like the bassoon.

ANSWER: english horn [or cor anglais]

[10] Nationalist Russian composers also often quoted this kind of traditional music that is transmitted orally from generation to generation. This general term was coined by proto-nationalist Johann Gottfried Herder.

ANSWER: folk music <JR>

- 9. This theory explains the lack of magnetic monopoles in the universe. For 10 points each:
- [10] Name this theory first posited by Alan Guth. It is named for a period of very rapid expansion in the early universe.

ANSWER: cosmic <u>inflation</u> [or cosmological <u>inflation</u>]

[10] Cosmic inflation is theorized to have happened about 10-to-the-negative-32 seconds after *this* event. This event occurred about 14 billion years ago and marks the beginning of the known universe.

ANSWER: Big Bang

[10] For some reason, there is less antimatter than matter in the universe, a phenomenon explained by *this* process, which preceded Big Bang nucleosynthesis. Sakharov posited three conditions for this process to occur.

ANSWER: baryogenesis <LL>

- 10. An author from this movement wrote *Notebook of a Return to the Native Land* and the play *A Tempest*. For 10 points each:
- [10] Name this movement of francophone black writers like Aimé Césaire and Léopold Sédar Senghor.

ANSWER: négritude

[10] This intellectual wrote the essay "Black Orpheus" about négritude. He also wrote the novel Nausea.

ANSWER: Jean-Paul (Charles Aymard) Sartre

[10] Césaire also wrote a Discourse on this process, by which France took control of territories in Africa and Asia.

ANSWER: **colonialism** [accept word forms like "**colonization**"; accept **imperialism** and word forms] <JR>

- 11. This artist designed the façade of Santa Maria Novella. For 10 points each:
- [10] Name this Renaissance architect and poet. His treatises *On Painting* and *On Architecture* are the standard sources for fifteenth-century aesthetic theory.

ANSWER: Leon Battista Alberti

[10] Santa Maria Novella is located in this city, the major hub of the Renaissance. Alberti wrote a dialogue about its ruling family, the Medici.

ANSWER: Florence [or Firenze]

[10] Alberti's friend Brunelleschi is most famous for designing one of these structures for the Florence Cathedral. Christopher Wren designed a "double" one for St Paul's in London.

ANSWER: domes <JR>

- 12. This religious holiday is often celebrated with fireworks. For 10 points each:
- [10] Name this Hindu "festival of lights."

ANSWER: **Diwali** [or **Deepawali**]

[10] During Diwali, sweets are offered up in a *puja* to this Hindu goddess of wealth and good fortune.

ANSWER: Lakshmi

[10] These patterned artworks are often made as decorations for Diwali and other Hindu holidays. They are made from coloured crushed leaves, rice, or sand.

ANSWER: Rangolis [or Kolams] < JR>

- 13. The bulk alignment of electric dipole moments in a dielectric material shares its name with *this* property. For 10 points:
- [10] Identify this property of light and other transverse waves, which specifies the direction in which the electric or magnetic field oscillates.

ANSWER: polarization

[10] These elementary particles of light can individually be either left- or right-circularly polarized. These particles have no mass and travel at the speed of light.

ANSWER: **photon**s

[10] If a perfect polarizer is placed in the path of an unpolarized beam of photons, the intensity of the resulting beam will be scaled by *this* factor.

ANSWER: one-**half** [or 0.5; or 50%] <SE>

- 14. In one poem, she described a mask that "pumps my blood with power." For 10 points each:
- [10] Name this American poet who died in 2012. She explored themes like the oppression of women and lesbians in poems like "Diving Into the Wreck."

ANSWER: Adrienne (Cecile) Rich

[10] This other poet described Rich as "all vibrant short black hair...and a tulip-red umbrella; honest, pink, forthright and even opinionated." This woman wrote the poem "Daddy" and the novel *The Bell Jar*.

ANSWER: Sylvia Plath

[10] Sylvia Plath and Adrienne Rich were pioneers in this poetic style, which includes sometimes extremely personal details from the poet's own life.

ANSWER: confessional poetry [accept confessionalism] < JR>

- 15. This man concluded the Osimo Treaty with Yugoslavia to settle border claims near Trieste. For 10 points each:
- [10] Name this Italian Prime Minister from 1974 until 1976. This member of the Christian Democrats was kidnapped and killed by the Red Brigades in 1978.

ANSWER: Aldo Moro

[10] Moro negotiated the Historic Compromise with this Italian political party. During much of the postwar period, it was the largest party of its political orientation in Western Europe.

ANSWER: Italian <u>Communist</u> Party [or <u>PCI</u>; or Partito <u>Comunista</u> Italiano; do <u>not</u> accept or prompt on answers including the word "socialist"]

[10] The Italian Communist Party distanced itself from this largest Communist country in the 1970s and '80s. It headed the Warsaw Pact and was led by Leonid Brezhnev.

ANSWER: <u>U.S.S.R.</u> [or <u>Soviet Union</u>; or <u>Union of Soviet Socialist Republics</u>; or <u>C.C.C.P.</u>] <LL>

- 16. This substance can absorb mercury emissions from coal-fired power plants. For 10 points each:
- [10] Name this substance that has an extremely high surface area-to-volume ratio, which makes it ideal for cleaning up pollution and treating certain types of poisoning.

ANSWER: <u>activated carbon</u> [accept "char<u>coal</u>" for "carbon"; accept "<u>active</u>" for "activated"; do <u>not</u> accept or prompt on just "carbon"]

[10] The high surface area of activated carbon also promotes this process, in which a non-solid binds to a surface. Common models of this process include the Langmuir isotherm and BET theory.

ANSWER: **adsorption** 

[10] This other allotrope of carbon has a much smaller surface area-to-volume ratio. This crystal has a hardness of 10 on the Mohs scale.

ANSWER: diamond <AF>

- 17. This philosopher wrote that "Subjectivity is truth" in his *Concluding Unscientific Postscript*. For 10 points each:
- [10] Name this author who claimed that "repetition and recollection are the same movement, except in opposite directions" in *Repetition*.

ANSWER: Søren (Aabye) Kierkegaard

[10] This concept is central to Kierkegaard's proto-Existentialist philosophy. This is also the central concept of *The Myth of Sisyphus* and other works by Albert Camus.

ANSWER: the **Absurd** [accept **Absurdism**]

[10] Unlike later existentialists, Kierkegaard's philosophy revolved around *this* religion of his. Kierkegaard's *The Sickness Unto Death* takes its title from this religion's Gospel of John.

ANSWER: <u>Christianity</u> [accept <u>Lutheran</u>ism or <u>Protestant</u>ism, but do <u>not</u> accept or prompt on "Catholicism"] <JR>

- 18. This character constantly digresses in his narration, at one point even incorporating the marbled endpapers of the book into the main text. For 10 points each:
- [10] Name this title character of Laurence Sterne's most famous book. His father wanted to name him after Hermes Trismegistus, but the maid Susannah couldn't remember that name properly.

ANSWER: **Tristram Shandy** [accept either name]

[10] Susannah also accidentally does this action to Tristram Shandy, using a window.

ANSWER: <u>circumcision</u> [accept word forms like <u>circumcised</u>]

[10] Tristram Shandy was heavily influenced by the work of this earlier novelist, who wrote Gulliver's Travels.

ANSWER: Jonathan Swift < JR>

- 19. Answer some questions about *Café com Leite* politics, for 10 points each.
- [10] *Café com Leite* politics involved the alternation of the presidency between the state of Minas Gerais and *this* state. The 1922 Week of Modern Art was held in this state's namesake city.

ANSWER: São Paulo

[10] *Café com Leite* politics dominated this largest country in South America, which was later ruled by Getúlio Vargas.

ANSWER: Federative Republic of **Brazil** [or República Federativa do **Brasil**]

[10] Brazil was earlier ruled by two emperors of this name. The first issued the Cry of Ipiranga, while the second approved the Golden Law.

ANSWER: Pedro [accept Pedro I or Pedro II] <LL>

- 20. While preaching at Chatham Street Church, he refused to give communion to slaveholders. For 10 points each:
- [10] Name this minister, the second president of Oberlin College. He used controversial tactics for evangelizing, like the "Anxious Bench," and he met with ministers at a conference organized by Lyman Beecher at New Lebanon.

ANSWER: Charles Grandison Finney

[10] Finney and Beecher were leaders of this American movement, a religious revival during the early nineteenth century.

ANSWER: **Second Great Awakening** [prompt on "Great Awakening"]

[10] The Second Great Awakening was arguably most intense in the "Burned-Over District" of this state. Earlier, the Erie Canal was built by Benjamin Wright in this state.

ANSWER: New York State <LL>

## Tiebreaker

21. In one of this man's poems, a worm cries, "Waste no compassion on these separate dead!" For 10 points each:

[10] Name this poet who wrote "A Far Cry from Africa."

ANSWER: Derek (Alton) Walcott

[10] Walcott comes from St. Lucia, an island in this sea. Other writers from it include Barbadian poet Kamau Brathwaite and Jamaican novelist Michelle Cliff.

ANSWER: Caribbean Sea

[10] Although Walcott is best known for his poetry, his works *Dream on Monkey Mountain* and *O Babylon!* are in *this* genre of literature. William Congreve is best-known for his works in this genre.

ANSWER: <u>drama</u> [or <u>play</u>s; or <u>theater</u>; accept any equivalents that indicate it is work intended to be performed on a <u>stage</u>; accept <u>comedy</u>; accept <u>tragedy</u>] <LL>