

Terrapin Invitational Tournament 2013: “Make your own judgments, but we wrote this set in good faith”
Packet by Penn A (Eric Mukherjee, Saajid Moyeen, Patrick Liao, Dallas Simons)

Tossups

1. One of its promulgators stated that it was necessary to “obliterate the path of humanity and righteousness” to institute it. It was advanced by Shēn Bùhài, who wrote a now lost book called *Shēnzi* to apply its principles. It called for an emphasis on *shù* and also saw “fixing the standards” and “the people are one” stances supported by a man who suggested that all farmers who don’t meant price quotas be enslaved. It was supported by a man who closely worked with the treacherous Zhào Gāo and had Fúsū commit suicide. It was outlined by a man who was executed by having horses dismember him, a method of death that he first developed. Promoted by Lord Shāng and then adapted for use by Lǐ Sī, it led Lǐ to exterminate Confucianism by burning books while serving under Qín Shǐ Huángdì. For 10 points, identify this generic school of thought promulgated by Hán Fēizi that promoted the publicity of laws.

ANSWER: **legalism** [or **fǎ jiā**]

2. Columbia professor of music Walter Frisch wrote a 1996 book titled for these works. The chaconne in the finale of one of these works was adapted from Bach’s cantata “For Thee, O Lord, I long.” The last of these has a 6/8 *andante moderato* second movement as well as an *allegro giocoso* third movement, which is the only movement in which the piccolo and triangle play; that last one of these works is in E minor. In one of these works, their composer modified Joseph Joachim’s F-A-E motif to demonstrate that he was both “free” and “happy;” that one of these works is in F major. Two of these works were premiered by Hans Richter, and the first of these works is in C minor and took over fourteen years to write; Hans Bulow called that piece “Beethoven’s Tenth.” For 10 points, name these four works by the composer of the *Academic Festival Overture*.

ANSWER: **symphonies** of Johannes **Brahms** [prompt on partial answer]
[edited]

3. This novel uses a story about a collective of chickens which defeats a cunning fox to show that peasants can oppose an oppressive tyrant. The death of a character called The Poet is likened to the “symbolic burial of freedom” in this novel; that poet’s verses are extensively praised by the Count de Satigny. When the central matriarch of this novel decides to name her twin children Nicolas and Jaime, her husband gets drunk and encounters a prostitute at a brothel named after Christopher Columbus. That prostitute, Transito Soto, saves Alba, who had been arrested and raped by the sadistic son of Pancha Garcia. This novel begins with the poisoning of the green-haired Rosa, and later on her sister Clara marries the rags-to-riches Esteban Trueba. For 10 points, name this novel written by Isabel Allende.

ANSWER: *The **House of the Spirits*** [or ***La Casa de los Espiritus***]
[edited]

4. The parameters of this process was used to constrain the mass of the tau neutrino. Hayashi modified the original theory of this process to account for relativity. The original paper which outlined this process cited Hughes work showing that plotting the neutron capture rate versus atomic number of heavier elements creates a flat graph. The ratios of products in this process is constrained by the baryon-to-photon ratio, as outlined in a paper by Alpher, Bethe, and Gamow. This process is predicted to produce about 25% helium-4 by mass after the universe cooled enough to avoid the deuterium bottleneck. This process occurred between 3 minutes and 20 minutes after the Big Bang. For 10 points, name this process in which baryonic matter formed heavier elements soon after the birth of the universe.

ANSWER: **Big Bang nucleosynthesis** [or **BBN**; accept just “nucleosynthesis” after the Big Bang is mentioned, prompt beforehand; prompt on “baryogenesis”]

5. This work's last section, "The Latest Phase," takes issue with the work of Morroe Berger and Manfred Halpern, who argue that certain figures are incapable of thought. Part II examines the rise of chrestomathy and argues that the modern form of the title entity was founded by Silvestre de Sacy and reshaped by Ernest Renan. Another section argues that Flaubert sexualized an entire country by describing a dancer in works like "Herodias" and *The Temptation of St. Anthony*. The first chapter examines Napoleon's invasion of Egypt and argues that a line was drawn between two certain continents, which led to the characterization that Asia is "defeated and distant." For 10 points, name this 1978 book that argues that Western scholarship towards the East is fraught with prejudice, a work of Edward Said.

ANSWER: **Orientalism**

[edited]

6. One adherent of this philosophy wrote 211 mathematical proofs that focused on the material world called *The Elements of Theology*. This school's ideas were spread by a man who advanced the "sea-battle" argument in his treatise "On Interpretation." During the Renaissance, Marsilio Ficino wrote a six-volume treatise that reintroduced the ideas of this philosophy to the public. Ammonius Saccas taught one philosopher of this school, who wrote fifty-four treatises concerning topics such as "the One's" superiority over intellect. Those works were arranged by Porphyry and are called the *Enneads*. For 10 points, name this philosophy whose exponents include Plotinus, which was inspired by the theory of forms formulated in *The Republic*.

ANSWER: **Neoplatonism** [accept word forms; prompt on "Platonism"]

7. One poem by this author closes "The self-same power that brought me here brought you" and is addressed to a "rival of the rose" and "purple shrub" that the narrator finds in a forest. A different poem by this author is set "On this green bank, by this soft stream" where a votive stone is put down. He wrote a poem about a creature that meditates on "the fate of the man-child the meaning of man" before asking "Who'll tell me my secret?" This author of "The Sphinx" created a speaker who holds the title objects to the sun and states "they are drops of frozen wine [that] from Eden's vats that run." In addition to writing "Rubies" and "The Rhodora," he set another of his poems "by the rude bridge that arched the flood ... where once, the embattled farmers stood and fired the shot heard round the world." For 10 points, identify this poet of "The Concord Hymn," who also wrote "Self-Reliance" and "The Oversoul."

ANSWER: Ralph Waldo **Emerson**

8. Dipeptide fragments of this compound are recognized by the NOD2 receptor. One drug that inhibits the synthesis of this compound has the horrifying side effect of Red Man Syndrome. A transglycosylase is responsible for crosslinking the subunits of this compound in the final step of its synthesis, after its subunits are transported by a pyrophosphate-containing lipid called bactoprenol. This compound, which is a complex polymer of D-amino acids, N-acetyl-glucosamine, and N-acetyl-muramic acid, makes up about 90% of the dry weight of gram-positive organisms. Beta-lactams like penicillin inhibit the synthesis of this compound, which is also broken down by lysozyme in tears. For 10 points, name this compound that makes up the cell wall of bacteria.

ANSWER: **peptidoglycan** [or **murein**]

9. The ability to control this substance is the last brush technique earned by the player in *Okami*, and is obtained in Kamui. In *Red Alert 3's Uprising* expansion pack, the only new Allied infantry unit is a legionnaire with the ability to control this substance. Two playable brothers in the *Mortal Kombat* universe used the same name at different times, during which they could control this substance; one of the brothers became Noob Saibot. In *Arkham City*, the cure to the Titan virus is discovered by a Batman villain who can control this substance. This substance names the type of used by Leader Candice in Sinnoh, Leader Pryce in Johto, and Elite Four Lorelei, who uses a Dewgong, Cloyster, and Lapras, which are all part this type and part water. For 10 points, name this substance controlled by the Pokémon Articuno and by Batman villain Mr. Freeze.

ANSWER: ability to control ice [or cryo-powers; or Freeze stuff before “Mr. Freeze”]

10. The Battle of Piedmont occurred in this region, and that battle’s victor had relieved General Sigel, who was defeated earlier by General Breckinridge in this region after being ambushed at New Market. One commander of an army named for this region carried out “The Burning.” In a campaign two years before all the aforementioned engagements, a commander joined up with General Richard Ewell to win at Port Republic after being defeated at the First Battle of Kernstown by John Fremont. A Confederate commander engaged three different Union armies and stopped them from joining the Peninsular campaign against Richmond by delaying them in an 1862 campaign in this region. This region was the site of brilliant campaigns by Philip Sheridan and Stonewall Jackson. For 10 points, name this prominent Civil War valley, which is mostly located in Virginia.

ANSWER: Shenandoah Valley [prompt on “Virginia”]

11. A pair of women holding cigarettes and leaning on a table appear in this artist’s *Two Ladies at the Automat*. This artist published an image of Anderson Cooper as a baby in a Valentine’s Day issue of *Harper’s Bazaar*. One of this photographer’s works shows a man in a boater wearing a suit with a button that reads “Bomb Hanoi” and carrying a small flag. This photographer showed a dark-haired man in front of a sofa on the left towering over a couple on the right in her depiction of Eddie Carmel. She created a photo that shows a boy in overalls standing in front of a tree holding an explosive device in his claw-like right hand, which inspired a critical quote about her work by Norman Mailer. For 10 points, name this American photographer of *Child with Toy Hand Grenade in Central Park*, who is derisively known as a “photographer of freaks.”

ANSWER: Diane Arbus [or Diane Nemerov]

12. The Everhart-Thornley detector improves on previous devices for detecting these by adding a lightguide and a photomultiplier. One device named for these particles uses a wiggler or an undulator to generate a periodic magnetic field. Wheeler suggested that the universe has only one of these particles that travels backwards and forwards through time. The anomalous magnetic moment of these particles is predicted by QED to several decimal places. These particles were shown to have wavelike behavior by firing them at a nickel target in the Davisson–Germer experiment, and they were first discovered in cathode rays by JJ Thompson. For 10 points, name these fermions, negatively charged particles that orbit a nucleus.

ANSWER: electrons

13. David Morris wrote about the sublimity of these works, and the coherence of their conventions are examined in a book by Eve Sedgwick. One of these works begins with Philip Harclay learning that his friend was killed by some Welsh Rebels and is Clara Reeve’s *The Old English Baron*. In another work in this genre, Matilda disguises herself as a dude to seduce the title character, a virtuous man named Ambrosio. The first one of these kinds of works was inspired by the author’s home of Strawberry Hill and begins with a wedding in which Conrad is crushed to death by a gigantic helmet. Later examples of them include *The Italian* and *The Mysteries of Udolpho*. For 10 points, Ann Radcliffe and Horace Walpole are masters of what genre, usually featuring mysterious castles and melodramatic horrors?

ANSWER: Gothic novels [accept anything with the word Gothic in it that makes sense, like Gothic fiction, Gothic stories, etc.]

[edited]

14. This work is the source of the controversial line, “Don’t we have the right to take a believing wife along with us, as do the other apostles and the Lord’s brothers,” and mentions that little yeast leavens a whole batch of dough when chiding its addressees. This text notes that the author “laid a foundation as a wise builder, and someone else is building on it.” This text discusses the question of women wearing head-coverings in church among matters pertaining to women, and the author draws a distinction between prophesying and speaking in tongues. The fifteenth

section of this text recounts those who saw Jesus after the resurrection, and this book is the source of the phrase “through a glass, darkly.” Containing the lines “When I was a child, I talked like a child, I thought like a child,” and “Love is patient, love is kind,” for 10 points, name this Pauline epistle addressed to a Greek city.

ANSWER: First Corinthians or 1 Corinthians [prompt on partial answer]

[edited]

15. After this ruler’s defeat, a shadowy figure named Jacob, Master of Hungary, sparked the Shepherd’s Crusade to recoup this man’s losses. His wife often accompanied him on his military campaigns, giving birth to their children John-Tristan, Peter and Blanche over a three year period. This man’s death on the African Coast during the Tunisian Crusade meant that his brother Charles I of Sicily, took over that campaign. This man’s brother, the Count of Artois, led an ill-fated charge against the forces of Qutuz. His most notable enterprise began with his arrival with Queen Margaret of Provence on Cyprus. He then set sail to defeat Baibars at the Battle of Damietta in 1249. For 10 points, identify this French monarch largely responsible for the eighth and seventh crusades, the only canonized ruler of France.

ANSWER: Saint Louis IX [or St. Louis; prompt on “Louis”]

[edited]

16. This figure can be seen walking through a path between a mountain and a high throne outside of an impossibly fantastic castle in a masterpiece of Gustave Moreau. Renaissance artists who frequently depicted this man included sodomist Il Sodoma, who painted a series on the life of this ruler. He can be seen holding his arms out wide as he receives the title conquered figure’s family in a painting of Veronese. One of this man’s equestrian victories can be found in a fresco within the House of the Fawn. A different work of art with the same title shows this man’s troops below a moon on the top left and a rising sun just above some mountains in the middle right. A source by Aventinus calling this man the sun god can be found in that painting, which depicts a scroll over his massive army. For 10 points, name this warlord whose army can be seen kicking some ass in Albrecht Altdorfer’s *The Battle of Issus*.

ANSWER: Alexander III of Macedon [or Alexander the Great]

[edited]

17. In the second act of this play, one character insists that he is playing a mandolin and not a guitar, and that character reveals that he keeps a revolver in his pocket constantly so that he can shoot himself if he wants to. One character in this play, who owns a villa near Mentone, receives a telegram informing her that her former lover is ill. Five years before the first act begins, the drowning of Anya’s brother caused Anya’s mother to flee to Paris. Minor characters in this play include a clerk named Yepikhodov who has proposed marriage to Dunyasha, and the servant Firs, who perishes on a couch in its final scene. During Act III, the merchant Yermolay Lopakhin oversees the sale of the title locale, which is owned by Madame Ranevskaya. For 10 points, name this play by Anton Chekhov, named for an estate with trees.

ANSWER: *The Cherry Orchard*

18. In *The Voyage of Maelduin*, one of these animals inhabits a magical palace and can randomly shape shift into an arrow to kill people. In Egyptian legend, the deity Mut roamed the desert as one of these animals while in exile. One of these animals was the son of a pig that occupied the isle of Anglesey and ate 180 men every meal until it was slain by Sir Kay. One deity associated with these animals has a name reflecting her patronage of ointment jars and is regarded as a gentler aspect to the fierce Sekhmet. The chariot of Freya was pulled by these animals, which often represented the head of a goddess that produced Maahes with her consort Atum-Ra at her cult center of Bubastis. For 10 points, the Egyptian god Bastet had the head of what feline animal?

ANSWER: domestic cats [or pussy; or kittens; or kitty-cat; prompt on “felids” or “felines” until mention]

[edited]

19. This event centered around the delivery of a document that began “We workers have come to you, Sovereign, to seek truth and protection...” Pinhas Rutenberg saved the life of a key figure in this event, who was recruited into the Okhrana secret police as a double agent. About a month after this one-day event occurred, the SR Combat Organization assassinated Duke Sergius, triggering even more chaos. It took place largely around Narva Gate and started the day after a general strike broke out. It began with a march in which people sang “God save the tsar” and culminated with the crowd, which was led by Father George Gapon, attempting to approach the Winter Palace. For 10 points, identify this event in which protesters marching to give Nicholas II a petition were fired on by the Imperial Guard, a major contributor to the Russian Revolution.

ANSWER: **Bloody Sunday** of 1905

[edited]

20. Removal of one of this kind of material’s non-gold components is the subject of surface enrichment. This kind of material is necessary for diffusion to induce heating in the Kirkendall Effect. Precipitation heating can be used to strengthen these materials. A major class of these compounds governed by the double exchange mechanism features components that are not ferromagnetic, even though these as a whole are. Two major classes of these compounds are substitutional and interstitial, the latter of which features a structure of alternating small and large molecules.

Examples of these materials include ferromagnetic ones named after Heusler, electrum, amalgam and bronze. For 10 points, identify these solid metallic solutions of two or more metals.

ANSWER: **alloys** [accept **Heusler** alloys; prompt on “semiconductors”]

[edited]

Extras

21. Hans Lewy gave a namesake “example” of one of these equations to show that the converse of the Cauchy–Kovalevskaya theorem doesn’t hold. A method of solving these equations generalizes the use of Adomian polynomials by employing a homotopy transformation; that is the HAM method. One method of solving these equations requires finding two operators L and P such that their commutator is equal to the time derivative of L ; L and P are called a Lax pair. Another method of solving them relies on first solving along a characteristic curve. Examples of these equations include one modelling vibrating membranes in three dimensions and one modelling heat flow. For 10 points, name this type of equation which contains several variables and their derivatives.

ANSWER: **partial differential equations** [or **PDEs**; prompt on “differential equations”; do not accept “ordinary differential equations” or “ODEs”]

22. Portuguese Caspar Bacarro was the first European to report this body of water’s existence, which was the site of the first naval action of the First World War, when a single gunboat was disabled by the SS Gwendolen in a port then called Spinxhaven. A territorial dispute in this body of water resulted from the 1890 Heligoland Agreement that gave the polity controlling its northeastern shore no jurisdiction over it. Other ports on this body of water include Likoma Island, Nkhata Bay, and Chipoka. This lake has a southeasterly wind called the *mwera*. Two countries that border this lake is prefer to call this lake by a generic term from languages spoken around it that literally means “Lake Lake.” This lake lies south of the David Livingstone Mountain Range and is drained a tributary of the Zambezi River; that tributary is the Shire River. This southernmost lake of the Eastern African Rift Valley system separates Mozambique and Tanzania from its namesake country. For 10 points, name this lake named for a nearby nation with capital at Lilongwe.

ANSWER: Lake **Malawi** [or Lake **Nyasa**; or **Lake lake** before mention; prompt on “lake”]

23. This government’s second leader had earlier resigned the premiership following the Stavisky Affair. This government agreed to the Matignon Agreements and thus created the 40-hour work week in their country. This government fell apart over disagreements over whether or not to intervene in the Spanish Civil War. This

government was formed when one of its constituent parties, who refused all ministerial posts in this government, had its policies changed as a result of the last congress of the Third International. This government's second premier was Camille Chautemps, its third was Edouard Daladier, and the first premier of this government was Leon Blum. For 10 points, name this French governing coalition from 1936 to 1938, which consisted of radicals, socialists, and communists.

ANSWER: France's **Popular Front** [or the **Front Populaire**]

Bonuses

1. The bacterium that causes this disease secretes lethal factor and edema factor, the latter of which functions as a calmodulin-dependent adenylate cyclase. For 10 points each:

[10] Name this disease caused by a bacillus, which comes in cutaneous and pulmonary forms. Its powdered form is often used as a biological weapon.

ANSWER: **anthrax**

[10] In unfavorable environmental conditions, *B. anthracis* can form this tough, seed-like structure to protect itself from the elements.

ANSWER: **endospore**

[10] The capsule of the anthrax bacterium is a polymer of the D-form of this amino acid, which, in another context, binds to NMDA receptors.

ANSWER: **glutamic acid** or **glutamate**

2. Only the southern part of this island was ever in the Greater East Asia Co-Prosperity Sphere. For 10 points each:

[10] Name this island that expelled its Ainu population in 1949 when it changed ownership. This largest Russian island was once divided into north and south by the 1905 Treaty of Portsmouth.

ANSWER: **Sakhalin** Island

[10] These islands stretch from Sakhalin Island to the Kamchatka Peninsula and separate the Sea of Okhotsk from the Pacific Ocean. The southernmost islands in this chain are still in dispute and thus the two disputants are technically still fighting the Second World War.

ANSWER: **Kurile** Islands

[10] Russia disputes ownership of Sakhalin Island and the Kuril Islands with this Asian nation whose own islands include Hokkaidō and Honshū.

ANSWER: **Japan**

3. It claims "It is truly strange to no longer inhabit the earth" before recalling the lament for Linos. For 10 points each:

[10] Name this single poem from a collection which states that "beauty is nothing but the beginning of terror that we are still able to bear," which "calmly disdains to destroy us." It opens by asking "Who if I cried out would hear me among the angelic orders?"

ANSWER: The **first of the Duino Elegies** [accept obvious equivalents, like "the **first Duino elegy**"]

[10] This German-language poet wrote "Every angel is a terror" in his *Duino Elegies*.

ANSWER: Rainer Maria **Rilke**

[10] This semi-autobiographical work by Rilke is his only novel and centers on the title character's coming of age in Paris.

ANSWER: *The **Notebooks of Malte Laurids Brigge***

4. During this election, the Whig Party convention unanimously backed the Know-Nothing ticket. For 10 points each:

[10] Name this election, the last to be contested by the Whigs and the Know-Nothings. Both parties supported a ticket with Andrew Jackson Donelson as Vice President.

ANSWER: United States Presidential Election of **1856**

[10] This Democrat won the 1856 election by saying that his Republican opponent's policies would lead to war. At the end of his presidency, the Southern States seceded, setting up the stage for his successor, Abraham Lincoln.

ANSWER: James **Buchanan**

[10] This man was the nominee of the Know-Nothing party in the election of 1856. He got third place.

ANSWER: Millard **Fillmore**

5. This man used a burnt-orange background and three misshapen figures representing the Eumenides in his *Three Studies for Figures at the Base of a Crucifixion*. For 10 points each:

[10] Identify this British artist who also painted *Lying Figure with Hypodermic Syringe*.

ANSWER: Francis **Bacon**

[10] Francis Bacon is most famous for depicting these figures screaming. One of the more notable ones deconstructs an image of Innocent X, one of these figures painted by Diego Velasquez.

ANSWER: **popes**

[10] Francis Bacon man painted the *Black Triptychs* after this man, Bacon's lover, committed suicide.

ANSWER: George **Dyer**

6. This politician's speech at the 59th session of the UN General Assembly called for the establishment of the Alliance of Civilizations. For 10 points each:

[10] Name this Socialist Worker's Party politician who didn't run in his country's 2011 elections, despite being elected Prime Minister in 2004 and 2008. His government negotiated the 2006 "permanent" ceasefire with a Basque separatist group.

ANSWER: José Luis Rodríguez **Zapatero**

[10] Zapatero served as Prime Minister of this nation, whose current king is Juan Carlos I.

ANSWER: Kingdom of **Spain** [or *Reino de España*]

[10] At the 2007 Ibero-American Summit, Zapatero defended his predecessor from this other world leader, who kept interrupting his speech until Juan Carlos I asked him "Por que no te callas," or "Why don't you shut up?"

ANSWER: Hugo Rafael **Chávez** Frías

7. This ruler was born so soon after his parents' marriage that in order to save face, he moved the year of his birth one year later in all public records. For 10 points each:

[10] Identify this leader who invaded the Mato Grosso province during a war which culminated with a loss at the Battle of Cerro Cora.

ANSWER: Francisco Solano **Lopez**

[10] Francisco Solano Lopez was a dictator of this country, which fought the War of the Triple Alliance with Brazil, Argentina and Uruguay.

ANSWER: **Paraguay**

[10] This city in the southwest of Paraguay was the main bastion of defense for troops in the War of the Triple Alliance. From here, the Paraguayan fleet would disastrously lose to the Alliance Fleet at the Battle of Riachuelo.

ANSWER: **Humaita**

8. An imaginary mass may allow particles to travel faster than this limit, and in 2011, the OPERA experiment published its measurements of neutrinos travelling faster than it. For 10 points each:

[10] Name this speed limit of the universe, approximately equal to a foot per nanosecond.

ANSWER: **speed of light** [accept *c*]

[10] One consequence of special relativity is the relativity of this property, in which the order of events depends on the observer's frame. Many physics students encounter this in the example of a moving ladder trying to fit into a garage, or a pole into a barn.

ANSWER: simultaneity [accept word forms]

[10] A rotation-free Lorentz transformation is given this name. This is described by adding a negative beta times gamma term to symmetric positions in the first column and first row of the transformation matrix.

ANSWER: Lorentz boost

9. This thinker expounded on the difference between “there is” and “it gives” in one work, and this man delivered lectures on Holderlin's poem, “The Ister.” For 10 points each:

[10] Name this man who explored the definition of “everydayness” as one of the two title concepts of another book.

ANSWER: Martin Heidegger

[10] That book by Heidegger is this 1927 work which examines the nature of *Dasein* and the two title concepts.

ANSWER: Being and Time [accept Sein und Zeit]

[10] Heidegger debated this other author of *The Myth of the State* over neo-Kantian questions at Davos in 1929. This philosopher discussed the expressive nature of representation in his tome *The Philosophy of Symbolic Forms*.

ANSWER: Ernst Cassirer

10. While in a market just before being insulted by Iyaloja, this character speaks of how “even those we call immortal should fear to die.” For 10 points each:

[10] Name this character who commits suicide using the chains used to bind his hands after he sees the body of his son, who has committed ritual suicide.

ANSWER: Elesin Oba [accept either name; accept “The King's Horseman”]

[10] Elesin is the title character of *Death and the King's Horseman*, a work by this Nigerian playwright and author of *The Lion and the Jewel*.

ANSWER: Akinwande Oluwole “Wole” Soyinka

[10] Soyinka also wrote this other play that begins with various characters betting their body parts during a game of dice. It focuses on the struggles between Doctor Bero, and his father that was always on the wrong side of unstable, whom Bero imprisons.

ANSWER: Madmen and Specialists

11. It is quoted in *Prince Igor* and was orchestrated by the composer of *Scarlattiana* and *Paganiniana*, Alfredo Casella. For 10 points each:

[10] Name this piano composition, an “oriental fantasy” that incorporates tunes taken from regions where the title religion is practiced. It opens with an *Allegro agitato* and concludes with the *Allegro vivo – presto furioso* third part.

ANSWER: Islamey

[10] This composer of the symphonic poem *Tamara* wrote the very difficult piece *Islamey*.

ANSWER: Mily Alexeyevich Balakirev

[10] Supposedly, *Islamey* caused Scriabin to injure himself, as did the fantasy *Réminiscences de Don Juan*, a piano work by this composer of the *Transcendental Études* and *Hungarian Rhapsodies*.

ANSWER: Franz Liszt

12. These events were held after a conflict that began with one side landing at Lyme Regis. For 10 points each:

[10] Name this series of trials at Winchester chaired by Lord Chief Justice Jeffreys.

ANSWER: the Bloody Assizes [prompt on BUT DO NOT REVEAL “Monmouth Rebellion Trials”]

[10] The Bloody Assizes tried members of this rebellion led by an illegitimate son of Lucy Walter. Its namesake Duke coordinated his rebellion the Earl of Argyll, but was defeated at the Battle of Sedgemoor.

ANSWER: Monmouth Rebellion [or Revolt of the West; or West County Revolt]

[10] The Monmouth Rebellion was directed against this Catholic king overthrown by the Glorious Revolution. He was the successor of his brother, Charles II.

ANSWER: **James II** of England [or **James VII** of Scotland]

13. The Minimalist Program is a subfield of this approach, which one major linguist attributes to historical grammarians like Panini. For 10 points each:

[10] Transformational grammars are subtypes of this type of grammar which attempts to predict which rules will combine to produce grammatical sentences.

ANSWER: **generative** grammar

[10] This linguist was responsible for much of the theory of generative grammar. This MIT professor wrote *Syntactic Structures*.

ANSWER: Avram Noam **Chomsky**

[10] Chomsky also proposed this linguistic theory, which argues that all languages share the namesake underlying structure. A syntactic structure in this theory can be broken into parts including head and specifier, the former of which is represented by the title symbol.

ANSWER: **X-bar** theory

14. It climaxes with the Captain bringing his ship dangerously close to the shoreline to help a fugitive from the *Sephora* escape. For 10 points each:

[10] Name this story in which Leggatt jumps into the Gulf of Siam after receiving assistance from the narrator, with whom he might be a Doppelgänger.

ANSWER: “The **Secret Sharer**”

[10] This author of “The Secret Sharer” also wrote about the insane ivory merchant Kurtz in *Heart of Darkness*.

ANSWER: Joseph **Conrad**

[10] At the same time Conrad was writing “The Secret Sharer” he was writing this novel, whose protagonist Razumov betrays Victor Haldin and ends up becoming a secret agent working for the tsarist regime.

ANSWER: **Under Western Eyes**

15. This type of topography often has a lot of caves. For 10 points each:

[10] Identify this type of topography that is created by the erosion of large fields of carbonate rocks by water. This type of topography is characterized by sinkholes and disappearing springs.

ANSWER: **karst** topography

[10] These features, which are common in karst topography, are sinkholes that connect the surface to some kind of groundwater source.

ANSWER: **cenote**

[10] This carbonate rock is commonly the substrate of karst topography, along with dolomite. It is made from calcite and chalk is a form of it.

ANSWER: **limestone**

16. This religious sect takes its name from the Sanskrit symbol for Thunderbolt, and highlights the *samaya*, or vows taken by initiates. For 10 points each:

[10] Identify this school of Buddhism which uses tantras and is a third way to enlightenment along with Mahayana and Theravada.

ANSWER: **Vajrayana** Buddhism

[10] One of the subsets of Vajrayana Buddhism is this Buddhist tradition, which contains the Nyingma and Gelug traditions and includes the Red Hat and Yellow Hat sects.

ANSWER: **Tibetan** Buddhism

[10] This is the term for the spiritual leader of Tibetan Buddhism. He is assisted by the Panchen Lama and its current holder is Tenzin Gyatso.

ANSWER: **Dalai Lama**

17. A copy of this work which adorned the Baths of Caracalla was uncovered in 1546. For 10 points each:

[10] Name this sculpture, which depicts a bearded man holding several apples behind his back and leaning on a massive club covered by the skin of the Nemean Lion.

ANSWER: **Farnese Hercules**

[10] The original *Farnese Hercules* was a creation of this ancient Greek sculptor, who also created *Apoxyomenos* and *Eros Stringing His Bow*.

ANSWER: **Lysippos**

[10] Lysippos is thought to be responsible for a statue of this figure fastening one of his sandals. This Greek messenger god is sometimes depicted with a *petasos* and a *kerykeion*.

ANSWER: **Hermes**

18. He founded the magazine *Fiction* along with Mark Mirsky and Max Frisch. For 10 points each:

[10] Name this author of “flash fiction,” such as those found in his collections *Sixty Stories* and *Forty Stories*.

ANSWER: Donald **Barthelme**

[10] In an interview, Barthelme was asked if he believed in entropy to which he responded “Entropy belongs to” this author. This author’s story “Entropy” is included in his *Slow Learner*, and his novels include *Gravity’s Rainbow*.

ANSWER: Thomas **Pynchon**

[10] This other postmodern American author wrote *Wonder Boys* and a novel set during the golden age of comics. His novel *The Yiddish Policemen’s Union* is an alternate history in which Jews were relocated to Alaska during World War II.

ANSWER: Michael **Chabon**

19. This technique is used to increase the yield of the Fischer esterification, and this technique is often used via a Liebig condenser. For 10 points each:

[10] Name this technique in which vapors are condensed then returned to the flask in which a reaction takes place in order to continuously supply energy.

ANSWER: **reflux**

[10] Refluxing is often used alongside this laboratory technique of separating mixtures based on their boiling points. Azeotropes make this process difficult.

ANSWER: **distillation**

[10] This is the temperature at which an azeotrope forms for a given binary mixture. The vapor pressure has a temperature dependence according to the Antoine equation, and at some temperature both species’ vapor pressure will be the same.

ANSWER: **Bancroft** point

20. Aristides the Just earned a good reputation by only using one ship to collect taxes for it. For 10 points each:

[10] Name this organization that defeated attempts by Naxos, Thasos, Lesbos, and Chios to leave it. After its Egyptian Expeditionary force was defeated by Megabyzus, it moved its treasury to the Attic Peninsula.

ANSWER: **Delian** League [prompt on “Athenian Empire”]

[10] The Delian League’s first *raison d’être* was to campaign against this empire ruled by the Achaemenid Dynasty. Some of its leaders include Darius the Great, Xerxes the Great, and Cyrus the Great.

ANSWER: Achaemenid **Persia**

[10] Like the earlier battle of Platea and Mycale, the Persian Empire’s army and navy was crushed at this double battle fought against the Delian League forces led by Cimon of Athens.

ANSWER: Battle of the Eurymedon River

Extras

21. She was taken across the Mediterranean on the back of Zeus in the form of a bull. For 10 points each:

[10] Name this mythological woman who lends her name to a continent.

ANSWER: Europa

[10] This aunt of Medea and mother of Phaedra and Ariadne gave birth to Asterion after forcing Daedalus to construct a mechanical bull suit to satisfy her creepy lust with bulls.

ANSWER: Pasiphae

[10] Aelian states that the bulls of this region were red-haired eaters of flesh. During the Trojan War, a king of this region slays Antilochus, the son of Nestor.

ANSWER: Ethiopia or Aethiopia [prompt on “Africa”]

22. In a perfect implementation of one of these data structures, lookups are constant time in the worst case. For 10 points each:

[10] Name these data structures which use a namesake function to map keys to values.

ANSWER: hash table [or hash map; do not accept “hash function”]

[10] Collisions occur when two keys are mapped to the same value using the hash function. A good hash function minimizes or avoids collisions by having this kind of distribution of hash values.

ANSWER: uniform

[10] When collisions do occur, they are often resolved using this method. This method creates a data structure, usually a linked list, at each bucket that the hash maps to.

ANSWER: separate chaining [or open hashing]

23. Hans-Ulrich Rudel won a Knight’s Cross with golden Oak Leaves, Swords, and Diamonds for piloting this plane model. For 10 points each:

[10] Name this Junkers-produced plane with a inverted gull wings, a siren and automatic dive brakes. It served a critical role as the air artillery in *blitzkrieg* tactics, but was found vulnerable to fighters in the Battle of Britain.

ANSWER: Stuka [or Junkers Ju 87; or Sturzkampfflugzeug]

[10] The Stuka was this type of airplane, as was the Douglas SBD Dauntless planes that destroyed the Japanese carriers at the Battle of Midway. It uses a namesake vertical approach to accurately deliver bombs.

ANSWER: dive-bomber [do not accept “glide-bomber”; prompt on “bomber”]

[10] This Japanese carrier-borne dive bomber sank more Allied warships than any Axis plane. It was often paired with “Kate” torpedo bombers and Zero fighter escorts, as seen in both waves at Pearl Harbor.

ANSWER: Val [or Aichi D3A; or Navy Type 99 Carrier Bomber Model 11; or kanjō bakugekiki; or kanbaku]