

## 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 11 - Tossups

1. This man caused the Ottoman Interregnum as a result of one battle, and his lands were inherited by Shah Rokh. He supposedly kept a prisoner in an iron cage, destroyed a rival completely at the Battle of Terek River. He won at the Battle of the Kondurcha River over the massive army of the Toktamysch-led Golden Horde, but died on an expedition to China. Besides capturing Bayezid I at the Battle of Ankara, this conqueror was known for sacking cities and creating pyramids of skulls. For 10 points, name this 14th century conqueror who used Samarkand as his base, known for being partially crippled.

ANSWER: **Tamerlane** [or **Timur** the Lame] <ZZ>

2. One derivation of this relation named for Robertson uses expectation values of Hermitian operators. Mandelshtam and Tamm derived a corollary of this statement which multiplies the variance of time with the variance of energy, a term which is greater than or equal to the reduced Planck constant over 2. According to this law, electrons of known velocity passing through a slit would result in a probability distribution rather than a single position as classical mechanics predicts. For 10 points, name this quantum principle which asserts the impossibility of perfect measurement of both a particle's position and its momentum.

ANSWER: Heisenberg **uncertainty** principle [prompt on "Heisenberg"] <WR>

3. This philosopher posited that natural phenomena constitute a divine universal language. This author of *Alciphron* attacked Locke's distinction between primary and secondary qualities in a work that uses the pleasure-pain argument to prove that pain cannot exist independently of the mind. That work argues that the mind cannot conceive of mind-independent objects via the master argument. He concluded that the causes of passive ideas cannot be matter and instead must be the mind of God. For 10 points, name this immaterialist philosopher who declared "to be is to be perceived" and wrote *Three Dialogues between Hylas and Philonous* and *A Treatise Concerning the Principles of Human Knowledge*.

ANSWER: George **Berkeley** ("bark-lee") <MZ>

4. This writer described wisdom as the "mother of all origins" and proposed a "l'umana operazione". This author of the *Convivio* contrasted the powers of the Holy Roman Emperor and the Pope in the *Monarchia*. An unfinished canzone and his commentary on his own life are contained in his *La Vita Nuova*. In one of his works, the letter P is erased from his forehead each time he passes a terrace. That work ends with an encounter with a rose and three circles of identical size. He glimpses the inscription "Abandon all hope, ye who enter here" while passing through nine circles of hell accompanied by the poet Virgil. For 10 points, name this poet and lover of Beatrice who wrote *The Divine Comedy*.

ANSWER: **Dante** Alighieri <AM/MZ>

5. Carathéodory introduced the concept of "adiabatic accessibility" to approach this statement, holding that an initial adiabatically isolated state would not be able to approach other states in its neighborhood. This postulate appears to contradict T-symmetry in Loschmidt's paradox, and heat from a reservoir cannot perfectly be converted into work in the Kelvin-Planck formulation of this statement. This postulate states that heat cannot flow from a colder body to a warmer body without doing work, according to Clausius's formulation. Apparently violated by Maxwell's Demon, for 10 points, name this law which states that the entropy of a closed system always increases.

ANSWER: **Second** Law of **Thermodynamics** <WR>

6. One ruler of this polity is known for a 200-line elegiac poem and his concise sayings, including “threaten no one, for that is a womanly trick”. Besides Chilon, another ruler of this polity created a legislative council of thirty men sixty years or older, elected by the Apella called the Gerousia. This polity always had the two kings, who were from the Agiad and Eurypontid Dynasties. Archidamus II of this polity negotiated a Thirty Year’s Peace with Pericles, and Lycurgus instituted the ruling system of five ephors in this city-state, whose slaves were known as helots. For 10 points, name this Peloponnesian city-state that imposed the Thirty Tyrants upon Athens following its victory in the Second Peloponnesian War.

ANSWER: Sparta <WR>

7. The title character of this work attended St. Joel’s Catholic High School and had his name inspired by a Plumtree song. In this series, Lynette Guycott’s bionic arm punches the highlights out of one character’s hair. That girl, who exclaims “I’ve kissed the lips that kissed you!”, is skilled at knife fighting and dates Young Neil. The protagonist’s love interest rollerblades through subspace as a “ninja delivery girl”. That character, Ramona Flowers, has "seven evil exes" whom the title Canadian bassist must defeat. For 10 points, name this Bryan Lee O’Malley graphic novel series adapted into a 2010 film starring Michael Cera.

ANSWER: Scott Pilgrim vs. *The World* <BH>

8. This writer described the slicing of an apple in his memoir *Sun and Steel*. He wrote about Ryuji, who falls in love with Fusako, and Kochan, who is disgusted to find that a picture of a knight depicts the female Joan of Arc and fails to fall in love with Sonoko. This author of *The Sailor Who Fell From Grace with the Sea* wrote a novel in which Nansen and the kitten are discussed by Kashiwagi and Mizoguchi. In his final works, Ying Chan, Isao, and Toru all have a similar birthmark and are thought to be reincarnations of Kiyooki Matsugae by Shigekuni Honda. For 10 points, name this Japanese author of *The Temple of the Golden Pavilion*, the *Sea of Fertility* series, and the *Confessions of a Mask*.

ANSWER: Yukio Mishima [or Kimitake Hiraoka] <PS>

9. Red and white threads dangle from a sewing cushion as a woman in yellow works with bobbins and a pin in one of his works. He may have depicted himself working at an easel next to a woman holding a trumpet and a book in his *The Art of Painting*. This artist of *The Lacemaker* also created two paintings depicting robed scientists with celestial globes, *The Astronomer* and *The Geographer*, and a servant pouring the title substance into a Dutch oven in his *The Milkmaid*. For 10 points, name this Dutch Baroque painter of *View of Delft* and *Girl with a Pearl Earring*.

ANSWER: Johannes or Jan Vermeer [accept *The Lacemaker* before “one of his works”] <WR>

10. The culture phase of this field was largely superseded by a theory introduced by Lewis Binford, its processual type. Techniques used in this field include cross-mending and seriation, data from which can be illustrated in a Harris matrix via the principle of superposition. C.J. Thomsen created the three-age system of this field, for which Heinrich Schliemann and Arthur Evans traveled to Greece. Other practitioners include Hiram Bingham and Howard Carter, who discovered an Incan city and King Tut’s tomb, respectively. For 10 points, carbon dating is often utilized in this field that studies cultures by analyzing remains and performing excavations.

ANSWER: archaeology <MZ>

11. The *Nashua Telegraph* organized a famous debate between this man and one opponent. He threatened to cut off aid to the military in El Salvador unless it ended its death squads, gave the “thousand points of light” speech and signed the Americans with Disabilities Act. He ordered a military intervention to restore Guillermo Endara to power as part of Operation Just Cause, overthrowing Manuel Noriega. After a meeting in Malta, he agreed to START I, and also pushed for the elimination of continental tariffs through the formation of NAFTA. For 10 points, name this former CIA director who defeated Michael Dukakis in the 1988 presidential election on the line “Read my lips-- no new taxes”.

ANSWER: George Herbert Walker Bush [or Bush Sr. or Bush 41; prompt on “Bush”] <ZZ>

12. During the ninth stanza of a fifteen-stanza song, some observers of this holiday hit each other with leeks or scallions. On the second day of this holiday, counting begins for the celebration of the harvest of the first fruits. In the tzafun of this holiday, the afikoman is eaten, and outside of Israel, it is observed for eight days, beginning with the 15th of Nisan. The youngest member at the Seder asks four questions about this holiday, on which the eating of bread is forbidden. For 10 points, name this Jewish holiday that celebrates the Exodus from Egypt, during which Jews read the Haggadah and eat matzo.

ANSWER: Passover [accept Pesakh, Pesah, Pevsekh, Paysakh, or Paysokh] <JG>

13. Alternating layers of albite with layers of one type of this mineral results in a silicate which exhibits a milky luster. That phenomenon, adularescence, is found in moonstone. As mafic magma cools, one type of this mineral progresses from being calcium-rich to sodium-rich on the right-hand continuous branch of Bowen's reaction series. That is the plagioclase variety of these minerals, which is often found in granite along with quartz. For 10 points, name this class of tectosilicate minerals, the most abundant mineral group in the Earth's crust, whose orthoclase variety has a Mohs hardness of six.

ANSWER: feldspars [accept orthoclase feldspars before "Bowen's reaction series"] <WR>

14. In this book, one character commits suicide by castrating himself on a toilet. That event occurs simultaneously with the narrator's dream about rust pouring out of Old Blastic's body. One character, who is ashamed of his beautiful hands, saves Sefelt when he has a seizure during sex with Candy. The antagonist's "fog" fails to prevent the narrator's vote for watching the World Series or going on a fishing trip. The antagonist of this novel is attacked and rendered mute in the aftermath of Billy's suicide, leading to McMurphy's lobotomy. For 10 points, name this novel that ends with Chief Bromden's escape from a psychiatric hospital run by Nurse Ratched, written by Ken Kesey.

ANSWER: One Flew Over the Cuckoo's Nest <MZ>

15. In a symphony written in this key's relative minor, an "Alma" theme represents the composer's wife. That symphony in this key's relative minor is Mahler's sixth, subtitled the *Tragic*. A piece titled after this key involves 53 measures that can be repeated according to the performers' tastes. That first minimalist piece was written by Terry Riley. Schubert wrote his final completed symphony in this key and subsequently called it the great one to distinguish it from his sixth symphony, "the little" one. For 10 points, name this letter that denotes the relative major of A minor and has neither sharps nor flats.

ANSWER: C major [do not accept "C sharp/flat major"] <WH>

16. This country's highest point, located in the snowy Semien Mountains, is Ras Dejen. This nation's village of Dikika in the Afar Depression was the site of the discovery of Selam, an *A. afarensis* skeleton unearthed 26 years after a similar discovery, Lucy. This nation shares Lake Turkana with its southern neighbor Kenya, while this nation's Lake Tana is the source of the Blue Nile which flows west into Sudan. It is bordered to the north by Eritrea and Djibouti and to the east by Somalia. For 10 points, name this landlocked Horn of Africa nation with capital Addis Ababa.

ANSWER: Federal Democratic Republic of Ethiopia <WR>

17. One early sign of this disease is blockage of an infant's small intestine with stool, known as meconium ileus. The mutation which causes this disease results in the deletion of three nucleotides which code for phenylalanine, and also results in resistance to cholera and Typhoid fever. That mutation, delta-F-508, results in the degradation of a transmembrane chloride channel. This disease, named for scarring and abnormal growths in the pancreas, is diagnosed using a sweat test and can lead to sinus and lung infections. For 10 points, name this autosomal recessive disorder, characterized by the accumulation of thick mucus in the lungs.

ANSWER: cystic fibrosis <SH>

18. A scene in this work discusses a unicorn that turns into a horse with an arrow in its head if seen by lots of people. One character in this play claims that "there's a design at work in all art" and later "dies" by a retractable dagger. This play opens with a coin landing on heads ninety-two times in a row, leading a character to conclude that they are "within un-, sub- or supernatural forces". The Tragedians, including the Player, are impossibly hidden in barrels in Act Three, which takes place on a ship. This play ends with the title news delivered to Horatio. For 10 points, name this tragicomedy featuring two characters originally from *Hamlet*, written by Tom Stoppard.

ANSWER: Rosencrantz and Guildenstern Are Dead <MZ>

19. John Peter Altgeld led the switch on the fourth ballot of a convention to nominate this man over Richard Bland, and Arthur Sewall was selected as his running mate for the ensuing election. He gave speeches such as “The Prince of Peace” and “The Value of an Ideal” while on the Chautauqua Circuit, and negotiated many anti-war treaties as Secretary of State, though he would later resign that post following the sinking of the *Lusitania*. Despite his strong support for the Spanish-American War, he opposed imperialism and the US annexation of the Philippines. For 10 points, identify this man who declared, “you shall not crucify mankind upon a cross of gold”, a three-time Democratic presidential candidate who advocated for bimetallism.

ANSWER: William Jennings **Bryan** <ZZ>

20. Nüwa, who in Chinese myths created the first humans and filled a void in the heavens, had the body of one of these creatures. One of these who incubated the egg of the world was named Ophion, and they also make up the skirt of Coatlicue. Vishnu slept on another one of these creatures, Ananta, and Tiresias became a woman after interfering with two mating ones. Laocoon and his sons were killed by two of these from the sea, and an Ouroboros was one that ate its own tail. For 10 points, name these legless creatures, including one which was killed by Apollo at Delphi, named Python.

ANSWER: **snakes** [accept **serpents** or clear equivalents] <WD>

TB. A *pianissimo* violin playing only the notes A and E over a string tremolo opens this piece’s *Allegro ma non troppo* 1st movement. This work’s D minor scherzo breaks tradition by being its 2nd movement instead of its 3rd, like its composer’s *Hammerklavier* piano sonata. This composition’s fourth and final movement is a recitative in which the “Seid umschlungen, Millionen!” theme, or “Be embraced, millions”, is developed by a chorus. For 10 points, name this symphony which contains a setting of Friedrich Schiller’s “Ode to Joy”, the final symphony of its deaf German composer.

ANSWER: *Symphony No. 9* by Ludwig van **Beethoven** [prompt on partial; accept **Choral** Symphony] <WR>

### **Round 11 - Bonuses**

1. Iocaste comforts the title character that a prophecy can't be true because Laius was killed by bandits. For 10 points each:

[10] Name this tragedy in which Tirisias tells the title character that he killed his true father, Laius, and married his mother, Iocaste.

ANSWER: **Oedipus Rex** [or **Oedipus the King**]

[10] Identify this ancient Greek playwright of *Oedipus Rex* and *Antigone* who set a play at a place sacred to the Furies, *Oedipus at Colonos*.

ANSWER: **Sophocles**

[10] In *Oedipus Rex*, Thebes is in the midst of one of these events. Creon returns from the Oracle of Delphi with the news that it is a manifestation of religious pollution, causing Oedipus to investigate Laius's death.

ANSWER: **plague** [or **pestilence**] <KX/MZ>

2. The *Two-Thousand Words* was written during this event, and several people immolated themselves after it ended. For 10 points each:

[10] Identify this event during which a liberal Action Programme was launched in an attempt to reform the Communist regime in Czechoslovakia. It was crushed by troops from the Warsaw Pact nations under orders from Leonid Brezhnev.

ANSWER: **Prague Spring**

[10] This leader of Czechoslovakia during Prague Spring was demoted to a position in the Forestry Service after it ended. His promotion of "Socialism with a human face" inspired Gorbachev's glasnost and perestroika programs.

ANSWER: Alexander **Dubcek**

[10] This nation notably refused to send troops to Prague to crush the movement. Its Prime Secretary Nicolae Ceausescu denounced the invasion in a public address shortly after it began.

ANSWER: **Romania** <ZZ>

3. The very end of this piece features an F-sharp major chord with a dominant seventh, sometimes referred to as "the most sickening chord in all opera". For 10 points each:

[10] Name this opera whose title character removes her clothes for King Herod in the "Dance of the Seven Veils" before kissing the severed head of Jochanaan.

ANSWER: **Salome**

[10] Besides writing *Salome*, this composer used thunder and wind machines in his *An Alpine Symphony* and wrote a tone poem that featured in *2001: A Space Odyssey*'s celestial syzygy, *Also Sprach Zarathustra*.

ANSWER: **Richard Strauss** [prompt on just "Strauss"]

[10] This composer wrote *La Grand Macabre*, where a personification of Death would arrive to announce the end of the world. He also created a Requiem and *Atmosphères*, which were used in *2001: A Space Odyssey*.

ANSWER: György Sándor **Ligeti** <WR>

4. Lin28 and Oct4 have been manipulated to produce these from normal somatic cells. For 10 points each:

[10] Name these cells which can be found in the bone marrow and adipose tissue of adults. Most controversy, however, comes from harvesting the embryonic variety of these pluripotent, undifferentiated cells.

ANSWER: **stem cells**

[10] Embryonic stem cells differentiate in three distinct germ layers in the early embryo. This layer, the outermost, is located distal to the mesoderm and will differentiate into the nervous system and the integumentary system.

ANSWER: **ectoderm**

[10] Human stem cells are typically grown on top these cells which prevent stem cells from differentiating. These common connective tissue cells also secrete collagen and extracellular matrix.

ANSWER: **fibroblasts** <WH>

5. Name some things about a certain country in Southeast Asia for 10 points each.

[10] Name this Southeast Asian nation that was embroiled in a conflict with its southern neighbor and the United States from which the US withdrew following the Case-Church Amendment.

ANSWER: North **Vietnam**

[10] This Vietnamese Communist ruler was a major proponent of Vietnamese independence. While he resigned due to his health prior to the Vietnam War, he remained a figurehead for the North Vietnam cause. Saigon was named after him following the war.

ANSWER: **Ho Chi Minh**

[10] President Johnson spearheaded the effort to pass this resolution named after a gulf in which North Vietnamese torpedo boats engaged the USS *Maddox*. It granted the President the ability to assist any Southeast Asian country in danger of a Communist takeover.

ANSWER: Gulf of **Tonkin Resolution** <JL>

6. The ambitious protagonist becomes haughty and deceptive, yet ironically advances up the social ladder when he slips up. For 10 points each:

[10] Name this novel in which Abbé Pirard shelters Julien Sorel after the exposure of his affair with Madame de Rênal.

ANSWER: *The **Red and the Black*** [or *Le **Rouge et le Noir***; or equivalent translations like *The **Scarlet and the Black***]

[10] This author of *The Red and the Black* wrote about the death of Clelia Conti and subsequent retirement of Fabrice del Dongo in *The Charterhouse of Parma*.

ANSWER: **Stendhal** [or Marie-Henri **Beyle**]

[10] Julien's plans for this character are thrown into question after the death of her fiancé, the boring but honorable Monsieur de Croisenois. Desperately in love with Julien, she kisses his severed head after his execution.

ANSWER: **Mathilde** de la Mole [prompt on partial] <MZ>

7. For 10 points each, name some space westerns.

[10] An iconic scene from this animated series is the confrontation with Vicious in a church. It follows the bounty hunter Spike Spiegel, who is joined by Edward, Faye Valentine, Jet Black, and the data dog Ein.

ANSWER: **Cowboy Bebop** [or **Kaibōi Bibappu**]

[10] This Joss Whedon-created series centers around the eccentric crew of *Serenity*, including the pilot Wash, the mercenary Jayne, and the somewhat unstable River, all led by Captain Malcolm Reynolds.

ANSWER: **Firefly**

[10] This gunslinging and smuggling space cowboy infamously claimed that his *Millennium Falcon* made the Kessel Run in less than 12 parsecs.

ANSWER: **Han Solo** [accept either] <MZ>

8. It was founded by its namesake prophet in Iran during the 6th century BCE. For 10 points each:

[10] Name this religion teaching that Ahura Mazda will eventually prevail over the evil Angra Mainyu, whose practitioners may expose corpses on a Tower of Silence before cremating them.

ANSWER: **Zoroastrianism** [prompt on "Mazdaism" or "Magianism"]

[10] This is the primary sacred text of Zoroastrianism, containing the Yasnas and the Gathas.

ANSWER: **Avesta**

[10] In the Younger Avesta, these supernatural entities advance chaos. In the Gathas, they are false gods that still have a following, and in later texts, they are described as personifications of evil.

ANSWER: **daevas** <SH>

9. It requires that the function is continuous on a given interval. For 10 points each:

[10] Name this theorem which guarantees the existence of at least one point on an interval such that, at that point, the line tangent to that function is parallel to the secant line connecting the interval's endpoints.

ANSWER: **mean value** theorem

[10] Finding the slope of the tangent line of a function is an operation given this name, whose inverse is integration.

ANSWER: **differentiation** [or **derivative**]

[10] Rolle's theorem is a special case of the mean value theorem where the derivative is equal to this value. This value, the slope of a horizontal line, is also the derivative of a constant function.

ANSWER: **zero** <WR>

10. The narrator triumphantly points at a ghost across a lake, only for Mrs. Grose to reveal that there's nothing there. For 10 points each:

[10] Name this novel, much of which is narrated by a governess who becomes convinced that the ghosts of Miss Jessel and Peter Quint are possessing Flora and Miles.

ANSWER: *The Turn of the Screw*

[10] This author of *The Turn of the Screw* and *The Ambassadors* wrote about Frederick Winterbourne's pursuit of the title character in *Daisy Miller*.

ANSWER: Henry James

[10] Isabel Archer rejects Lord Warburton and Caspar Goodwood and instead marries Gilbert Osmond in this Henry James work.

ANSWER: *The Portrait of a Lady* <MZ>

11. Though his attempt at reforming the healthcare system failed, he was able to get an Omnibus Budget Reconciliation Act passed. For 10 points each:

[10] Identify this president who signed the Brady Bill, setting up a waiting period on handgun purchases. He ordered US intervention in Somalia to oust rebel leader Mohammed Aidid.

ANSWER: William Jefferson Clinton

[10] Shortly after Clinton's reelection, it was revealed that he had had an inappropriate relationship with this person, a 22 year old White House intern. Evidence of the affair was collected by Linda Tripp.

ANSWER: Monica Lewinsky

[10] In this Supreme Court decision, Chief Justice Rehnquist, writing for the Court, held that President Clinton had no immunity from civil suits concerning actions that took place prior to his inauguration.

ANSWER: *Clinton v. Jones* <ZZ>

12. Name some art featured on album covers for 10 points each.

[10] The cover of Coldplay's 4th studio album *Viva la Vida* features this Eugene Delacroix painting, in which the title woman holding the French tricolor and a bayonet stands over several corpses.

ANSWER: *Liberty Leading the People* [or *La Liberté guidant le peuple*]

[10] Don Ellis's 1967 album *Electric Bath* features this neoclassical painter's *The Turkish Bath* as its cover. An anatomically incorrect concubine holds a peacock fan in this artist's *La Grande Odalisque*.

ANSWER: Jean-Auguste-Dominique Ingres

[10] The self-titled 2008 Fleet Foxes album uses a detail of this Bruegel painting in its cover. It allegorically depicts dozens of idioms, such as an armored man biting a knife, who is "armed to the teeth".

ANSWER: *Netherlandish Proverbs* [or *Flemish Proverbs*; or *The Blue Cloak*; or *The Topsy Turvy World*] <WR>

13. Name these mythological characters who underwent some sort of change; one could call it a "metamorphosis". For 10 points each:

[10] Pygmalion fell in love with this creation of his, a sculpture of a woman. He prayed to Venus, who turned this woman from ivory to flesh.

ANSWER: Galatea

[10] This extremely ugly satyr was the god of nature. His flute was made from reeds, which the nymph Syrinx changed into after he chased her.

ANSWER: Pan [accept Faunus]

[10] In addition to Galatea and Pan, Daphne, who transforms into a laurel tree, and Echo, whose voice remains when she disappears, appear in *Metamorphoses*, a work by this Roman poet.

ANSWER: Ovid [or Publius Ovidius Naso] <WD>

14. Answer some questions about bonding for 10 points each.

[10] In this type of bond, valence electrons are shared between atoms. When three atoms share two electrons through this type of bond, an antibonding orbital is formed.

ANSWER: covalent bond

[10] This property allows molecules with cyclic systems of delocalized electrons to be especially stable. According to Hückel's rule, a planar ring must have  $4n+2$  pi electrons, where  $n$  is an integer, in order to have this property.

ANSWER: aromaticity

[10] This type of strong covalent bond may be formed when two s orbitals overlap. In a non-cyclic, singly-bonded compound, the number of these bonds equals one minus the number of atoms in the molecule.

ANSWER: sigma bond <WR>

15. Judith Butler argues that this concept does not exist naturally, but is constructed and reinforced through performance. For 10 points each:

[10] Name this psychological concept that refers to characteristics and roles associated with sex. Unlike sex, which is usually considered biologically determined, this concept can be self-determined.

ANSWER: gender

[10] This writer tackled “the problem that has no name” and, in *The Feminine Mystique*, described the title concept as the illusion that women were fulfilled through marriage and housework.

ANSWER: Betty Friedan

[10] *The Feminine Mystique* praises this anthropologist for early work on fluid gender dynamics, but criticized her Freudian turn in *Male and Female* to glorifying women in their gender roles.

ANSWER: Margaret Mead <MZ>

16. Sites along it include the Cilician Gates, as well as numerous outposts called Caravanserai. For 10 points each:

[10] Identify this route running from the Aegean coast in Lydia through Asia Minor and reaching cities like Ecbatana, Susa, and Persepolis.

ANSWER: Persian Royal Road

[10] The Royal Road was significantly expanded under the rule of this monarch. He conquered much of the Indus Valley and codified Egyptian law, though he is perhaps best known for the defeat his forces suffered at Marathon.

ANSWER: Darius I [or Darius the Great; prompt on “Darius”]

[10] The Camino Real ran along the spine of the Andes, and included sites such as Winay Wayna as well as this abandoned site discovered by Hiram Bingham. It includes structures such as the “hitching post of the sun” and the “room of the three windows”.

ANSWER: Machu Picchu <ZZ>

17. Its title comes from a line in Paul Dunbar’s poem “Sympathy”. For 10 points each:

[10] Name this work whose central character becomes nearly mute after the murder of Mr. Freeman and regains her voice thanks to Bertha Flowers.

ANSWER: I Know Why the Caged Bird Sings

[10] *I Know Why the Caged Bird Sings* is a work of autobiographical fiction by this writer. She wrote “my man is Black Golden Amber Changing” in a poem collected in *Just Give Me a Cool Drink of Water ‘fore I Diiie*.

ANSWER: Maya Angelou

[10] In this poem, Maya Angelou describes “A Rock, A River, A Tree”. Read at Bill Clinton’s inauguration, it declares that the listener may “say simply / very simply / with hope / Good morning”.

ANSWER: “On the Pulse of Morning” <MZ>

18. These particles may release radiation when decelerated, known as Bremsstrahlung. For 10 points each:

[10] Name these first generation leptons which possess an electric charge of minus one elementary charge. J. J. Thomson viewed them as “plums” embedded in the “pudding” of a positively charged atom.

ANSWER: electrons

[10] If an electron’s speed exceeds  $c$  divided by the refractive index of the medium it is travelling through, this type of radiation in the form of a coherent wavefront of photons will be released.

ANSWER: Cherenkov radiation [or Čerenkov effect]

[10] Cherenkov radiation occurs when charged particles pass through this type of medium. These materials insulate currents but can polarize and therefore support electrostatic fields, making them useful in capacitors.

ANSWER: dielectric <WR>



19. That's right, it's another question about rivers. For 10 points each:

[10] This river begins at a glacier on Geladandong Peak before flowing east. One of its headwaters, the Golden Sands River, features the very deep Tiger Leaping Gorge.

ANSWER: Yangtze River [or Chang Jiang]

[10] This structure built on the Yangtze River is the largest hydroelectric power station in the world. Completed in 2012, this controversial dam is located in Yichang, in the Hubei province.

ANSWER: Three Gorges Dam [or San Xia Da Ba]

[10] This other Chinese river, the second longest in Asia, feeds the Hukou Waterfall. It flows into Bohai Bay, which is located in this river's namesake sea, and its high levels of sediment are a result of its path through the Loess Plateau.

ANSWER: Yellow River [accept Huang He] <AM>

20. His version of *La bohème* was much less popular than Giacomo Puccini's. For 10 points each:

[10] Name this Italian composer of *Zazà* whose opera, *Chatterton*, ends in the suicide of the title poet and his lover Jenny. His first opera is in the Verismo style and features the aria "Vesti la giubba".

ANSWER: Ruggero Leoncavallo

[10] This aforementioned Leoncavallo opera ends with Canio, the head of the title acting troupe, stabbing his wife Nedda and her lover Silvio. It is often performed with Pietro Mascagni's *Cavalleria rusticana*.

ANSWER: *i* Pagliacci [or Clowns; or Players; do not accept "il Pagliacci"]

[10] The role of Canio in *Pagliacci* is played by a man with this voice type. A famous trio with this highest male vocal range consists of Plácido Domingo, José Carreras and Luciano Pavarotti.

ANSWER: tenor <WR>

TB. Cherokee Sal dies giving birth to the protagonist, who is named by John Oakhurst. For 10 points each:

[10] Name this short story which ends with the title character's death in a flash flood.

ANSWER: "The Luck of Roaring Camp"

[10] John Oakhurst also appears in this short story as a gambler exiled along with The Duchess, Mother Shipton, and Uncle Billy.

ANSWER: "The Outcasts of Poker Flat"

[10] This editor of *Overland Monthly* wrote "The Luck of Roaring Camp" and "The Outcasts of Poker Flat".

ANSWER: Bret Harte <MZ>