**Prison Bowl VI**

Questions written and edited by Hunter College High School (Sam Brochin, Swathi Chakrapani, William Dou, David Godovich, Lily Goldberg, Jason Gurevitch, Willie Ha, Sarah Hamerling, Sophey Ho, Brian Huang, Sayema Islam, Jonathan Lin, Brent Morden, Alex Moschetti, Tenzin Norzin, Wilton Rao, Ruth Schoenfeld, Priya Srikumar, Karina Xie, Marianna Zhang, and Zihan Zheng)

**Round 06 – Tossups**

1. John the Deacon was a secretary to one ruler of this polity and wrote the earliest known chronicle of here. This polity gave up Morea in exchange for portions of Dalmatia in the Treaty of Passarowitz. Alexander VI organized the League of Cambrai to combat this polity, and it was dissolved as a result of the Treaty of Campo Formio. Enrico Dandolo of this polity successfully diverted the 4th Crusade to sack Constantinople, and ships supplied by this polity won a decisive victory at the Battle of Lepanto. It frequently sparred with the Ottoman Empire for control of the eastern Mediterranean. For 10 points, name this “most serene” republic in northern Italy that like Genoa, was ruled by a doge.

ANSWER: Republic of **Venice** [or Most Serene Republic of **Venice**] <JL>

2. In a work named after one of these constructs, the narrator meets Alvaro de Luna and can see only two out of three wheels of Fortune. In addition to titling the magnum opus of Juan de Mena, another of these structures is home to Asterion. The pachuco, an expression of mimetisimo, fails to escape one of them in a work that includes the sections “The Sons of La Malinche”, “Day of the Dead”, and “Mexican Masks”. The King of Babylonia dies in one of sand and Ts’ui Pen constructs a temporal one. These structures title a work about the solitude of Mexico written by Octavio Paz and a collection of short stories by Jorge Luis Borges. For 10 points, name these lonely mazes.

ANSWER: **labyrinth**s [or **laberinto**s] <MZ>

3. The radiation per unit solid angle of a wave undergoing this process varies with the cosine of the angle between the line of sight and the perpendicular. Lambert’s emission law applies to the directionally independent form of this process, in which a microscopically rough interface causes it to occur in many different angles in the “diffuse” type of this phenomenon. The “specular” variety of this process is modeled by a law which states that the angle of incidence equals this process’s namesake angle. For 10 points, name this optical phenomenon in which a wavefront rebounds off of a surface, often facilitated by mirrors.

ANSWER: **reflection** <WR>

4. The third movement of Olivier Messiaen’s *Quartet for the End of Time* is named “Abyss of” these entities, and in the first movement, the clarinet and violin imitate two of these. The second tone poem in Sibelius’s *Lemminkainen Suite* is named after one of these “of Tuonela”. A work describing one of these creatures contains a violin cadenza without bar lines and is based on a George Meredith poem. Another one of these animals bewitches King Kashchei and is captured by Prince Ivan. For 10 points, name these animals, one of which, preceded by “fire”, titles an Igor Stravinsky ballet.

ANSWER: **bird**s [also accept black**bird**, **nightingale**, **swan**, **lark**, and fire**bird**] <WR>

5. This person asserted that “the right will is... well-directed love, and the wrong will is ill-directed love” in a work which described history as the struggle between those motivated by self and those who have turned away from self. In Book 2 of an autobiographical work, this man steals pears not to eat them, but to enjoy the sin itself, and he detailed a method for interpreting scripture in *On Christian Doctrine*. This man’s mother was St. Monica and his baptism by St. Ambrose converted him from Manichaeism. For 10 points, name this Church Father who authored *The City of God* and *Confessions*.

ANSWER: Saint **Augustine** of Hippo [also accept Saint **Austin** or **Augoustinos**] <WR>

6. The incomplete beta function can compute the cumulative density function for this object’s namesake probability distribution. That discrete distribution, defined by the number of successes from a number of Bernoulli trials, approximates a Poisson distribution as the number of trials increases. Raising one of these to the *n*th power yields an expansion with *n+1* terms, whose coefficients can be found on the rows of Pascal’s Triangle using this algebraic expression’s namesake theorem. *A* squared plus *B* squared is an example of, for 10 points, this type of polynomial, which contains two terms.

ANSWER: **binomial** [or **binomial** distribution; do not accept or prompt on “polynomial”] <WR>

7. This river’s tributaries include the Iller and Abens Rivers. Previously, this river contained the Ada Kaleh, now submerged following the construction of the two dams at the Iron Gates. The confluence of this river and the Siret is at the port city of Galati, while this river joins a large tributary called the Sava in a Balkan capital. Receiving the Tisza in Serbia, this river begins in the Black Forest of Germany and is the second longest river in Europe. For 10 points, name this river that passes through Belgrade, Budapest, and Vienna, and flows into the Black Sea.

ANSWER: **Danube** River <SB>

8. One of this writer’s plays ends with Sam collapsed on the floor and Ruth resolving to stay behind in London, leaving Teddy to return to America. In another play, he traced the evolution of Emma and Jerry’s affair in reverse chronology. This playwright of *The Homecoming* and *Betrayal* wrote a play that includes an argument over the semantics of lighting a kettle and ends with Ben holding Gus at gunpoint. In another of his plays, McCann and Goldberg take Stanley Webber away from the title celebration. For 10 points, name this “comedy of menace” dramatist of *The Dumb Waiter* and *The Birthday Party.*

ANSWER: Harold **Pinter** <MZ>

9. This battle concluded when a squall prevented the movement of troops across to Gloucester Point. One side’s cavalry under Banastre Tarleton was forced to retreat early on, though the Fusilier’s redoubt that side held withstood several attacks. The success of de Grasse’s naval fleet was vital during this siege, which saw the construction of long parallel trenches. A British attempt to spike the cannons and wait for Clinton’s reinforcements failed, while the abundant supply of ammunition allowed Washington to order the guns to fire without stop, preventing repairs. For 10 points, name this critical defeat for Cornwallis that led to the end of the American Revolution.

ANSWER: Siege of **Yorktown** <ZZ>

10. Alfred Donné discovered what he called “granular bodies” in a substance secreted during this process, colostrum. Mastitis may occur if a newborn undergoes an irregular form of this action, known as galactorrhea. The product of this process in humans contains high levels of immunoglobulin A, lysozymes and casein (“CAY-sin”), and this action is maintained by PRL and oxytocin, which cause a positive feedback mechanism. This action begins after progesterone levels lower and prolactin levels rise, stimulating the mammary glands. Breasts or udders facilitate, for 10 points, this action of secreting milk for the nourishment of offspring.

ANSWER: **lactation** [accept **nursing** or **breast feeding**; accept things like **milk production** before mention] <WH>

11. This artist depicted a girl in a pink dress kneeling on a cushion and grabbing a blue ribbon tied to a yellow armchair in his *Young Lady with a Bird and Dog*. This man’s portraits include one of John Montresor as well as his own half-brother, Henry Pelham, holding a yellow leash in his *Boy With a Squirrel*. In his most famous painting, a man in a bandanna holds an oar while reaching down to the title nude figure, who has fallen into Havana Harbor and is about to be attacked by a fish. For 10 points, name this American colonial painter of a portrait of Paul Revere as well as *Watson and the Shark*.

ANSWER: John Singleton **Copley** <WR>

12. Geoffrey Pyke wished to use these objects in the military following the invention of pykrete. Lord Mountbatten was involved in that project, dubbed Operation Habakkuk. Knud Lauritzen argued for welding instead of riveting in order to better withstand these objects, one which led to the loss of 6 million dollars’ worth of gold bullion near Admiralty Island. The sighting of another one of these by Frederick Fleet was ignored, and the *Carpathia* rescued 710 survivors from a ship captained by Edward Smith which collided with one of them. For 10 points, identify these objects that can separate off of glaciers, one of which led to the sinking of the *Titanic*.

ANSWER: **iceberg**s [prompt on “ice floe”, “ice”, and “pack ice”] <ZZ>

13. In one of this writer’s novels, Abbe Dalla Piccola and the anti-semitic author of *The Protocols of the Elders of Zion,* Simone Simonini, are revealed to be the same person. In another novel by this author of *The Prague Cemetery*, the Tres society is devised as part of The Plan, which results in Lorenza’s stabbing and Belbo’s hanging. The blind Jorge of Borgos harbors an intense hatred for Aristotle’s *Poetics* in another of his novels, which centers on a series of murders at an abbey investigated by Adso of Melk and William of Baskerville. For 10 points, name this Italian semiotician who wrote *Foucault’s Pendulum* and *The Name of the Rose.*

ANSWER: Umberto **Eco** <MZ>

14. In this series, Padmasambhava and Walter Simeon are both possessed by the Great Intelligence. One character in this series, the Rani, was friends with a character who, upon staring at the Vortex through the Untempered Schism, hears the sound of drums in his head. This TV show, which features the Master, was revived in 2005 with the title role played by Christopher Eccleston. Currently, the role is played by Matt Smith, the 11th regeneration of the title alien. For 10 points, name this BBC science fiction television series in which the Time Lord protagonist travels in the TARDIS, a blue police box.

ANSWER: ***Doctor Who*** <SH>

15. A drunk Hrungnir wants to steal this entity but is killed by Thor in a duel. Eikthyrni (“Eyk-THEER-knee”) stands upon this entity, and from his antlers drip water that forms Hvergelmir. The tree Glasir stands before it, and people eat Saehrimnir under a ceiling thatched with golden shields in this place. Inside, Bilskirnir stands in the hall of Thor, who is the son of this place’s owner. The Einherjar, who will drink and spar until Ragnarok when they will fight alongside the gods, are brought to this place by valkyries. For 10 points, name this hall from where Odin rules, located in Asgard.

ANSWER: **Valhalla** <WD>

16. One civil war in this country ended with a treaty signing on the American battleship *Wisconsin*, the Thousand Days’ War. This country quarreled with a neighbor over ownership of Leticia, and the first president of this country under its current constitution was José María Campo. The USS *Nashville* was sent to harass its efforts to put down a revolution. FARC rebels continue to conduct guerrilla warfare in this nation, where the assassination of Jorge Elicer Gaitan began a ten-year civil war known as “La Violencia”. Along with Venezuela and Ecuador, it was part of a successor state to the Viceroyalty of New Granada. For 10 points, name this South American country engaged in internal conflicts involving drug trafficking, with a capital at Bogota.

ANSWER: Republic of **Colombia** <AM>

17. The ratio of latent heat to this quantity is approximately 21 calories per mole per Kelvin according to Trouton’s ratio, and this quantity’s reciprocal appears on the right side of the Clausius-Clapeyron equation. A mixture of acetone and chloroform has a higher value for this quantity than either of its components because it is a negative azeotrope. Other ways to elevate this value include adding a salt to a solvent or increasing the atmospheric pressure relative to the vapor pressure of the substance. For 10 points, name this temperature, about 100 degrees Celsius for water, at which a liquid vaporizes into a gas.

ANSWER: **boiling point** [prompt on “heat of vaporization” or “enthalpy of vaporization” before mention] <AM>

18. This poet promised not to forget the “friends who in darker fortunes tried”, a thought sparked by a “modest bell” and “humble stalk” in “The Yellow Violet”. In “The Battle-field”, he commented that “Truth crushed to earth will rise again”. He observed the title creature of one poem pursue “thy solitary way” before concluding, “He who... guides through the boundless sky thy certain flight” will “lead my steps aright”. This poet of “To a Waterfowl” opened a poem with “To him who in the love of Nature holds / Communion with her visible forms”. For 10 points, name this poet who urged the reader to “approach thy grave, / like one who... lies down to pleasant dreams” in “Thanatopsis”.

ANSWER: William Cullen **Bryant** <MZ>

19. A young boy grins maniacally and clutches a toy grenade in a Diane Arbus photograph set in this location. Its equestrian monuments include one designed by Augustus Saint-Gaudens of William Tecumseh Sherman, and another depicting a Polish king holding up two swords. That statue is of King Jagiello. Large panels of saffron fabric were suspended in this location in Christo and Jeanne-Claude’s *The Gates.* Belvedere Castle, Strawberry Fields, Sheep Meadow, and the Great Lawn are sections of this site, which was designed according to the Greensward Plan by Calvert Vaux and Frederick Law Olmstead. For 10 points, name this large park in Manhattan.

ANSWER: **Central Park** <MZ>

20. This man proposed the idea of mand in a work criticized by Noam Chomsky. He wrote “science does not dehumanize man, it de-homunculizes him,” and advocated punishment if people are given free will to make choices. In another of his works, T. E. Frazier and five others lead a community with Planners, Managers, Workers, and Scientists who follow a namesake code. This man was inspired by Thoreau to write that work, *Walden Two*, and also wrote *Beyond Freedom and Dignity*. For 10 points, name this behaviorist whose namesake box used rats to study operant conditioning.

ANSWER: Burhuss Frederic **Skinner** <PS>

TB. Peter Buxtun exposed one scandal involving this entity, in which its president Robert Russa Moton participated, while another group associated with this entity participated in Operation Husky. Eleanor Roosevelt was taken on a flight while visiting this entity, and one person from this entity once served dinner guests many different dishes made from just potatoes. A four-decade long syphilis experiment was conducted with the support of this entity, and the first president of this entity delivered the Atlanta Compromise speech. For 10 points, identify this entity where the “red tails” trained whose faculty included George Washington Carver and Booker T. Washington.

ANSWER: **Tuskegee** Institute or University <ZZ>

**Round 06 – Bonuses**

1. You know what sucks? When your husband is killed and your son is thrown off a wall. For 10 points each:

[10] Name this mother of Astyanax and wife of the greatest Trojan hero. She was taken as Neoptolemus’s concubine during the Trojan War but later married Helenus.

ANSWER: **Andromache**

[10] This husband of Andromache led the Trojans against the Greeks. He dueled Ajax and killed Patroclus before he was chased around the walls of Troy, killed, and had his body mistreated.

ANSWER: **Hector**

[10] This Greek hero killed Hector as well as other heroes like Penthesilea and Memnon. He was invulnerable everywhere except where his mother Thetis had held him while dipping him into the river Styx.

ANSWER: **Achilles** <WR>

2. Everyone loves really big guns that cause really big explosions. Name some video game characters that tote such weapons for 10 points each.

[10] This protagonist of the *Metal Gear* series uses a severely overpowered Grenade Launcher as his Final Smash in Super Smash Bros. Brawl. His job as a spy causes him to frequently hide within cardboard boxes.

ANSWER: Solid **Snake** [accept **David** or Iroquois **Pliskin**]

[10] This offensive class in *Team Fortress 2* wields a Rocket Launcher as his primary weapon. He is fond of crazily waving around his melee weapon, a shovel, and lecturing on Sun Tzu, who he believes invented warfare.

ANSWER: The **Soldier**

[10] The robotic Quote of this game, a “soldier from the surface”, uses a Missile Launcher as well as a Blade given to him by King the Mimiga (“mee-MEE-gah”) and a Machine Gun given by Curly Brace.

ANSWER: **Cave Story** <WR>

3. He formed an alliance with Emiliano Zapata and Venustiano Carranza in overthrowing the government of Victoriano Huerta. For 10 points each:

[10] Identify this general of the Mexican Revolution who led the Army of the North and served as a Governor of Chihuahua. He ordered a raid on Columbus, New Mexico, after the US began providing aid to Carranza.

ANSWER: Pancho **Villa** [or José Doroteo Arango **Arámbula**]

[10] This American general was ordered by President Wilson to find Villa following the raid. He was recalled shortly thereafter and was appointed the leader of the American Expeditionary Force in World War I.

ANSWER: John J. **Pershing**

[10] This aide of General Pershing is believed to have launched the first motorized attack in US history during the Mexican expedition. He notably led the US 3rd Army in World War II and was instrumental in relieving trapped forces in Bastogne during the Battle of the Bulge.

ANSWER: George S. **Patton** <JL/ZZ>

4. This 11th century Japanese work is sometimes called “the world’s first novel.” For 10 points each:

[10] This novel portrays the life of the title son of the emperor, who is exiled after his brother discovers his affair with Lady Fujitsubo, one of his father’s wives.

ANSWER: *The* ***Tale of Genji*** [or ***Gengi monogatari***]

[10] Name this Heian period lady-in-waiting and author of *The Tale of Genji*. Genji’s second wife shares her name.

ANSWER: **Murasaki** Shikibu

[10] This first wife of Genji is diagnosed with spirit possession after she suffers a seizure while bickering with Lady Rokujo, one of Genji’s many mistresses. She dies shortly after giving birth to Genji’s son.

ANSWER: **Aoi** no Ue <SH>

5. Its computation sometimes requires one to draw a Lewis structure. For 10 points each:

[10] Name this quantity assigned to atoms in a compound which is always equivalent to charge for a monatomic ion and 0 for pure elements. This quantity, which represents a hypothetical charge, is changed by electron transfer.

ANSWER: **oxidation state** [or **oxidation number**; prompt on partial]

[10] As the first alkali metal, this element almost always has an oxidation state of +1. This element with atomic number 3 is the “Li” in LiAlH4.

ANSWER: **lithium**

[10] In LiAlH4, lithium’s oxidation state is +1 and aluminum’s is +3. This is the oxidation state of a single hydrogen atom, the same oxidation state as a single oxygen in H2O2.

ANSWER: **-1** [**negative one**] <WR>

6. This continent contains the Amundsen-Scott station, located at 90 degrees south, 0 degrees west. For 10 points each:

[10] Name this continent, the windiest and driest continent on average, which has its highest point at Vinson Massif in the Ellsworth Mountains.

ANSWER: **Antarctica**

[10] This sea, one of two major Antarctic bays, is notoriously perilous, being the site of the freezing of Ernest Shackleton’s ship *Endurance*. Its namesake seal can be found on the Antarctic Peninsula.

ANSWER: **Weddell** Sea

[10] Antarctica is the only continent besides North America to contain these large frozen coastline landforms, where glaciers flow into the ocean. Examples include ones named for Amery, Ross, and Ronne.

ANSWER: **ice shelves** <WR/WH>

7. The dormant doctrine involving this entity was created by Chief Justice Marshall’s dicta in *Gibbons v. Ogden*. For 10 points each:

[10] Identify this portion of Article I of the Constitution that was applied to allow Congressional regulation of desegregation in *Katzenbach v. McClung* and set the national minimum drinking age in *South Dakota v. Dole*.

ANSWER: **Commerce Clause** [accept **Article I, Section 8**]

[10] This companion case to *Katzenbach v. McClung* involved an attempt by the titular institution to deny service to  black patrons, arguing that desegregation violated the institution’s 5th Amendment right to choose its customers and placed the owner in a position of involuntary servitude.

ANSWER: ***Heart of Atlanta*** *Motel v. US*

[10] Several recent cases involving the Commerce Clause, such as *Florida v. Sebelius* and *Virginia v. Sebelius*, focused on the constitutionality of this act, and its individual mandate in particular. Chief Justice Roberts chose to uphold this law using the taxing power instead.

ANSWER: Patient Protection and **A**ffordable **C**are **A**ct [prompt on “Obamacare”] <ZZ>

8. Franz Liszt’s *Totentanz* is based on this hymn. For 10 points each:

[10] Name this Latin sequence that describes “the day of wrath... as foretold by David and the sibyl”. Its music is quoted in Rachmaninoff’s *The Bells* as well as Saint-Saen’s *Danse Macabre*.

ANSWER: “**Dies Irae**”

[10] The “Dies Irae” is just one sequence in this type of Roman Catholic mass for the dead. Benjamin Britten wrote a “War” one, while Gabriel Faure wrote one that excludes the “Dies Irae”.

ANSWER: **Requiem** mass [accept Missa **pro defunctis** or Missa **defunctorum**]

[10] Franz Sussmayr completed this composer’s Requiem Mass in D Minor. He also wrote a coloratura aria “Der Holle Rache” in his *The Magic Flute*.

ANSWER: Wolfgang Amadeus **Mozart** <WR>

9. Its protagonist hears a howl while dreaming of an orgy for the stranger god. For 10 points each:

[10] Name this novella where Gustav von Aschenbach becomes obsessed with Tadzio during a cholera outbreak.

ANSWER: ***Death in Venice*** [or *Der* ***Tod in Venedig***]

[10] This author of *Buddenbrooks* and *The Magic Mountain* wrote about alienated artists in novellas such as *Tonio Kroger* and *Death in Venice*.

ANSWER: Thomas **Mann**

[10] Mann describes Aschenbach’s attraction to this entity as an attraction to nothingness and perfection. Tonio Kroger travels north to visit it, and Aschenbach dies by this entity while watching Tadzio.

ANSWER: the **sea** [or the **ocean**; accept Adriatic **Sea** or Baltic **Sea**] <MZ>

10. Sequencing was all the rage in the 90s. For 10 points each:

[10] This organism was one of the first to have its genome sequenced. Tatum and Lederberg discovered bacterial conjugation in this Gram-negative organism.

ANSWER: **E**scherichia **coli**

[10] This project was completed in 2003 with a reported accuracy of 99.99% of 99% of the target organism’s genetic information. This massive project used a hierarchical shotgun method to sequence over three billion nucleotides.

ANSWER: **H**uman **G**enome **P**roject

[10] The Human Genome Project initially gained funding from the National Institutes of Health under the leadership of this co-discoverer of the double helical structure of DNA along with Francis Crick.

ANSWER: James Dewey **Watson** <WH>

11. It discusses the “problem of the color-line.” For 10 points each:

[10] Name this sociological work, a collection of essays on African-American identity. It argues that the happy black slave is a flawed image created by whites, and describes a “veil” between black and white perspectives.

ANSWER: *The* ***Souls of Black Folk***

[10] *The Souls of Black Folk* is a seminal work in sociology by this editor of *The Crisis.* A rival of Booker T. Washington, he introduced the idea of the “talented tenth,” and founded the Niagara movement.

ANSWER: W. E. B. **Du Bois** (“doo-BOYZ”)

[10] Du Bois coined this phrase to describe the fragmented and often conflicting identities of being black and being American.

ANSWER: **double consciousness** [or **twoness**] <PS>

12. Answer the following about Enlightenment political philosophy, for 10 points each.

[10] This model proposes the division of the state into independent branches, each no more powerful than the others. This system often yields legislative, judicial, and executive branches.

ANSWER: **separation of powers** [prompt on “tripartite system”]

[10] This French Enlightenment political philosopher articulated a theory of the separation of powers. He argued that monarchies relied on the principle of virtue, and despotisms relied on fear.

ANSWER: Charles-Louis de **Montesquieu**

[10] Montesquieu published this 1748 political treatise in which he discusses how liberty in England might be preserved through separation of powers.

ANSWER: *On the* ***Spirit of the Laws*** [or *De* ***l’esprit des lois***] <SH>

13. When asked why he doesn’t pray, he replies, “I don’t want no hep. I’m doing all right by myself”. For 10 points each:

[10] Name this character who kills the grandmother after she calls him her son and reaches out to touch him.

ANSWER: The **Misfit**

[10] The Misfit and the grandmother appear in this Southern Gothic short story, where the cat Pitty Sing causes a car crash.

ANSWER: “**A Good Man is Hard to Find**”

[10] This writer who described Hazel Motes’s return to Tennessee in Wise Blood wrote “Everything That Rises Must Converge” and “A Good Man is Hard to Find”.

ANSWER: Flannery **O’Connor** <MZ>

14. It was the Dutch East Indies until Japanese occupation during World War II. For 10 points each:

[10] Name this Southeast Asian archipelago where the Dutch launched numerous “police actions” before leaving. It is also the home of the former Srivijaya Empire.

ANSWER: Republic of **Indonesia**

[10] This second President of Indonesia overthrew his predecessor after the 1966 Supersemar granted him absolute power. Backlash from the Trisakti shootings helped lead to his 1998 resignation.

ANSWER: **Suharto**

[10] Suharto annexed this modern-day nation after invading it through Operation Komodo in 1975, the same year it declared its independence from Portugal. Today, this nation shares an island with an Indonesian province.

ANSWER: Democratic Republic of **Timor-Leste** [or **East Timor**] <WR>

15. CERN’s Gargamelle was an example of one of these used to detect neutrinos. For 10 points each:

[10] Name these detectors invented by Donald Glaser, in which decreasing the pressure of a tank causes charged particles to form the namesake entities, which are photographed when they reach a large diameter.

ANSWER: **bubble chamber**s [prompt on partial]

[10] Bubble chambers are filled with superheated hydrogen in this phase of matter. Condensation turns a gaseous compound into a compound in this fluid, fixed-volume phase.

ANSWER: **liquid**

[10] PICASSO is an experiment that uses bubble chambers to search for Weakly Interacting Massive Particles, a candidate for this hypothesized substance. It accounts for a quarter of the universe’s mass-energy.

ANSWER: **dark matter** <WR>

16. This artist painted people carrying large baskets of flowers in several works. For 10 points each:

[10] Identify this artist who produced the mural *Detroit Industry* for the Ford Motor Company. His other works include depictions of the arrival of the Spanish to his country and celebrations like the Day of the Dead.

ANSWER: Diego **Rivera**

[10] Rockefeller commissioned Diego Rivera to produce this work, though it was destroyed due to the inclusion of a portrait of Lenin. A later version was reproduced featuring marching soldiers in yellow, separated from civilians with red headgear by a large machine.

ANSWER: ***Man at the Crossroads***

[10] This other Mexican painter portrays herself as an empty shell with roots growing out of her chest and dress in *Root Raices*. A man and a woman hide behind tall leaves in her *What the Water Gave Me*.

ANSWER: Frida **Kahlo** de Rivera [or Magdalena Carmen Frieda **Kahlo** y Calderón] <ZZ>

17. According to T. S. Eliot, they were one of the last groups to avoid the “dissociation of sensibility”. For 10 points each:

[10] Name this group of poets characterized by their abstract imagery and conceit. They included Thomas Traherne, George Herbert, and Andrew Marvell.

ANSWER: **metaphysical** poets

[10] This metaphysical collection includes “Batter my heart” and a poem that concludes “we wake eternally... death shalt die”, “Death be not proud”.

ANSWER: **Holy Sonnets**

[10] This poet of “The Flea” and the Holy Sonnets also penned a poem that centers on the metaphor of a compass, “A Valediction: Forbidding Mourning”.

ANSWER: John **Donne** <MZ>

18. This tradition believes in a “divine spark” within all humans that is released upon death. For 10 points each:

[10] Name this movement which believes in Sophia, an embodiment of wisdom who births an imperfect demiurge which then creates the universe. This religion derives its name from the Greek word for “knowledge”.

ANSWER: **Gnosticism**

[10] One prominent symbol of Gnosticism is the “sun” type of this symbol. A “Greek” type of this symbol has four equal-length arms and symbolizes the Eastern Orthodox church.

ANSWER: **cross**es

[10] This Gnostic text is a non-canonical gospel which details “the hidden words that the living Jesus spoke”. It is named for the apostle who felt Christ’s wounds, commenting “my Lord and my God”.

ANSWER: Gospel of **Thomas** <WR>

19. The Hawaiian islands were formed by one of these regions. For 10 points each:

[10] Name these abnormally high-temperature regions which may result in volcanic activity, regardless of proximity to a plate boundary. These regions may be the result of convection currents in conjunction with mantle plumes.

ANSWER: **hotspot**s

[10] The volcanoes in the Hawaiian hotspot are of this type, which have gently sloping sides due to their formation by low viscosity lava. Their broad, low shapes contrast with those of steeper-sloped cones.

ANSWER: **shield** volcanoes

[10] This word describes volcanoes that spew natural gas as well as namesake mixtures of water and soil or clay. Followed by “slide”, this word refers to a type of fast-moving landslide typically caused by heavy rain.

ANSWER: **mud** <SH>

20. Early 20th century Russia was a rather chaotic place politically. For 10 points each:

[10] Following the abdication of Czar Nicholas II, this man formed a brief provisional government and sought to continue Russian participation in World War I. The Bolsheviks ousted him from power after the failure of his namesake offensive.

ANSWER: Alexander **Kerensky**

[10] The Bolsheviks partially made good on their promise of “peace, land, and bread” by negotiating this treaty with Germany. It came after the German capture of Riga forced Trotsky to stop stalling.

ANSWER: Treaty of **Brest-Litovsk**

[10] After making peace with the Germans, the Bolsheviks had to deal with various contending factions such as the Whites and the Greens in this conflict. It ended with the Bolsheviks victorious.

ANSWER: **Russian Civil War** <ZZ>

TB. His namesake path integral can be approximated by the time slicing definition. For 10 points each:

[10] Name this American theoretical physicist who delivered his Lectures on Physics at Caltech, where he also developed a system of pictorially depicting particle interactions.

ANSWER: Richard **Feynman**

[10] The Hellmann-Feynman theorem finds the derivative of this quantity for a wavefunction. More famously, Einstein found that this quantity is equal to mass times the speed of light squared.

ANSWER: **energy** [prompt on “E”]

[10] Feynman worked with Schwinger and Tomonaga to develop this theory whose accuracy is tested by measuring the fine structure constant. This SU(1) gauge theory is the quantum analogue of a theory developed by Maxwell.

ANSWER: **quantum electrodynamics** [or **QED**] <SH>