

SOUTHEAST-MIDWEST HOUSEWRITE: PACKET 6

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NOTE: THESE TOSSUPS AND BONUSSES ARE PAIRED. IF THE TOSSUP GOES DEAD, SKIP THE ASSOCIATED BONUS. DO NOT GO BACK AND READ ANY BONUSSES THAT ARE SKIPPED.

1. A short poem by this author tells how the narrator laughed when a man in a crowd yelled “what an eloquent little man!” while at a legal trial prosecuted by this author’s friend. This author dedicated a collection of his poems “just polished off with dry pumice” to a man named Cornelius. The longest poem and only epyllion by this author is framed by the marriage of (*) Peleus and discusses Ariadne’s abandonment. This author asks for a thousand and a hundred kisses three times in a poem that opens “Let us live...let us love.” The one-hundred-first poem by this author is about visiting his brother’s funeral ashes and ends with the motto “Hail and Farewell,” or “Ave atque Vale.” For 10 points, name this author of many *carmina*, a Roman poet and lover of Juventius and Lesbia.

ANSWER: Gaius Valerius Catullus

<Ashbrook, Poetry> [Ed. Leahy]

1. These compounds are converted to ketones in the Claisen and Dieckmann condensations. For 10 points each:

[M] Name these compounds that consist of a carbonyl group bonded to an alkoxy group and an R side group. A carbon is double bonded to an oxygen and single bonded to OR’ (“O R prime”) in this functional group.

ANSWER: esters

[H] This reaction converts ketones to esters using mCPBA. In it, oxygen is inserted into a carbon-carbon bond next to a carbonyl group.

ANSWER: Baeyer–Villiger oxidation

[E] mCPBA and other BVO catalysts are “peroxy” forms of these compounds. The O-OH group of mCPBA allows it to donate protons, classifying it under the Brønsted-Lowry definition of these compounds.

ANSWER: acids [accept peroxyacids or peracids]

<Valan, Chemistry> [Ed. Lei]

2. A group of this ethnicity called the Azalis split from one religion over the belief that one man was not “He whom God shall make manifest.” Another religious leader of this ethnicity built an “arc” of religious buildings on the side of a mountain as dictated in the *Tablet of Carmel*. One leader of this ethnicity used the term “Letters of the Living” to refer to the first eighteen disciples of one religion. Free love and (*) vegetarianism were promoted by a religious figure of this ethnicity named Mazdak. A religious figure of this ethnicity who wrote the Gathas was venerated along with a prophet of this ethnicity named Mani in Manichaeism (“MAN-ih-kee-ism”). The conflict between Angra Mainyu and Ahura Mazda was preached by a prophet of this ethnicity. For 10 points, name this ethnicity that historically practiced Zoroastrianism.

ANSWER: Persians [accept Iranians; prompt on Baha’is, Zoroastrians, or Manichaeans by asking “of what ethnicity is that Baha’i/Zoroastrian/Manichaean leader?”]

<Prabhakar, Religion> [Edited]

2. N.K. Jemisin describes the “Day of Good Birds” in a parody of this story named for those that “stay and fight.” For 10 points each:

[H] Name this story inspired by a scenario proposed by William James. In this story, the happiness of a seemingly utopian society depends on the torture of a child locked in a cellar.

ANSWER: “**The Ones Who Walk Away From Omelas**”

[M] This recently deceased author wrote “The Ones Who Walk Away From Omelas.” This author wrote about the ambisexual denizens of Gethen in *The Left Hand of Darkness* and created the Earthsea universe.

ANSWER: Ursula Kroeber **Le Guin**

[E] LeGuin and Jemisin are each multiple-time winners of the premier science fiction award, which has this name. An author with this last name described the redemption of Jean Valjean in *Les Misérables*.

ANSWER: **Hugo** [accept the **Hugo** Awards or Victor **Hugo**]

<Delot-Vilain, Short Fiction/Other> [Ed. Leahy]

Note to moderator: read pronunciation guides in answerline carefully.

3. This language was the first to implement an algorithm for line-breaking created by this language’s inventor and Michael Plass. MetaPost is most commonly used with this language, which uses ampersands to separate entries in its tabular environment. A set of macros for this language was developed by Leslie Lamport. Frequently-used packages in this language include **PGF/TikZ** (“P-G-F ticks”) and **fancyhdr**, which are implemented using the command (*) “backslash usepackage.” A suite of enhancements for this language is given by the package **amsmath**. Overleaf is an online text editor for this language. Donald Knuth invented this language to format his second edition of *The Art of Computer Programming*. For 10 points, name this language that is used to typeset mathematics.

ANSWER: **TeX** (“teck,” but be lenient) [accept La**TeX** or any answer including **TeX** like Lua**TeX** or Con**TeX**]

<Karthik, Computer Science> [Ed. Bowman]

NOTE TO MODERATOR: Read first answerline carefully.

3. A plan called the “Great Design” was created by this organization for one military endeavor. For 10 points each:

[H] Name this organization, whose leaders, the Heeren XIX (“nineteen”), developed the “Great Design.” Later on, this organization authored the Charter of Freedoms and Exemptions in order to settle one colony through patroonships.

ANSWER: **Dutch West India** Company [accept **GWC**; do NOT accept nor prompt on “Dutch East India Company” nor “VOC”]

[E] The “Great Design” was formulated to harass the Iberian Union, which was then ruled by a king with this name. An earlier king with this name inherited Spain from his father Charles V and sent the Spanish Armada.

ANSWER: **Philip** [accept **Philip** I of Portugal or **Philip** II of Spain or **Philip** the Prudent or **Philip** III of Portugal or **Philip** IV of Spain or **Felipe** or **Filipe**]

[M] As part of the “Great Design,” the Dutch captured the island of Gorée, in this modern-day west African country. This country’s capital city was the western terminus of a proposed French railway that would have gone to Djibouti.

ANSWER: Republic of **Senegal**

<Prabhakar, British/European History> [Edited]

4. A dish in this country called *patsamena*, consisting of dried shrimp with sweet potato leaves, is one of this country's most popular *laokas* ("la-OH-kas"), or accompaniments. Before switching to a Latin alphabet, this country's official language was written using an Arabic-based script called Sorabe. A reburial ceremony in this country where people remove the dead from their graves and wrap them in a fresh cloth is called *famadihana*. Many rice paddies surround this country's largest lake, Lake (*) Alaotra. The Merina people are native to this country which is home to the westernmost Austronesian language, Malagasy. Antananarivo is the capital of, for 10 points, what island country separated from mainland Africa by the Mozambique Channel?

ANSWER: Republic of Madagascar

<Sareddy/Prabhakar, Geography> [Ed. Prabhakar]

4. This film almost directly lifts a scene from *Yojimbo* in which Sanjuro chops off a man's hand while in a bar, and *Yojimbo* actor Toshiro Mifune was originally considered for one of this film's roles. For 10 points each:

[E] Name this film. Akira Kurosawa's influence on this film's director, George Lucas, also inspired how this film's opening follows the lowly characters C-3PO and R2-D2 as they wander Tatooine after Leia's capture by the Empire.

ANSWER: Star Wars Episode IV: A New Hope [accept either underlined portion]

[H] The plot of *Star Wars* was mainly inspired by this Kurosawa film, in which two peasants help escort the disguised Princess Yuki and a bunch of gold out of enemy Yamana territory.

ANSWER: The Hidden Fortress [or Kakushi toride no san akunin; accept The Three Villains of the Hidden Fortress]

[M] *A New Hope* also pays homage with these transition effects frequently used by Kurosawa. A bar anchored at the center of the shot sweeps along the border of the screen in the "clock" type of this transition.

ANSWER: (clock) wipes

<Ashbrook, Film> [Edited]

5. This leader's government published the White Book, which alleged a conspiracy to murder top military officials as part of Plan Z. The FPMR sought to overthrow this leader, whose actions were investigated in the Rettig report. This leader became commander-in-chief of his country's army after the resignation of Carlos Prats. The DINA assassinated (*) Orlando Letelier ("le-TELL-yay"), a critic of this leader, in a car bombing in Washington D.C. This leader reversed many of the socialist policies of his predecessor by working with the "Chicago Boys" to make laissez-faire economic reforms. This dictator participated in Operation Condor and came to power after a 1973 coup d'etat. For 10 points, name this dictator, who overthrew Salvador Allende to become president of Chile.

ANSWER: Augusto José Ramón Pinochet Ugarte

<Karthik, World History> [Ed. Prabhakar]

5. One work by this thinker suggests that violence is necessary for decolonization in its opening section "On Violence" and has a preface written by Jean-Paul Sartre ("sart"). For 10 points each:

[M] Name this Martinican psychiatrist and philosopher who discussed the psychological impacts of colonization and formation of a national culture in the book *The Wretched of the Earth*.

ANSWER: Frantz Omar Fanon [accept Ibrahim Frantz Fanon]

[E] Another Fanon work is about the pressure of colonized people to wear "masks" of this color. Critical race theory studies the institutional "privilege" associated with this color.

ANSWER: white [or whiteness; accept *Black Skin, White Masks*; accept white privilege]

[H] In *The Wretched of the Earth*, Fanon suggests that this class of people could aid revolutionaries in the struggle against colonialism. This group is made up of members of the lower class who will never achieve class consciousness.

ANSWER: lumpenproletariat [prompt on proletariat]

<Nageswaran, Philosophy> [Edited]

6. In a work by this composer, two timpanis playing sextuplets introduce a movement whose main melody begins with two octaves of a descending G minor scale. This composer included pieces named for Sardanapalus and Cleopatra in a set of cantatas that won him the Prix (“pree”) de Rome after four tries. This composer included a version of the Rákóczi March in his choral work (*) *The Damnation of Faust*. A work by this composer that ends with an “Orgy of the Brigands” was commissioned by Paganini as a viola concerto. This composer’s unrequited love for Harriet Smithson inspired a work whose opium-induced visions are linked by an *idée fixe*. For 10 points, name this composer of *Harold in Italy* and *Symphonie fantastique*.

ANSWER: Hector **Berlioz** [or Louis-Hector **Berlioz**]

<Dantzler, Classical Music> [Ed. Strombeck]

6. Madge Owens runs away from this state to chase after her lover after a picnic on Labor Day. For 10 points each:
[E] Name this state. A bus breaks down at a diner during a snowstorm in a play set in this state, to which Dorothy Gale tries to return in *The Wizard of Oz*.

ANSWER: **Kansas**, United States

[M] Kansas is the setting of plays such as *Picnic* and *Bus Stop* written by this “playwright of the Midwest.”

ANSWER: William Motter **Inge**

[H] Hal Carter, the protagonist of *Picnic*, masquerades as this profession, prompting the spinster Rosemary to say he’ll “never rise beyond the gutter.” A man with this profession in *Bus Stop* named Bo Decker kidnaps the nightclub dancer Cherie, hoping that she’ll marry him.

ANSWER: **cowboys** [prompt on **drifters**]

<Ashbrook, Drama> [Ed. Leahy]

7. Protocols for assessing the mortality of this condition include CURB-65 and PSI. The antibiotic colistin counteracts a species that frequently causes this disease in the genus *Acinetobacter*. Frederick Griffith used a pathogen named for this condition to demonstrate genetic transformation of bacteria. The bacterium *Klebsiella* (“KLEB-see-ella”) induces a distinct “currant-jelly” colored sputum in patients infected with this disease. A species of bacterium in the genus *Mycoplasma* causes its atypical (*) “walking” type. This disease usually becomes fatal when liquid filling the pleural cavity is infected by bacteria and viruses. For 10 points, name this infectious disease inflicted by a wide variety of pathogens and common in hospitals, which causes the inflammation of alveoli in the lungs.

ANSWER: **pneumonia** [accept *Streptococcus pneumoniae*]

<Lau, Biology> [Ed. Lei]

7. This man’s second wife Hajar and her son settled in the Wilderness of Paran after leaving his settlement at Beersheba. For 10 points each:

[E] Name this father of Ismā‘īl who is asked to sacrifice his son Isaac in the Old Testament.

ANSWER: **Ibrahim** [or **Abraham**]

[M] Hajar ran seven times to and from the hills of Al-Safa and Al-Marwah in search of water for her son Ismail, but was relieved when the angel Jibril arrived and opened up this spring of water.

ANSWER: the Well of **Zamzam** [or the **Zamzam** well]

[H] Hajar was the daughter of a king from this region. Chapter 21 of the book of Genesis states that she found her son a wife from this region, while Islamic tradition maintains that he instead married a member of the Jurhum tribe.

ANSWER: **Egypt** [or the **Egyptian** kingdom]

<Valan, Myth> [Ed. Groger]

8. Bonds backed by this good were traded by a French banker in the Erlanger Loan. Edward Baptist examined increased production of this good in “This Half Has Never Been Told.” In Sven Beckert’s book titled for the “Empire of [this commodity],” he investigated its role in the development of modern capitalism. One speech about this commodity claims “No power on earth dares make (*) war upon it.” Increased production of this good in Egypt and India stifled attempts at a form of diplomacy named for this good. James Henry Hammond popularized the phrase that claimed this commodity was “king.” Eli Whitney invented a “gin” used to process, for 10 points, what cash crop that was grown throughout the American South and used for textiles?

ANSWER: **cotton** [accept the “Empire of **Cotton**”; accept “**Cotton** is King”; accept the **cotton** gin]
<Prabhakar, American History> [Ed. Nageswaran]

8. Answer the following about Hawking radiation, for 10 points each.

[E] Hawking radiation is emitted by these astronomical objects, whose gravitational pull is so strong that even light cannot escape.

ANSWER: **black holes**

[M] A paradox concerning black holes asks whether Hawking radiation is able to carry away this quantity, which is seemingly destroyed by black holes. This quantity is related to entropy in a theory formulated by Claude Shannon.

ANSWER: **information**

[H] According to the AMPS paper, one of these layers of energy within the event horizon would be able to destroy the entanglement of Hawking radiation. These layers of energy solve the paradox but also violate the equivalence principle.

ANSWER: **firewalls**

<Karthik, Physics> [Ed. Bowman]

9. The flawed “biological” and “psychological” assumptions are a part of Hubert Dreyfus’s (“DRAY-fuss’s”) argument against the capability of this concept. Newell and Simon’s work with this concept inspired their theory that it is really just “symbol manipulation” as part of their physical symbol system hypothesis of it. A thought experiment compares this concept to a man (*) copying characters of a language he doesn’t speak. That experiment argues against the “strong” form of this concept and takes place within the title “Chinese Room.” A British thinker asked about the extent of this concept’s capability by subjecting it to the “imitation game.” For 10 points, the Turing test applies to what concept that generally refers to the ability of a computer to think?

ANSWER: **artificial intelligence** [or **AI**; accept **strong AI**; accept **machine intelligence**; accept **MI**; prompt on **intelligence**]

<Ashbrook, Philosophy> [Edited]

9. After this work was exhibited at the Brooklyn Museum of Art in 2001, an outraged Mayor Giuliani proposed a commission to set “decency standards” at all publicly funded New York City museums. For 10 points each:

[H] Name this Renee Cox photomontage which parodies a religious scene. It depicts Cox standing nude in the middle surrounded by the twelve apostles, all of whom are African American, except for Judas, who is white.

ANSWER: ***Yo Mama's Last Supper***

[M] This artist’s *The Sacrament of the Last Supper* includes a disembodied torso above the central scene. That painting, like this artist’s painting *Leda Atomica*, was created during his Nuclear Mysticism period.

ANSWER: Salvador **Dalí** [or Salvador Domingo Felipe Jacinto **Dalí** i Domènech, 1st Marquess of Dalí de Púbol]

[E] This artist’s version of *The Last Supper* is housed in the refectory of the Santa Maria delle Grazie in Milan. His other works include *Madonna of the Rocks* and the *Mona Lisa*.

ANSWER: Leonardo **da Vinci** [or **Leonardo** da Vinci]

<Dantzler, Painting & Sculpture> [Ed. Strombeck]

10. In one scene this character is described as a “Ruby, rather!—or Coral!—or Red Rose” because of the color of her cheeks. This character is introduced as a “lovely immortal flower” sprung from “rank luxuriance of a guilty passion.” While in the woods, this character asks a small river “Why art thou so sad?” and expresses curiosity about “the Black Man” to her (*) mother. This character sees her reflection in a knight’s armor on a visit to Governor Bellingham’s house. This “elf-child” claims to be “plucked by her mother off the bush of wild roses” and watches a meteor shower with the man who is revealed to be her father. An affair with Arthur Dimmesdale results in the birth of, for 10 points, what daughter of Hester Prynne?

ANSWER: **Pearl** Prynne [prompt on Prynne or Hester Prynne’s daughter before mention]

<Mehra, Long Fiction> [Ed. Leahy]

10. This empire’s ruler Rajaraja the Great built the Brihadisvara temple, dedicated to Shiva. For 10 points each:

[H] Rajaraja the Great ruled this empire which extended influence over much of the eastern Indian Ocean. Rajaraja and his successor Rajendra led this empire during its successful invasions of Sri Lanka and the Srivijaya kingdom.

ANSWER: **Chola** Empire [accept **Chola** Dynasty]

[M] The Chola [CHOE-lah] Empire was dominated by these South Indian people. Other states ruled by these people included the Chera and Pandya kingdoms.

ANSWER: **Tamils** [accept **Tamilians**; prompt on Dravidians]

[E] Rajendra Chola built another temple dedicated to Shiva in his new capital city, named for this river. Both were built after Rajendra’s successful naval expedition up this holiest river in the Hindu religion.

ANSWER: **Ganges** river [or **Ganga** river or **Gangaikonda**]

<Karthik/Prabhakar, World History> [Ed. Prabhakar]

11. The ruler of an empire based in this city sold relics like the Crown of Thorns to Louis IX of France. Geoffrey of Villehardouin (“vee-lard-WANN”) is best known for an account of one event in this city. A visit to the court of Philip of Swabia may have convinced Boniface of Montferrat to besiege this city. That siege resulted in four bronze statues of horses being removed from this city and the establishment of an empire ruled by (*) Baldwin of Flanders. Before an attack on this city, one group besieged the city of Zara to repay debts to Enrico Dandolo, whose fleet breached this city’s defenses on the Golden Horn. That army established the Latin Empire in this city after sacking it during the Fourth Crusade. For 10 points, name this city, the capital of the Byzantine empire.

ANSWER: **Constantinople** [prompt on Istanbul or Byzantium]

<Karthik, British/European History> [Ed. Prabhakar]

11. A section of this poem describes the “still point of the turning world” as “neither flesh nor fleshless” and “neither from nor towards.” For 10 points each:

[H] Name this poem, which begins by wondering if “time present and time past / are both perhaps present in time future.” The speaker of this poem questions “the door we never opened into the rose garden” in a possible allusion to his religious conversion.

ANSWER: “**Burnt Norton**”

[M] Burnt Norton is part of this tetralogy of poems by T.S. Eliot, which also includes “East Coker” and “The Dry Salvages.” George Orwell criticized the stark theology presented in this collection in *All Art is Propaganda*.

ANSWER: **Four Quartets**

[E] Eliot based the poetic structure of “Burnt Norton” off this earlier poem of his. This poem dedicated to Ezra Pound begins by stating that “April is the cruelest month.”

ANSWER: “**The Waste Land**”

<Leahy, Poetry> [Edited]

12. In a painting inspired by his honeymoon, this artist portrayed his wife in a red dress as she points toward a brilliant white ravine. In another painting by this artist set at dusk, a grove of bare oak trees surround a single wall of a ruined abbey. This artist's painting of several ships at various distances from shore and his painting of two figures "Contemplating the Moon" both employ (*) *Rückenfigur*. In a painting by this artist set atop sandstone cliffs, a figure balances their extended left foot with a cane. This artist of *Chalk Cliffs on Rügen* and *The Stages of Life* depicted a red-haired man facing away from the viewer and toward a misty landscape in his most famous painting. For 10 points, name this German Romantic painter of *Wanderer above the Sea of Fog*.

ANSWER: Caspar David **Friedrich**

<Gandhi, Painting & Sculpture> [Ed. Strombeck]

12. A book titled for this concept criticized Paul Lazarsfeld for employing it as a methodological tool in what was deemed "abstract empiricism." For 10 points each:

[H] Name this concept that titles a 1959 book about a certain discipline. This concept is defined by an "awareness of the relationship between personal experience and the wider society."

ANSWER: **sociological imagination** [accept *The Sociological Imagination*; prompt on sociology]

[M] *The Sociological Imagination* is a book by this American thinker. This sociologist analyzed the group of people whose decisions affect "the underlying populations of the world" in the book *The Power Elite*.

ANSWER: C. Wright **Mills** [or Charles Wright **Mills**]

[E] Mills also wrote a book titled for this type of worker, exploring social alienation in the middle class. These workers have higher-paying jobs and are contrasted with "blue collar" workers.

ANSWER: **white** collar workers [accept *White Collar: The American Middle Classes*]

<Prabhakar/Ashbrook, Sociology> [Edited]

13. For a polytropic process, the boundary type of this quantity is proportional to the natural log of the ratio of volumes. D'Alembert's ("dahl-uhm-BAIR's") principle generalizes a principle that states that the type of this quantity associated with a virtual change is zero for a system in equilibrium. " $Q_{sub\ c}$ " is divided by this quantity to find the coefficient of performance for a heat pump. This quantity is equal to the (*) area enclosed on a P-V diagram for a heat engine. This quantity is divided by input heat in the formula for a heat engine's efficiency. The first law of thermodynamics states that Q minus this quantity equals "delta U ." For 10 points, name this quantity defined as the energy transferred to or from a body by a force along a displacement.

ANSWER: **work** [accept virtual work; accept boundary work]

<Zhao, Physics> [Ed. Bowman]

13. This historian claimed an Egyptian king named Sesostris invaded Europe. For 10 points each:

[E] Name this ancient Greek historian who discussed Sesostris and other Egyptian monarchs in the second book of his *Histories*. Cicero called this historian the "father of history."

ANSWER: **Herodotus** of Halicarnassus

[H] Prince Khaemwaset, governor of this city, has been dubbed the "first Egyptologist" for his work in restoring ancient monuments. Herodotus claimed the *pharaoh* Menes built this city's Great Temple of Ptah [puh-TAH].

ANSWER: **Memphis**

[M] Another historian, Manetho, wrote a history of Egypt at the behest of a *pharaoh* of this name. The historian Josephus claimed the Septuagint was commissioned by a *pharaoh* of this name with the epithet Philadelphus.

ANSWER: **Ptolemy** [accept **Ptolemy** I Soter; accept **Ptolemy** II Philadelphus]

<Prabhakar, Other History> [Edited]

14. A bill in this country attempts to prevent children over the age of 3 from attending “clandestine schools.” A council representing one group in this country was pressured to agree to a “charter of republican values.” This country withdrew an ambassador after Recep Tayyip Erdoğan (“Reh-jip tie-yip air-do-wan”) compared its policies to the “lynch campaigns...against Jews.” This country’s president controversially claimed (*) Islam was “in crisis” across the world. In 2016, various cities in this country banned burkinis. A schoolteacher in this country, Samuel Paty, was beheaded by a Chechen refugee after showing controversial cartoons of the Prophet Muhammad. Charlie Hebdo is based in, for 10 points, what European country currently led by Emmanuel Macron?
ANSWER: **France** [or the **French** Republic; accept République **française**]
<Nageswaran, Current Events> [Edited]

14. This number can be approximated by dropping needles onto a grid of vertical lines and seeing what fraction of the needles touch a line in the Buffon’s needle setup. For 10 points each:

[E] Name this irrational number, which is the ratio of a circle’s circumference to its diameter.

ANSWER: **pi** [or **tau/2**]

[M] The value of pi can be approximated using Buffon’s setup and one of these algorithms. These algorithms, named for a casino, use repeated random sampling to provide an approximate solution to a problem.

ANSWER: **Monte Carlo** methods [or **Monte Carlo** algorithms]

[H] This mathematician co-names a series with Mikio Sato that approximates one over pi. This mathematician also discovered a set of three congruences for the partition function.

ANSWER: Srinivasa **Ramanujan**

<Karthik, Math> [Ed. Bowman]

15. A story by this author depicts a conversation with a “bearded student” who “plays at dumb-show” during his exams. In another story by this author, a deaf-mute servant rescues a dog but is later forced to drown her by the Landlady; that story is “Mumu.” A character created by this author has a grand retelling of his life story interrupted by a man snoring in the next room; that character admits his name is Vasily (*) Vasilyevich before asking the narrator to call him the “Hamlet of the Shchigrovsky District.” A character in a novel by this author dies after cutting himself during an autopsy of a typhus patient and speaks on nihilism to his friend Kirsanov. For 10 points, name this Russian author of the collection *A Sportsman’s Sketches*, who wrote about Bazarov in *Fathers and Sons*.

ANSWER: Ivan **Turgenev**

<Karthik, Short Fiction/Other> [Ed. Leahy]

15. One of this composer’s *Trois nouvelles études* is supposedly the last piece Franz Liszt was heard playing before his death. For 10 points each:

[E] Name this Polish Romantic composer, whose Opus 10 set of twelve etudes includes ones named “Black Key” and “Revolutionary.”

ANSWER: Frédéric **Chopin**

[M] Chopin’s first etude in the Opus 10 set, nicknamed “Waterfall,” consists entirely of these musical elements. The ascending form of this element makes up the melody of a Mannheim rocket.

ANSWER: **arpeggios**

[H] This early 20th-century Polish pianist included two variations on the “Waterfall” in his 53 *Studies on Chopin’s Etudes*. This pianist alternated pairs of high and low sixteenth-notes to depict chattering monkeys in his *Java Suite*.

ANSWER: Leopold **Godowsky**

<Bowman, Classical Music> [Ed. Strombeck]

16. The Shrake-Rupley algorithm calculates one property accessible to these substances by using a “rolling ball” approach. The generalized Born model, an approximation of the Poisson-Boltzmann equation, is often used in molecular dynamics simulations to model these substances implicitly. An undesired signal from one of these substances is commonly “suppressed” in NMR. (*) Supercritical carbon dioxide is used as one of these substances in green chemistry. The dielectric constant quantifies the polarity of these substances. SN1 reactions require the use of a protic variety of these substances to occur. Common examples of these substances include DMSO and water. For 10 points, identify these compounds that dissolve solutes to form solutions.

ANSWER: **solvents**

<Zhao, Chemistry> [Ed. Lei]

16. After one character sees his “indistinct and cloudy” reflection in a pocket-mirror, he is told that this place is a “school of humor” and “a world of pictures, not realities.” For 10 points each:

[H] Name this place, where one character listens to an awful recording of Handel’s Concerto Grosso in F Major. A door in this place is labelled “ALL GIRLS ARE YOURS, ONE QUARTER IN THE SLOT.”

ANSWER: the **Magic Theater** [prompt on, but do NOT reveal, descriptions like the theater from Steppenwolf]

[M] The Magic Theater appears in this novel, where it is described as “FOR MADMEN ONLY.” The protagonist of this novel intends to commit suicide on his fiftieth birthday until he meets Hermine at the Black Eagle Tavern.

ANSWER: **Steppenwolf**

[E] This German author wrote about Harry Haller in *Steppenwolf*. He also wrote *Siddhartha*.

ANSWER: Hermann **Hesse**

<Karthik, Long Fiction> [Ed. Leahy]

17. One ruler of this name watched the athlete Polydamas of Skotussa kill three of his elite soldiers in a display of strength. An earlier ruler of this name sent Scylax of Caryanda to explore the easternmost province of that ruler’s empire. The forces of that ruler with this name quashed one uprising at Lade (“LA-day”) under the leadership of Datis. Another ruler of this name was assassinated by his subordinate (*) Bessus after his defeat in one battle. The first ruler with this name created the Behistun Inscription. Alexander the Great defeated the last ruler with this name at Issus and Gaugamela (“GOW-gah-meh-lah”), ending the Achaemenid Empire. For 10 points, give this name of three Persian emperors, the first of whom was defeated in the Persian Wars along with his son Xerxes.

ANSWER: **Darius** [accept **Darius I**, **Darius** the Great, **Darius II**, or **Darius III**]

<Lau, Other History> [Ed. Prabhakar]

17. This substance is created by boiling carbon-based materials in a vat of sodium sulfide and sodium hydroxide called a cooking digester, after which it is bleached. For 10 points each:

[H] Name this substance. This substance is mixed with water and fed into a Fourdrinier machine on top of a mesh screen conveyor belt in order to create a certain material.

ANSWER: wood **pulp**

[E] Pulp is the main base of this type of material, which is stored on rolls during the industrial creation process. The process of “beating” pulp helps make this material more or less resistant to ink.

ANSWER: **paper**

[M] An alternative to wood-based pulp is pulp based on this plant, which grows hundreds of times faster than trees. Rope made from the fibers of this plant was coated with tar on older sailing ships.

ANSWER: **hemp** [or industrial **hemp**; prompt on *Cannabis sativa*]

<Ashbrook, Other> [Edited]

18. A track by this musician begins with the bass playing the notes “A, G, A” followed respectively by 1, 1, and 2 beats of clapping. This musician included his theme for the show *Mr. Broadway* on his album *Jazz Impressions of New York*. This musician’s State Department-sponsored world tour inspired a piece which used a street musician’s rhythmic subdivision of (*) “2+2+2+3.” This musician’s most famous album includes the tracks “Strange Meadow Lark” and “Three to Get Ready,” as well as a song with a long Joe Morello drum solo. That song was composed by this musician’s collaborator Paul Desmond. For 10 points, name this jazz pianist whose album *Time Out* includes unusual time signatures on the songs “Blue Rondo a la Turk” and “Take Five.”

ANSWER: Dave **Brubeck** (The first song is “Unsquare Dance”)

<Dantzler, Jazz> [Ed. Strombeck]

18. Answer the following about the work of Theodor Schwann, for 10 points each.

[H] Schwann was the first to extract an enzyme from animal tissue. He extracted pepsin, the precursor of which is produced by these cells. In addition to producing pepsinogen, these cells secrete gastric lipase.

ANSWER: gastric **chief** cells [or stomach **chief** cells]

[M] Schwann also extended this theory to animals, though it had already been stated for plants by Matthias Schleiden. The third tenet of this theory, which regards generation schemes, was added by Rudolf Virchow.

ANSWER: **cell** theory

[E] Schwann names a type of cell that produces this substance in the peripheral nervous system. This substance forms a sheath around axons to increase the speed of electrical impulses.

ANSWER: **myelin**

<Karthik, Biology> [Ed. Lei]

19. This figure once gave a sibling a “critical eye,” “strong arm,” and a “lightning skirt” to use during one journey. This figure helped one army in battle with an owl ghost-god that could turn into a dragon. This figure, whose rival was a snow goddess, angrily destroyed a sacred grove belonging to a sibling who hatched from an egg this deity carried in an (*) armpit. That sibling embraced this deity’s lover after this deity turned the dancer Hopoe into stone. Namaka exiled this child of Haumea (“how-MAY-uh”) whose siblings included Kapo and Hi’iaka (“HEE-ee-ah-kuh”). Poliahu defeated this goddess in a sled race off of Mauna Kea. The caldera of Kilauea is the home of, for 10 points, what Hawaiian goddess of lightning, fire, and volcanoes?

ANSWER: **Pele** (The rival snow goddess is Poli‘ahu.)

<Prabhakar, Myth> [Ed. Groger]

19. Answer some questions about the proselytization of Christianity in China, for 10 points each.

[H] Early missionaries such as Alopen were members of the Church of the East, which was a part of this theology that was deemed heretical in 431 AD. This theology believes that the human and divine aspects of Christ are separate.

ANSWER: **Nestorianism** [accept word forms like **Nestorians**]

[E] Christianity in China was spread by Matteo Ricci (“ree-chee”) and Francis Xavier, who were members of this religious order. This Catholic order was founded by Ignatius of Loyola.

ANSWER: **Jesuits** [accept **Society of Jesus**]

[M] Moses Clark White proselytized in China on behalf of this Christian denomination in the 1800s. This sect’s founder names a “quadrilateral” for spiritual living, and his brother wrote the hymn “Hark! The Herald Angels Sing.”

ANSWER: **Methodism** [accept **Methodists**; accept **Methodist** Episcopal Church; accept **Wesleyanism**]

<Prabhakar, Religion> [Edited]

20. On hearing that an actress is a “vision of eternal grace” and a “poem,” a character created by this author remarks that he “thinks she’s got her mouth open.” That character investigates a murder at a house surrounded by “desolate marshes,” the Muldoon Manor. A character created by this author teaches his student about the Library of Alexandria after enclosing a letter inside The Couch of Eros. That man is questioned about a (*) “carnal embrace” before encouraging his student to solve Fermat’s Last Theorem. This author of *The Real Inspector Hound* created the “hermit of Sidley Park”, Septimus Hodge. In one play by this author, a character watches the Tradegians perform *The Murder of Gonzago* after winning 92 coin flips in a row. For 10 points, name this playwright of *Arcadia* and *Rosencrantz and Guildenstern are Dead*.

ANSWER: Tom **Stoppard**

<Leahy, Drama> [Edited]

20. One of these people defended the right of women to be active in the abolition movement in *Letters to Catharine Beecher*, a member of the otherwise pro-abolition Beecher family. For 10 points each:

[M] Name these sisters from South Carolina who, despite growing up in a traditional slaveholding family, later became outspoken advocates of women’s rights and the abolition movement.

ANSWER: **Grimké** Sisters [accept Sarah Moore **Grimké** and Angelina Emily **Grimké**; accept Sarah Moore **Grimké**; accept Angelina Emily **Grimké**; accept Angelina Emily **Grimké** Weld]

[E] Catharine Beecher’s sister Harriet Beecher Stowe was a strong supporter of abolition as evidenced by her publication of this novel. This novel helped expose the horrors of slavery to northerners.

ANSWER: **Uncle Tom’s Cabin**; or, *Life Among the Lowly*

[H] Another abolitionist sibling of Catharine Beecher, Henry Ward Beecher, went on trial after this activist exposed his affair with Elizabeth Tilton. This first woman to run for president ran on a ticket with Frederick Douglass.

ANSWER: Victoria Claflin **Woodhull** [or Victoria **Woodhull** Martin]

<Nageswaran, American History> [Edited]