

Bulldog High School Academic Tournament 2017 (XXVI): Revenge of the BH-SAT

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Packet 2 Tossups

1. While in this city, a protagonist dreams of people dressed in pelts who howl long “U”s for the “stranger god.” In this city, the author of *The Subject* imagines himself as Socrates lecturing at Phaedrus. That man gets the urge to travel to this city after seeing a red-haired man in a doorway. That man’s bags are sent to Como and not this city, where he smells carbolic acid (*) disinfectant in the air. That man ignores warnings of a cholera epidemic in this city, instead going to the beach to eat overripe strawberries and watch the Polish boy Tazio. Thomas Mann wrote a novella about Gustav von Aschenbach’s “Death in”—for 10 points—what Italian city?
ANSWER: Venice [or Venezia; accept “Der Tod in Venedig”] <JR>

2. The descendants of this man’s sons are called *sayyid* and *sharif*. This man legendarily wielded a sword whose blade was split at the tip and that was called *Zulfiqar*. For over a millennium, there has been a dispute over whether this man has six or eleven legitimate successors. This man’s assassination ended the first Fitna. This man’s son was killed on the 10th of Muharram at the Battle of (*) Karbala, which is commemorated on Ashura. This father of Husayn married Muhammad’s daughter Fatimah. This man succeeded Uthman as the fourth and last Rashidun or “rightly-guided” caliph. For 10 points, name this first imam of Shia Islam.
ANSWER: Ali ibn Abi Talib <JR>

3. This angle is the critical angle above which total internal reflection occurs in a material whose refractive index equals the square root of 2. The worldline of an object moving at the speed of light makes this angle with respect to the *y*-axis on a Minkowski diagram. For a granular material with a coefficient of static friction of 1, this is the value of the angle of repose. A projectile launched at this angle from the horizontal will (*) maximize its range for a given initial speed. Doubling this angle gives the angle between a normal force and the friction force it produces. For 10 points, give this angle equal to pi over 4 radians, which is the measure of both acute angles in an isosceles right triangle.
ANSWER: 45 degrees [or pi over 4 radians before it’s mentioned] <SE>

4. This man made the most recent complete English translation of the *Book of Odes*, a.k.a. the *Classic of Poetry*. Throughout his life, this poet translated works by Guido Cavalcanti and Confucius. In a “translation” by him, the speaker married “My Lord you” at fourteen, when her hair was “still cut straight across [her] forehead.” This “translator” of “The River (*) Merchant’s Wife” described the desire to “resuscitate the dead art of poetry” in “Hugh Selwyn Mauberley.” He exhorted “Make it new!” and described “petals on a wet black bough” in a two-line Imagist poem. For 10 points, name this Fascist American poet who wrote “In a Station of the Metro” and *The Cantos*.
ANSWER: Ezra (Weston Loomis) Pound <JR>

5. Along with the fountain *Meta Sudans*, one of these structures is located just southwest of the Roman Colosseum. A giant, modern structure of this kind sits among the skyscrapers of La Défense. The tomb of the Unknown Soldier is located beneath one of these structures, which sits at the juncture of twelve avenues in (*) Paris. Constantine and Titus name structures of this kind that inspired another one that's found on the west end of the Champs-Élysées ["SHAWZ-ay-lee-zay"] and was commissioned by Napoléon. For 10 points, name these giant, road-spanning passageways that are often built to celebrate military "triumphs."

ANSWER: triumphal arches [prompt on gates] <JR>

6. This protein's transport of hydrogen increases its activity in a "shift" named for a Danish physiologist. This protein changes conformation in a classic example of allosteric modulation via cooperative binding. This protein, which forms a ring of two alpha- and two beta-subunits, is affected by a common glutamate-to-valine mutation. In (*) horseshoe crabs, this protein is replaced by a copper-containing blue pigment. This protein is made of four porphyrins bound to a ferrous ion. A mutation in this protein causes sickle-cell anemia. For 10 points, name this iron-containing protein that carries oxygen in red blood cells.

ANSWER: hemoglobin [or Hb or Hgb] <JR>

7. This man's first Secretary of State may have written the Bixby letter while he was Abraham Lincoln's secretary. This man once joked that his predecessor had the backbone of "a chocolate éclair," and he strengthened the Interstate Commerce Commission with the Elkins and Hepburn Acts. This man *appointed* Gifford Pinchot and sent out the Great (*) White Fleet. This man gave a campaign speech immediately after being shot, calling himself as "fit" as an animal. This man advocated a "Square Deal," created the Forest Service, and ran for a third term in 1912 on the "Bull Moose" Party. For 10 points, name this president who was succeeded by William Howard Taft.

ANSWER: Theodore Roosevelt [or Teddy Roosevelt; prompt on just Roosevelt] <MK>

8. This event titles a George Herbert poem that uses varying line lengths to look like the title "wings." A poem titled for this event claims "Too long a sacrifice can make a stone of the heart" and describes people coming "from counter or desk among grey eighteenth-century houses" with "vivid faces." The speaker of that poem titled for this event recalls sharing "polite (*) meaningless words" with "MacDonagh and MacBride and Connolly and Pearse," and concludes: "all [is] changed, changed utterly: a terrible beauty is born." For 10 points, what Christian holiday titles a W.B. Yeats poem commemorating a failed Irish uprising in 1916?

ANSWER: Easter [accept "Easter Wings"; accept "Easter, 1916"; accept Easter rising, Easter Rebellion, etc.; accept Eiri Amach na Casca] <JR>

9. The roles these people play in society are called "situations" in a book that attacks narcissists, actors, and mystics for their "justifications." These kind of people are not allowed to be transcendent, but only "immanent," according to a book that attacks a series of "Facts and Myths." The status of these people was compared to slavery in a (*) utilitarian essay written alongside *On Liberty*. Harriet Taylor co-wrote an essay on these people's *Subjection* with John Stuart Mill. An existentialist book from 1949 claims that "one is not born, but rather becomes," this kind of person. For 10 points, name this kind of person that Simone de Beauvoir dubbed the "Second Sex."

ANSWER: women [accept females; accept feminine] <JR>

10. This art form was used to commemorate the Orchid Pavilion Gathering in the *Lan-ting-ji Xu* [“shew”] by Wang Xizhi [“see jee”]. In Islamic lands, this art form passed through styles like naskh and kufic. Eight rules for making art of this kind are mnemonically derived from the word “Yong” in a variety of this art form called *shu-fa* [“SHOO fah”]. In the Islamic world, this art form’s most common motif is the (*) *basmala*. In China, this art form follows strict rules concerning stroke order. In the West, this art was often combined with miniature painting to make large “initials.” This is the premiere visual art in Islam, since depictions of humans are forbidden. For 10 points, name this art of fancy penmanship.

ANSWER: calligraphy [prompt on writing; prompt on penmanship until it’s mentioned; prompt on any answer that indicates making a book, manuscript, etc.] <JR>

11. This country is where the Ladby Ship was discovered, and a king of this country built ring fortresses with gates for each of the cardinal directions. A history of this country was written by Saxo Grammaticus. Gorm the Old’s son christianized this country just before the year 1000, according to the Jelling Stones. In 1864, this country lost the duchies of (*) Schleswig and Holstein. Until 1814, Norway was controlled by this country. Its king Christian X supposedly wore a yellow star in solidarity with the Jews. For 10 points, name this Scandinavian nation that was occupied during World War II by its southern neighbor, Germany.

ANSWER: Kingdom of Denmark [or Kongeriget Danmark] <LL>

12. This body of water is home to most of the world’s largest offshore wind farms. A sandbank in this body of water gives its name to the hypothetical land bridge Doggerland. This body of water is the west end of the Kiel Canal. The Brent field in this body of water produces the leading price benchmark for the world’s (*) oil. This body of water lies to the west of the Heligoland Bight and the Skagerrak. This sea is bounded to the north by the Shetlands and Orkneys. The English Channel sits between the west end of this sea and the Atlantic. For 10 points, name this sea between Britain and Scandinavia.

ANSWER: North Sea <JR>

13. This organization’s founding document was partly drafted by Wellington Koo. An emissary of this organization was murdered in the Corfu Incident. This organization issued a form of identification for refugees named for Fridtjof Nansen. This organization’s founding (*) Covenant incorporated colonial “mandates.” Its unenforceable sanctions did nothing to stop the remilitarization of the Rhineland. Henry Cabot Lodge successfully got the United States to boycott this organization, even though its creation had been the last of Woodrow Wilson’s Fourteen Points. For 10 points, name this precursor to the United Nations.

ANSWER: League of Nations <MK>

14. The speed of these structures can be increased by using Duff’s device or other techniques for “unrolling.” That speedup is achieved by reducing the frequency of control instructions for these structures. Control is often passed to the next example of one of these structures by using the keyword “continue,” and these structures are often ended using the keyword (*) “break.” The beginning of one of these structures initializes a variable, sets a condition for termination, and describes incrementation of the variable. These control structures are most commonly initiated using the keywords “while” or “for.” For 10 points, name these blocks of code that repeatedly execute their contents.

ANSWER: loops [accept more specific answers like for loops] <AF>

15. In August 2016, a player from this team returned from the disabled list by pinch-hitting a game-winning home run off Chris Sales's first pitch. A pitcher from this team is the most recent man to win more than 30 games in a season, and led this team to win the 1968 World Series. The star of its 1984 World Series win, Alan Trammell, managed this team to a record 119 (*) losses in 2003. This team has since recovered, with players from it winning the American League MVP award from 2011 through 2013. Hank Greenberg and Ty Cobb played most of their careers for this team. Justin Verlander and Miguel Cabrera play for—for 10 points—what baseball team from a Michigan city?

ANSWER: Detroit Tigers [accept either underlined part]

16. A man from this modern country is told to “put some juldee in it” or he’ll be “marrowed” by a group of soldiers. That man from this modern country is called “Lazaruthian leather” and then says “I ‘ope you liked your drink” before being shot. A poem contrasts this modern country with safe quarter where “you may talk o’ gin and beer.” The speaker of that poem says “by the living Gawd that made you, you’re a (*) better man than I am!” to the title water-carrier from this modern country. This country is the setting of Rudyard Kipling’s “Gunga Din” and a novel in which Adela Quested is supposedly raped by Dr. Aziz. For 10 points, E.M. Forster wrote about a *Passage to* which modern country?

ANSWER: (British) India [accept *A Passage to India*] <JR>

17. [Note to moderator: the letter ð is pronounced like “th”.]

This god once received Alfheim, the home of the light elves, as a teething gift. He’s not Odin, but this god fell in love at first sight with his future wife while sitting on Hliðskjalf. This god gave a sword that fights on its own to a servant he sent to woo that giantess. This employer of Skirnir and husband of (*) Gerðr owned a foldable ship called Skiðblaðnir and a bronze boar called Gullinbursti. This member of the Vanir was the son of the sea god Njorðr, and Loki once accused him of committing incest with his similarly-named sister. For 10 points, name this Norse god of agriculture and fertility, the brother of Freyja.

ANSWER: Freyr [also accept Yngvi-Freyr] <JG>

18. These people were documented in a massive ethnography by Bernardino of Sahagún. Every fifty-two years, these people performed a “New Fire” ceremony called the Binding of the Years. These people organized in units called *calpulli*, and conducted most of their agriculture on “floating gardens” called (*) *chinampas*. These people were documented in the Florentine Codex. These people formed a “Triple Alliance” and their main center was a city built on artificial islands. These Nahuatl speakers were betrayed by La Malinche in the leadup to La Noche Triste. For 10 points, name this inhabitants of Tenochtitlan, who were ruled by Moctezuma and conquered by Hernán Cortés.

ANSWER: Aztecs [or Mexicatl; accept Nahuatl before “Nahuatl”] <JR>

19. This technique is impossible at the Bancroft point of a system. This technique may use either a “pressure swing” or an entrainer, and it is often combined with reflux to increase its efficiency. Many zones of equilibrium known as “theoretical plates” are needed to overcome a small difference in volatility, in this technique’s (*) “fractional” type. This procedure fails on a mixture of methanol, acetone, and chloroform, since those three compounds form a “saddle” azeotrope. This technique requires a heat source and a condenser. For 10 points, name this lab technique that separates two substances by boiling one of them off, often used to desalinate water.

ANSWER: distillation [accept fractional distillation] <AF>

20. This piece's second movement begins with six fast repeated notes, followed by a grace note that leaps up a perfect fifth. In one of its movements, the two violins trade off three-note phrases that go from an extremely high E down to the G string. This piece includes a fughetto on "Twinkle Twinkle Little Star." This piece uses no brass instruments, one clarinet and one flute, two pianos, and a (*) glass harmonica. This piece includes a hilariously slow quotation of Offenbach's "Can-Can," and uses a xylophone to quote its own composer's *Danse macabre* in the movement "Fossils." For 10 points, name this suite by Camille Saint-Saëns, which includes "Aviary," "Aquarium," and "The Swan."

ANSWER: *The Carnival of the Animals* [or *Le Carnaval des Animaux*] <JR>

Tiebreaker

21. A scattering event in which one of these particles is the *incident* particle is characterized by a factor of "one minus the cosine of the scattering angle." These particles are exchanged in interactions between charged particles according to QED and they're responsible for radiation pressure. These particles are incident in both (*) Compton scattering and Rayleigh scattering. The energy of one of these particles equals its momentum times the speed of light or Planck's constant times its frequency. Einstein posited these bosons to explain the photoelectric effect. For 10 points, name these quanta of light that have zero mass.

ANSWER: photons <AF>

Bonuses

1. This composer's late works include three piano sonatas in C minor, A major, and B-flat major. For 10 points each:

[10] Name this Austrian Romantic composer of the "Trout" Quintet and the "Unfinished" Symphony.

ANSWER: Franz (Peter) **Schubert**

[10] Schubert's last two sonatas end with movements in *this* form, which circles back to a main theme between "episodes." Mozart ended his A major piano sonata with one of these movements subtitle "alla turca."

ANSWER: **rondos** [accept "**rondo alla turca**"]

[10] Schubert's late works also include two sets of four piano pieces in *this* short form. One of Schubert's pieces in this genre is in G-flat major and 4/2 time, while another consists of variations on a theme from *Rosamunde*.

ANSWER: **impromptus** <JR>

2. Terms like "chorus" and "catharsis" are taken from this language. For 10 points each:

[10] Name this language of tragedians like Sophocles, who were critical to the development of Western drama. The "rules" of drama were laid down in this language by Aristotle's *Poetics*.

ANSWER: (Ancient) **Greek** [or **Hellenike**]

[10] This 19th-century playwright's catharsis-free comedies proved that Aristotle wasn't the be-all-end-all of drama. This man's play *Three Sisters* was premiered by the Moscow Art Theatre, run by the forerunner of Method Acting.

ANSWER: Anton (Pavlovich) **Chkhov** (That forerunner is Konstantin Stanislavski.)

[10] This other writer ditched Aristotle for techniques like the "alienation effect," which he discussed in his essay "On Chinese Acting." This man wrote the original lyrics for "Mack the Knife."

ANSWER: (Eugen) Bertolt (Friedrich) **Brecht** <LL>

3. For 10 points each—answer the following about an Islamic empire in West Africa:

[10] First, name this empire, which was conquered by Moroccan forces at the Battle of Tondibi. After being founded by the thirty-year Sonni dynasty, it was ruled for a century by the Askia dynasty.

ANSWER: **Songhai** Empire

[10] This commodity was used as currency in the Songhai Empire. Mahatma Gandhi protested a British tax on it by leading a March to the ocean to make this substance.

ANSWER: **salt**

[10] The most successful ruler of Songhai, Sonni Ali, established this city as his capital. In 2012, it became a capital once again, this time of the Malian breakaway state of Azawad.

ANSWER: **Gao** <MK>

4. For 10 points each—answer the following about aromatic compounds:

[10] The classic example of an aromatic compound is this six-carbon ring with formula C₆H₆. Derivatives of this molecule include toluene and phenol.

ANSWER: **benzene**

[10] The delocalized electrons of aromatic compounds mean that they can be given more than one of *these* representations. Benzene is often depicted as a hexagon around a circle as the "average" of two of these diagrams.

ANSWER: **resonance structures** [accept **contributing structures** or **canonical structures**; prompt on **Lewis** structure or **Lewis** dot diagram or similar]

[10] This is the term for any compound that's *not* aromatic, like propane, butane, or, well, a lot of things.

ANSWER: **aliphatic** compounds <JR>

5. A kite features prominently in this play as a symbol of the relationship between a character and his servant Sam. For 10 points each:

[10] Name this play by Athol Fugard, which centers on the racial tensions between the title white teenager and his two black servants, Sam and Willie, who form the second title group.

ANSWER: *“Master Harold”...and the boys*

[10] Sam and Willie practice this activity at the beginning and the end of the play. Sam uses this activity as a metaphor to describe an ideal “world without collisions.”

ANSWER: ballroom dancing [accept reasonable equivalents]

[10] Athol Fugard, like Nadine Gordimer and J.M. Coetzee, is from this country. All of those authors strongly criticized the policy of apartheid in this country.

ANSWER: Republic of South Africa [or RSA] <LL>

6. This piece was called the “soul of chess” by Philidor. For 10 points each:

[10] Name this piece, which can only move forward, but captures diagonally. If it reaches the end of the board, this least valuable piece can be “promoted” to a different piece.

ANSWER: pawn

[10] A pawn that cannot be blocked or captured by enemy pawns is described by *this* term. Having this kind of pawn is advantageous because it can easily be promoted.

ANSWER: passed pawn

[10] Black moves a pawn to c6 after White’s e4 in *this* chess opening, which often creates a passed d-pawn for White. Sidelines of this Semi-Open defense include the Tartakower Variation and the Hillbilly Attack.

ANSWER: Caro–Kann Defense <JW>

7. This operation is often used to turn multiplication into addition, since this operation of “ $x \cdot y$ ” equals “this operation of x ” plus “this operation of y .” For 10 points each:

[10] Name this function whose derivative is “one-over- x .”

ANSWER: (natural) logarithms

[10] The base of the natural logarithm is *this* transcendental number often called Euler’s number. The decimal representation of this irrational number begins “2 point 7 1 8 2 8...”

ANSWER: e

[10] Exponentiating a logarithm can help evaluate limits like “ x to the one-over- x ,” which takes the indeterminate form “infinity to the zero.” Ignoring signs, which *two* indeterminate forms can be evaluated using L’Hôpital’s rule?

ANSWER: infinity over infinity AND zero over zero [accept answers that use “divided by” instead of “over”]
<JR>

8. This city was often defended with an iron chain around the Golden Horn, and through the use of Greek Fire. For 10 points each:

[10] Name this capital of the Byzantine empire. It was renamed for a “great” Christian Roman emperor.

ANSWER: Constantinople

[10] In 626, Constantinople repelled a siege from this empire’s ruler Khosrau II. This Persian empire, which followed the Parthians, defeated the Romans at battles like Edessa under rulers like Shapur I.

ANSWER: Sassanian Empire [or Sassanids]

[10] This Byzantine emperor defeated the Sassanids at the 627 Battle of Nineveh. Unfortunately for this emperor’s reputation, the resulting peace was ended when the Muslims conquered all of Mesopotamia and North Africa.

ANSWER: Heraclius [Flavius Heraclius Augustus] <JR>

9. For 10 points each—answer the following about the geography of Alaska:

[10] This peak is the tallest in the Alaska Range, and in the entire continent of North America. This mountain was formerly named for a U.S. President; either name is acceptable.

ANSWER: **Denali** [accept Mount **McKinley**]

[10] Juneau is located on *this* kind of feature of Alaska, while Tallahassee is located in another one of them. West Virginia has two of these features, which are defined purely by how people draw borders.

ANSWER: **panhandles** [prompt on **salients**]

[10] Much of Alaska's fishing takes place in this bay of the Bering Sea, which lies just north of the Alaska Peninsula and the Aleutian islands. Most of the world's sockeye salmon is caught in this bay.

ANSWER: **Bristol** Bay <MK/JR>

10. This text is the major source for Saint Hilda's work at the Synod of Whitby. For 10 points each:

[10] Name this text written at Jarrow in the early- to mid-700s. This text popularized the Western European use of "A.D." for dates.

ANSWER: ***Ecclesiastical History of the English People*** [or ***Historia ecclesiastica gentis Anglorum***; prompt on answers that mention the Venerable **Bede** without the word "Ecclesiastical," which is required]

[10] This 9th-century king of Wessex supposedly translated Bede's *Ecclesiastical History* into Old English. This man is usually considered the first King of England, and he's the only one nicknamed "The Great."

ANSWER: **Alfred** the Great

[10] Alfred also sponsored the creation of a *Chronicle* named for these people. These people, the main medieval inhabitants of modern England, took their hyphenated name from two Germanic tribes that settled there.

ANSWER: **Anglo-Saxons** <JR>

11. This movement is exemplified by a room that James McNeill Whistler decorated, which is now in the Freer Gallery. For 10 points each:

[10] Name this European art movement inspired by the "flat" quality of *ukiyo-e* prints. We need the specific term, which is derived from a French word.

ANSWER: **Japonisme** [prompt on **Orientalism** or word forms; prompt on **Anglo-Japanese**]

[10] This artist was so into *Japonisme* that he copied a number of Japanese prints. He also painted *Wheatfield with Crows* and *Starry Night*.

ANSWER: Vincent (Willem) **Van Gogh**

[10] Japonisme was a huge influence on Hector Guimard and other members of *this* art movement, who used curvy forms inspired by plants. Like "avant-garde," *this* two-word French name emphasizes its "progressive" nature.

ANSWER: **Art Nouveau** <JR>

12. This work hinges on an oath the central person made to uphold the Laws, which are inherently just. For 10 points each:

[10] Name this philosophical work, which argues that people should never do an injustice, even to escape the consequences of another injustice.

ANSWER: ***Crito***

[10] In his namesake dialogue, Crito tries to convince *this* man to escape prison. This philosopher is the dominant speaker in most of Plato's dialogues.

ANSWER: **Socrates**

[10] The *Crito* is usually bundled with *this* other Plato work, which is a reimagining of Socrates's legal defense.

ANSWER: ***Apology*** [or ***Apologia***] <JR>

13. Near this novel's beginning, the protagonist watches her sister and a friend undress to get in a fountain after they break a vase. For 10 points each:

[10] Name this 2001 novel, in which Briony Tallis falsely accuses Robbie Turner of raping her cousin Lola.

ANSWER: Atonement

[10] *Atonement* was written by this British author, who followed a neurosurgeon during an Iraq war protest in his novel *Saturday*.

ANSWER: Ian (Russell) McEwan

[10] McEwan's most recent novel, *Nutshell*, is written from the perspective of *this* character as a fetus. This character's lines include "What's Hecuba to him, or he to Hecuba?" and "To be or not to be, that is the question."

ANSWER: Prince Hamlet <JR>

14. For 10 points each—answer the following about the territorial expansion of the United States in the early 1800s:

[10] Andrew Jackson expanded white settlement by expelling *these* Native Americans through the Trail of Tears. The Indian Removal act targeted this group, along with the Creek, Seminole, Choctaw, and Chickasaw.

ANSWER: Cherokee

[10] Horace Greeley urged "Go West, young man" as an expression of *this* belief. This almost-rhyming two-word phrase describes the inevitability of the U.S. expanding all the way across North America.

ANSWER: manifest destiny

[10] Manifest destiny was a major part of the presidential campaign of James K. Polk, who advocated annexing all of Oregon with *this* slogan. This slogan was finally denied when Polk agreed to draw the line at the 49th parallel.

ANSWER: Fifty-four Forty or Fight! <JR>

15. Eukaryotes are classified based on the number of these structures that their ancestors had. For 10 points each:

[10] Name these whip-like structures that many cells use to move. They're much longer than cilia.

ANSWER: flagella [or flagellum]

[10] This organism uses its many flagella to burrow into the lining of the stomach, thus avoiding being dissolved by stomach acid. Unfortunately for humans, the inflammatory response to this organism's burrowing causes ulcers.

ANSWER: Helicobacter pylori [prompt on Helicobacter]

[10] *Chlamydomonas*, a genus of this type of organism, is commonly used to study flagellar motility. This group of organisms is distinguished from similar groups by the presence of both chlorophylls *a* and *b*.

ANSWER: green algae [prompt on partial answer; do **not** accept or prompt on "blue-green algae"] AF>

16. For 10 points each—answer the following about the austere filmmaking style of Yasujiro Ozu:

[10] Ozu eschewed wipes and dissolves in favor of *this* direct transition between takes. This term is often used to describe the end of a shot, or just the point where an edit is made in general.

ANSWER: cuts

[10] Ozu almost never used *this* kind of shot, in which the camera moves to follow the action. This kind of shot is often called "dolly shot" for the cart and rails that are used to make the motion smooth.

ANSWER: tracking shots [or following shots]

[10] Ozu also avoided music that the character's can't hear, which is described by *this* term. This kind of music is contrasted with "source music," since this kind of music does *not* come from "within the film."

ANSWER: non-diegetic music [accept word forms like "music that's not diegetic"] <JR>

17. For 10 points each—answer the following about contemporary American novelist Don DeLillo:

[10] DeLillo wrote about Gary Harkness playing *this* sport at a small college in Texas in the novel *End Zone*.

ANSWER: American **football** [prompt on gridiron football]

[10] DeLillo also wrote about baseball. At the beginning of this long DeLillo novel, Cotter Martin grabs a ball hit by Bobby Thomson for a home run.

ANSWER: **Underworld**

[10] In DeLillo's novel *Running Dog*, Moll Robbins looks for pornography allegedly made by this man. Jack Gladney, the protagonist of DeLillo's *White Noise*, is a professor who studies this 20th-century political leader.

ANSWER: Adolf **Hitler** <MK>

18. At high Reynolds numbers, this quantity is proportional to the square root of weight. For 10 points each:

[10] Name this asymptotic speed attained by an object falling through a fluid medium. For a skydiver in Earth's atmosphere, it's around 200 kilometers per hour.

ANSWER: **terminal velocity** [prompt on partial answer]

[10] One can solve for terminal velocity by setting the gravitational force equal to *this* force, which acts to oppose a body's motion through a fluid. At low speeds, it can be calculated by Stokes' law.

ANSWER: **drag** force [prompt on friction force]

[10] In the Stokes regime, the terminal velocity is proportional to the difference in *this* quantity between the object and the fluid. Thus, if this quantity is equal for the object and the fluid, the terminal velocity will be zero.

ANSWER: volumetric mass **density** <SE>

19. For 10 points each—answer the following about the basic tenets of Islam:

[10] Islam rests on this number of “pillars,” including fasting on Ramadan and praying this number of times per day.

ANSWER: **five**

[10] The pillar *shahada* is the expression of two beliefs, including that Muhammad is God's messenger. Identify the *other* belief, which is called *tawheed*; it's also expressed by the Jewish *shema* and the opening of the Nicene Creed.

ANSWER: there is only **one God** [monotheism; accept reasonable equivalents like “there is **no God but Allah**”]

[10] Muslims are required to give to charity in the pillar of *zakat*. Any extra, voluntary charitable giving is described by *this* Arabic term, which is a cognate of the Hebrew/Jewish word for the same concept; either language is fine.

ANSWER: **sadaqah** [accept tzedakah] <JR>

20. In Hesiod, these phenomena are represented by a primordial trio called the Oneiroi. For 10 points each:

[10] Name these experiences governed by Morpheus. Supplicants to Asclepius hoped to be cured through having these experiences.

ANSWER: **dreams** [accept reasonable equivalents, including **nightmares**; prompt on sleeping or similar answers]

[10] Athena visited this hero in a dream while he was sleeping in one of her temples and gave him a golden bridle. This hero used that bridle to tame Pegasus, which he rode when he slew the Chimera.

ANSWER: **Bellerophon**

[10] The Oneiroi, Thanatos, Hypnos, and Geras, were the children of this primordial entity with Erebus, or Darkness. Zeus never punishes the Oneiroi for anything because of his fear of this goddess.

ANSWER: **Nyx** [prompt on answers like “the Night”] <CX>

Tiebreaker

21. This method was exemplified by the catechistic format of Peter Abelard's *Sic et Non*. For 10 points each:

[10] Name this method that dominated medieval philosophy starting in the 12th century. Saint Anselm is often considered the “founder” of this kind of philosophy.

ANSWER: **Scholasticism** [accept word forms like **scholastic**]

[10] Most people agree that this 13th-century philosopher was the greatest Scholastic. This man systematized practically all of Catholic thought in his *Summa Theologica*.

ANSWER: Saint Thomas **Aquinas**

[10] A pretty impressive later theological summary was written by Francisco Suárez, a scholar from *this* Spanish university town. This city's university is the third-oldest in Europe, after Bologna and Oxford.

ANSWER: **Salamanca** <JR>