

Prison Bowl VII

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Round 10 – Tossups

1. Material from Dodona gave the gift of prophecy to one of these objects that rotted, collapsed, and killed a sleeping hero. In Norse mythology, one of these can be folded up like cloth, and another is made of the fingernails and toenails of the dead. These objects include Skidbladnir, Naglfar, and one from Greek mythology that sustained only minor damage from the Symplegades, a pair of clashing rocks. Set guarded one of these objects from Apep that carries Ra across the sky. Coins were placed into the mouths of the deceased to allow access to one of these objects operated by Charon. For 10 points, identify these vessels exemplified by the *Argo*.

ANSWER: **boats** [accept **ships** or **barges**] <MZ>

2. The Duke of Clarence won a battle at Edgecote for the losing side in this conflict. During this conflict, one king married Elizabeth Woodville, and the title Lord Montague was awarded to Richard Neville. The battle of Wakefield in these wars saw the death of Richard III and preceded the second battle of St. Albans. In one of the final battles of this conflict, forces under Henry VII crushed those of Richard III. In these wars, the Battle of Towton saw the Yorkists decisively defeat the Lancastrians. For 10 points, name these wars named after the floral symbols of the two opposing English houses.

ANSWER: **Wars of the Roses** <DW>

3. In a poem titled after this condition, the speaker “leave[s] singing my lovely revenge” after lowering the addressee “from the icy niche where men placed you”. Romelio Ureta inspired that sonnet by Gabriela Mistral. One poem’s speaker asserts “we wake eternally” and easily overcome this after “one short sleep”. That speaker dismisses its personification as “slave to fate, chance, and desperate men”. A Tennyson poem describes the Light Brigade charging into its jaws, while a Dylan Thomas poem repeatedly asserts that it “shall have no dominion”. For 10 points, name this condition that Donne’s Holy Sonnet X commands to “be not proud”.

ANSWER: **death** <KX>

4. Examples involving houses with barn facades and a job interviewee with 10 coins in his pocket challenge the classical definition of this concept. Those are Gettier problems, which involve a degree of luck. It is innate to the Forms and achieved through recollection, according to the dialogue *Meno*. The world of the Forms outside the Cave represents this concept reached by philosophers in the Allegory of the Cave. The evil demon challenges the extent of this concept, which can come in *a posteriori* or *a priori* types. It is studied in epistemology and traditionally defined as justified true belief. For 10 points, name this concept, the absence of which is ignorance.

ANSWER: **knowledge** [prompt on **truth**; prompt on **belief**] <MZ>

5. This artist frequently painted a forest of *grelots* or sleigh bells, which fill one of eight wall panels in a painting where a cannon aims at a female torso. In another of his paintings, a Poe novel is reflected correctly, while only the back of his patron Edward James is visible. This artist of *On the Threshold of Liberty* and *Not to be Reproduced* intended to impale viewers on a painting that features two empty candlesticks, a clock, and a train emerging out of an unlit fireplace. He points out that he only painted a depiction of a real pipe, declaring “this is not a pipe” in one painting. For 10 points, name this Belgian surrealist who painted *Time Transfixed* and *The Treachery of Images*.

ANSWER: Rene **Magritte** <MZ>

6. *Argonaute* proteins bind to some of these molecules, including the Piwi-interacting type, in RISC. In prokaryotes, Rho-independent termination of their synthesis is controlled by part of one of these molecules called a riboswitch. With proteins, they comprise snRNPs (“snurps”), a component of spliceosomes. The wobble effect describes the binding of this molecule’s cloverleaf-shaped form to codons, and a five prime cap and a poly-A tail are added onto one type of it after transcription. That “messenger” type of this can be translated into proteins. Uracil is used in, for 10 points, this single-stranded nucleic acid.

ANSWER: **ribonucleic acid** <SH>

7. Avril Lavigne recorded a punk-rock cover of the song featured in this sequence for a 2004 movie. A photorealistic hand delivers clothes to a character in this sequence who is divided into quarters and reassembled in three permutations. At its end, the protagonist uses his nose as a flute. A photorealistic character in this sequence requests the audience to “flop like a fish” if “nautical nonsense is something you wish”. It opens with a painting of a pirate asking, “Are ya ready kids?” before this sequence plunges beneath the sea. For 10 points, name this sequence shown at the start of every episode of a Nickelodeon series featuring a goofy marine resident of Bikini Bottom.

ANSWER: SpongeBob SquarePants opening sequence [accept SpongeBob SquarePants theme song or SpongeBob SquarePants opening song before “photorealistic hand”; prompt on SpongeBob SquarePants before “nose as a flute”] <MZ>

8. This author created a character who imagines a writer with “vine leaves in his hair, flushed and fearless”. That play by this writer repeats “people don’t do such things,” and features a character obsessed with a beautiful death who is blackmailed by Judge Brack over Lovborg’s suicide, causing her to shoot herself. *Hedda Gabler* was written by this man, who created a character threatened by Krogstad. That character realizes she has spent eight years with a “strange man” before leaving and slamming the door, stunning her husband Torvald. For 10 points, identify this Norwegian dramatist who created Nora Helmer in *A Doll’s House*.

ANSWER: Henrik Ibsen <MZ>

9. Ion displacement in these entities occur due to the Jahn-Teller effect, and their Miller indices are integral by definition. They can develop vacancies in the Frenkel defect, and their configurations are described by arrays named for Bravais. An “interpenetrating” type is displayed by caesium chloride. Percent volume occupied by atoms per unit cell is their atomic packing factor, which is 0.74 for hexagonal close-packed and face-centered cubic. With “liquid” forms used in televisions, for 10 points, name these solid materials with atoms arranged in an ordered pattern, such as diamonds and table salt.

ANSWER: crystals <BM>

10. Paul Tsongas dropped out of the running in this election after a third place finish in Michigan, despite winning in New Hampshire. The candidate finishing second in that state went on to win this election. Another candidate in this election allowed Pat Buchanan to deliver the keynote address during his nominating convention, resulting in the “culture war” speech. That candidate finished in this election behind the “Comeback Kid”, but ahead of another whose running mate was James Stockdale. For 10 points, identify this presidential election in which a third-party candidate, Ross Perot, finished behind George H.W. Bush and the winner, Bill Clinton.

ANSWER: United States presidential election of 1992 <ZZ>

11. This man criticized what he saw as the presupposition of the division of labor in Pierre-Joseph Proudhon’s *The Philosophy of Poverty*. He argued that “philosophers have only interpreted the world in various ways, the point is to change it” in his *Theses on Feuerbach*. He had previously broken from the Young Hegelians in his *The German Ideology* by advocating a dialectical materialist view of history. He also identified the “proletarian revolution” as a source of power in *Das Kapital*. For 10 points, name this German economist, who urged the workers of the world to unite in his *Communist Manifesto*.

ANSWER: Karl Marx <ZP>

12. A dying character in this novel is covered with a parachute and comforted with the words “there, there”. This novel’s protagonist arbitrarily declares “death to all modifiers” and “a war on articles” while censoring letters, and is stabbed by Nately’s whore. Near the end of the novel, it is revealed Orr had escaped to Sweden. An IBM machine with a sense of humor is responsible for one character’s rank, Major Major Major Major. This novel presents a situation where an insane man can get out of flying missions, but only a sane man would ask to get out at all. For 10 points, name this satirical novel featuring the bombardier Yossarian, written by Joseph Heller.

ANSWER: Catch-22 <AM>

13. Birefringence results from these entities in the Voigt effect, while light is polarized with a rotation linearly dependent one of their components in the Faraday effect. The force exerted by them is proportional to the cross product of these entities with the velocity of a nearby charged particle, and they are expelled by superconductors in a phenomenon discovered by Meissner. One differential equation stating that they have a divergence equal to zero, named after Gauss, is the second of Maxwell's equations. Their strength is measured in teslas and they are denoted by the letter B. For 10 points, name these entities that often surround a material that has north and south poles.

ANSWER: magnetic fields <AT>

14. The *munita* was one type of this structure that required the excavation of a *fossa* and building of a *dorsum* with an elliptical profile. Outside the capital, the construction of these structures was overseen by two magistrates, and by four within the capital. One was the site of an ambush led by Arminius near Kalkriese at the Battle of the Teutoburg Forest. *Milia passuum*, literally 'one thousand paces', were laid along these structures at various intervals and Spartacus and his followers were crucified alongside these structures. For 10 points, name these pieces of infrastructure which connected major cities, the means of travel in the Roman Empire.

ANSWER: Roman roads [prompt on roads; accept via or viae or way] <ZP>

15. In one version of this event, women take men's scarves and put sugar in them, tying them to trees. In other variants, depictions of gods are swung around and accompanied by singing. Offerings are made to the love god Kamadeva on this holiday. One ritual performed during this day involves women drinking *thangai* or bhang and then hitting shielded men with *lathis*. This holiday celebrates the survival of King Hiranyakashipu's son, Prahlada, on a burning pyre. This event takes place on Phalguna Purnima, the vernal equinox. For 10 points, name this Hindu spring festival that involves throwing brightly colored powder.

ANSWER: Holi [prompt on Basanta Utsav] <PS/RN>

16. A conformal mapping from one of these objects to a plane can be carried out using a Wulff net and is called the stereographic projection. Brouwer proved that at least one cyclone must exist on the earth at all times, but that theorem does not hold on a hairy doughnut. One of these objects can be doubled in volume by moving and rotating pieces in the Banach-Tarski paradox. The sum of interior angles of triangles on these objects is less than 180 degrees, and their geodesics are segments of great circles. They are created by revolving a semicircle around its radius. For 10 points, name these geometric entities whose volume is four-thirds pi times the cube of their radius.

ANSWER: spheres [prompt on balls] <ZP>

17. Heitor Villa-Lobos scored the fifth of his *Bachianas Brasileiras* for soprano voice and eight of this instrument. The second movement of Dvořák's B minor concerto for this instrument starts with soft chords in the woodwinds, and Elgar's E minor concerto for this instrument was popularized by Jacqueline du Pré. The first of six unaccompanied suites for this instrument begin with arpeggiated chords in G major and were written by J.S. Bach. Mstislav Rostropovich and Yo-Yo Ma play this instrument. For 10 points, name this string instrument which is pitched lower than a viola and played upright.

ANSWER: cello <BM>

18. Isaac II Angelus made a secret treaty to impede the attacking side of this conflict, which William II was the first to join. Anglo-French relations during this conflict improved at Vezelay after succession disputes between King Guy and Conrad of Montferrat, who was killed by the Nizari Ismāīliyyah. One of its leader was succeeded by his son Henry VI after drowning in the Saleph River. Duke Leopold V and King Philip II returned home after the siege of Acre during this conflict that saw the death of Frederick Barbarossa. For 10 points, name this campaign, ended by the Treaty of Jaffa, where Richard the Lionheart led English troops against his Muslim rival Saladin but did not retake Jerusalem.

ANSWER: Third Crusade [prompt on the Crusades] <AM/RN>

19. A character in this book takes the stage name Mr. Waldengarver as an actor. Its protagonist is beaten with a cane called "The Tickler" by his sister. This novel includes a character who dies after mistreating a horse, Bentley Drummle. The main character of this novel receives a massive fortune from the ex-convict Magwitch. In this novel, a dilapidated mansion that contains frozen clocks is owned by an old woman who still wears her decaying wedding dress. To avenge that woman's abandonment at the altar, Estella is groomed by Miss Havisham in this novel to become a cold heart-breaker. For 10 points, name this novel by Charles Dickens about Pip's rise to high society.

ANSWER: Great Expectations <AM>

20. This person's namesake style of classes begins with a series of sitting falls, and ends with accelerating and cascading back-falls until everyone reaches the floor. This dancer utilized a huge blood-red cloak in *Clytemnestra*, whose props were co-designed by Isamu Noguchi. Spirals and controlled falls are emphasized in a namesake method that centers around the synchronization of breath with contraction and release. She choreographed a work that includes five variations on the Shaker hymn "Simple Gifts." Her namesake dance company included dancers like Merce Cunningham. For 10 points, name this American dancer who choreographed Aaron Copland's *Appalachian Spring*.

ANSWER: Martha Graham <PS/MZ>

TB. A commercial flight from this nation was shot down by the USS *Vincennes* in 1988, after the *Vincennes* had encroached onto this nation's territorial waters. Many men in this nation fulfilled their compulsory military service by teaching villagers to read during the White Revolution. A secret police called the SAVAK was established after Operation Ajax overthrew this nation's Prime Minister, Mohammed Mossadeq. This nation engaged in a eight-year war with a neighbor that ended with a return to borders set in the Algiers Agreement, Iraq. For 10 points, name this nation once ruled by Shah Mohammed Reza Pahlavi, who was overthrown and replaced by Ayatollah Khomeini.

ANSWER: Islamic Republic of Iran <DW>

Round 10 – Bonuses

1. Instead of a bonus about paintings and their painters, let's talk about art conservation and restoration. For 10 points each.

[10] Paintings are often studied with this type of radiation used in diffraction analysis to study crystalline pigment. As it is absorbed by dense materials such as lead white in skin tones or bone in bodies, it is also used in medical imaging.

ANSWER: **X-ray** [accept **X-radiographs** or **X-ray** diffraction]

[10] Paintings like the Mona Lisa often develop this cracking pattern as paint ages. You don't actually want to fill this pattern in, but retouching with watercolor can restore visual coherence.

ANSWER: **craquelure**

[10] Conservationists generally don't remove this film that develops on the surface of copper and bronze. Caused by oxidation, its verdigris type is responsible for the Statue of Liberty's color.

ANSWER: **patina** <MZ>

2. This quantity is zero for superfluids. For 10 points each:

[10] Name this property, a fluid's resistance to flow.

ANSWER: **viscosity**

[10] This quantity is the ratio of inertial forces to viscous forces, and can be used to characterize the flow of a fluid. Turbulence tends to occur at high values for this quantity.

ANSWER: **Reynolds number** [prompt on **R**]

[10] This phenomenon occurs at low Reynolds numbers. Occurring when fluid flows in parallel layers, it is marked by the absence of eddies or vortices. Smoke from a cigarette initially rises in this fashion, before being disturbed.

ANSWER: **laminar** flow [prompt on **streamline**] <SH>

3. Its speaker asserts that he is still a lover of nature, wherein he recognizes the "soul of all [his] moral being". For 10 points each:

[10] Identify this poem that opens, "Five years have passed" since the speaker last visited the title structure. It is addressed to the poet's sister Dorothy.

ANSWER: "Lines Written a Few Miles above **Tintern Abbey**, on Revisiting the Banks of the Wye during a Tour"

[10] This Romantic poet of "The Prelude" collaborated with his literary bro Samuel Taylor Coleridge on *Lyrical Ballads*, a collection that includes his Lucy poems and "Tintern Abbey".

ANSWER: William **Wordsworth**

[10] In this section of *Lyrical Ballads*, Wordsworth posits that all good poetry is "the spontaneous overflow of powerful feelings... recollected in tranquility".

ANSWER: **preface** to the *Lyrical Ballads* <MZ>

4. Mythology is filled with snakes, which tend to be nasty, nasty creatures. For 10 points each:

[10] This brother of Fenrir and Hel encircled Midgard, forming an Ouroboros. He will kill Thor at Ragnarok with his venom.

ANSWER: **Jormungandr** [or **Midgard Serpent**; or **World Serpent**]

[10] This serpent from Egyptian mythology tried to swallow the sun everyday. He was the main opponent of Ra, and was the embodiment of Chaos.

ANSWER: **Apep** [or **Apophis**]

[10] St. Columba reportedly saved one of his retainers by rebuking this Scottish lake dweller, and forbidding it from eating people.

ANSWER: **Loch Ness Monster** [or **Nessie**] <AM>

5. Panics, recessions, and depressions often begin with these events. For 10 points each:

[10] Name this part of a financial crisis where large numbers of customers rush to withdraw their deposits from a financial institution because those deposits might become insolvent.

ANSWER: bank panic [or bank run]

[10] During the Panic of 1907, this man met with other Wall Street financiers to shore up the collapsing US banking system. Earlier, during the Panic of 1893, he had lent the US Treasury \$65 million to prop up the gold standard.

ANSWER: John Pierpont Morgan

[10] President Andrew Jackson signed this act which required government land to be purchased using hard currency, causing the Panic of 1837.

ANSWER: Specie Circular [or Coinage Act] <JL>

6. He discussed buying a taxidermied owl for his partner Hugh in “Understanding Owls”. For 10 points each:

[10] Name this humorist whose “Santaland Diaries” relates his experience as a Macy’s elf. He discusses his childhood in Raleigh and life abroad in *Me Talk Pretty One Day* and *Let’s Explore Diabetes with Owls*.

ANSWER: David Sedaris

[10] David Sedaris is a frequent contributor to this radio program hosted by Ira Glass and produced by WBEZ. Each weekly episode is an hour long and consists of several acts centered on a theme.

ANSWER: This American Life

[10] Sedaris’s essays often debut in this Conde Nast-owned literary magazine, known for its short stories, illustrated covers and single-panel cartoons. Its icon is a dandy with a monocle.

ANSWER: *The* New Yorker <MZ>

7. The remnants of one of these objects named for the Farallon Islands forms three smaller ones named Explorer, Gorda, and Juan de Fuca. For 10 points each:

[10] Name these objects, which move around on the surface of the Earth in a namesake “tectonic” theory.

ANSWER: tectonic plates

[10] The subduction of the Farallon plate may have resulted in the formation of the Rio Cala one of these curved archipelagos, often comprising a chain of volcanoes.

ANSWER: volcanic island arc [prompt on volcanic arc; prompt on oceanic arc; do not accept “continental arc”]

[10] The theory of plate tectonics is based upon this German scientist’s theory of continental drift. His predictions agreed with the early findings in paleomagnetism.

ANSWER: Alfred Wegener <ZP>

8. Some of these documents were issued at the behest of the Queen. For 10 points each:

[10] Alan Turing recently received one of these for his work on the *bombe* at the Government Code and Cipher School. President Ford issued a controversial one of these to his predecessor Richard Nixon.

ANSWER: pardons [accept royal pardons; accept presidential pardons]

[10] A presidential pardon was issued to this man following the Mountain Meadows Massacre, which he may have ordered. His term as governor of Utah saw President Buchanan order federal troops into the state in the Utah War.

ANSWER: Brigham Young

[10] This lower house, contrasted with the Federation Council, issued pardons to Masha Alyokhina and Nadezha Tolokonnikova, both former members of Pussy Riot.

ANSWER: State Duma <RN>

9. Wouldn’t it be nice if we could quantify improvements to the human condition? For 10 points each:

[10] The global rate of this ability is 84.1% for humans age 15 or above. It is defined as the capacity to read and write.

ANSWER: literacy

[10] Before 2009, this metric of well-being formulated by the UN took into account life expectancy at birth, standard of living, school enrollment, and adult literacy.

ANSWER: Human Development Index [accept HDI]

[10] In 2010, the UN began reporting a version of the HDI that incorporates this disparity between populations. It is also measured by the Gini coefficient, and progressive taxation is frequently aimed at ameliorating this.

ANSWER: economic inequality [accept wealth inequality or income inequality; prompt on “inequality”; prompt on anything that mentions a word like “income” or “wealth” and one like “disparity” or “gap”] <SH>

10. For 10 points each, answer the following about LGBT representation in comics.

[10] DC first introduced this character to ward off rumors of her male counterpart's homosexuality. Recently, she has been re-introduced as Kate Kane, a crime-fighting Jewish lesbian.

ANSWER: **Batwoman** [do not accept "Batgirl"]

[10] Until 1990, Comics Code Authority blocked publication of Destiny's relationship with this red-haired, blue-skinned shapeshifter. In 2011, Jennifer Lawrence portrayed this mother of Nightcrawler and adoptive mother of Rogue.

ANSWER: **Mystique** [accept Raven **Darkholme**]

[10] Mystique is a villain from this Marvel franchise, which became the first mainstream comic series to depict a gay marriage with Northstar's wedding.

ANSWER: **X-Men** <AT/MZ>

11. This structure can be attributed to the ever-widening divergent boundary found between the Nubian Plate and the Somalian Plate. For 10 points each:

[10] Name this six thousand kilometer deep valley that runs from northern Syria to central Mozambique. It straddles Lake Victoria and is caused by the junction of the African, Arabian, and Indian tectonic plates.

ANSWER: **Great Rift** Valley

[10] This depression is located at the northern end of the East African Rift Valley, and contains parts of Eritrea, Djibouti, and Ethiopia. It contains the lowest point in Africa, Lake Asal.

ANSWER: **Afar** Depression [or **Afar** Triangle]

[10] The convection from the mantle that results from plate divergence can melt rock, which eventually cools into this type of mafic igneous rock. It makes up most of the ocean floor and is one layer of the Afar Depression.

ANSWER: **basalt** <AT/RN>

12. For 10 points each, name some things about pre-Columbian Peru.

[10] This southern Peruvian civilization created an aqueduct system that still works. It drew lines in spider, fish, and lizard shapes in a namesake desert, and also shares its name with a tectonic plate that borders the Andes.

ANSWER: **Nazca** culture

[10] This climatic phenomenon may have caused the Nazca's demise, along with deforestation. It likely caused severe flooding from heavy rains because of warmer ocean waters in the east Pacific.

ANSWER: El **Nino**

[10] El Nino may also have destroyed this Peruvian culture centered near Trujillo. This culture made temples such as Huaca del Sol and flat-topped pyramids in semi-autonomous river valleys. It inspired Chimu religion and construction.

ANSWER: **Moche** culture <DM/RN>

13. One character in this opera puts all her friends' charges on Alcindoro's bill. For 10 points each:

[10] Name this opera in which Musetta wins back Marcello after singing "Quando me'n vo'." In the duet "Sono andati?," Mimi recalls holding hands with her love Rodolfo as she lies dying from tuberculosis.

ANSWER: *La* **Bohème**

[10] This composer of *La Bohème* also wrote about the love between Cio-Cio San and Pinkerton in *Madama Butterfly* and included the aria "Nessun dorma" in his *Turandot*.

ANSWER: Giacomo **Puccini**

[10] This Puccini opera is performed in its entirety less often than its acclaimed soprano aria, "O mio babbino caro." In this aria, Lauretta, who wishes to buy a ring and marry Rinuccio, pleads to her father to look at Buoso's will.

ANSWER: **Gianni Schicchi** <KX>

14. These materials have a small band gap, and are used in rectifiers and transistors. For 10 points each:

[10] Name these materials including silicon and germanium that have conductivities between conductors and insulators.

ANSWER: **semiconductors**

[10] In this process, the conductivity of pure silicon can be increased by replacing a small number of silicon atoms with atoms that have a different number of valence electrons.

ANSWER: **doping**

[10] P-type semiconductors can be produced by doping silicon with elements from this group. In a p-n junction, electrons from the n-type region migrate to the p-type region doped with these elements.

ANSWER: group **III** or **13** <SH>

15. A genie attempts to abolish “all resonant and surging suffering in more intense music” in an *Illumination* from this movement. For 10 points each:

[10] Name this 19th-century French artistic movement that rejected Zola’s naturalism in favor of the mysterious and transcendent. Its poets include Stephen Mallarmé and the tempestuous couple Arthur Rimbaud and Paul Verlaine.

ANSWER: **Symbolism**

[10] This landmark poetry collection of the Symbolist movement opens by describing *ennui*, a “monster” familiar to you, “hypocrite reader, my twin, my brother!”. Its sections include “Spleen and Ideal”, “Revolt”, and “Death”.

ANSWER: *Les **Fleurs du mal*** [or *The **Flowers of Evil***]

[10] This Symbolist poet was put on trial for the scandalous decadence and graphicness of *Les Fleurs du Mal*. He introduced an element of the supernatural and macabre to Symbolism by translating Edgar Allan Poe into French.

ANSWER: Charles **Baudelaire** <MZ/KX>

16. William Shakespeare inspired many composers to write pieces based on his plays. For 10 points each, name some Shakespeare plays which name musical works.

[10] Piotr Tchaikovsky included a famous “love theme” in his *Fantasy Overture* based on this Shakespeare play. Prokofiev’s ballet based on this tragedy features a notable “Dance of the Knights.”

ANSWER: **Romeo and Juliet**

[10] *Romeo and Juliet* inspired conductor Leonard Bernstein to write tracks such as “Somewhere” and “America” for this musical. Taking place in New York City, it involves the rivalry between the Jets and Sharks.

ANSWER: **West Side Story**

[10] Benjamin Britten adapted a libretto by Peter Pears to write an opera based on this Shakespeare play. Notable incidental music for this play includes the lullaby “Ye Spotted Snakes” and a famous “Wedding March.”

ANSWER: A **Midsummer Night’s Dream** <BM>

17. For 10 points each, answer these questions about a certain practitioner of Chinese Legalism.

[10] This emperor, first of his dynasty, took power at the end of the Warring States Period by quickly conquering the land held by the Zhou dynasty.

ANSWER: Qin **Shi Huangdi** [accept **Qin Shi Huang**; prompt on **Qin** or **Zheng** or partial answer]

[10] Two actions were suggested by Shi Huangdi’s minister Li Si (“LEE SEE”) in order to suppress intellectual discourse regarding proper governance. Name either.

ANSWER: **book burning** or **burying** of **scholars** [accept clear-knowledge equivalents; prompt on **censorship**]

[10] Shi Huangdi was succeeded by his son, Qin Er Shi, whose nephew also briefly ascended, and then was deposed by this rebel and founder of the Han dynasty

ANSWER: **Liu Bang** [or Emperor **Gao**; or **Gaozu**; or **Kao** Tsu; prompt on **Pei Gong**; prompt on **Liu**] <ZP>

18. For 10 points each, answer the following about island ecology.

[10] Darwin discovered fourteen species of these birds on the Galapagos islands that developed different beak shapes to adapt to varying foods on the different islands.

ANSWER: **finches**

[10] This type of population bottleneck frequently occurs when a new population is established on an island. This phenomenon results in decreased genetic variation in locations such as the Easter and Pitcairn Islands.

ANSWER: **founder effect**

[10] This effect, a subset of Foster’s rule, results in island species much larger than their mainland relations. Examples include the moa and Haast’s eagle, both native to New Zealand.

ANSWER: island or insular **gigantism** <SH>

19. Name some things about a certain Christian sacrament, for 10 points each.

[10] Name this wafer used in Communion, which depending on your flavor of Christianity, either represents Christ or is Christ.

ANSWER: **Eucharist**

[10] In Catholic tradition, this term refers to how the wafer changes form into the body of Jesus. Lutherans, Methodists, and Anglicans do not believe in this process actually happening, and that the wafer is just a symbol.

ANSWER: **transubstantiation**

[10] Transubstantiation was upheld at this 16th century council, the Catholic response to the Reformation. It condemned Protestantism and reasserted the Pope's absolute authority.

ANSWER: Council of **Trent** <MAG/PS>

20. One poem by this man accuses Tongilianus of setting fire to his own house in order to claim the insurance. For 10 points each:

[10] Name this ancient Roman satirist known for his brief and often rude epigrams.

ANSWER: Marcus Valerius **Martial**is

[10] Martial wrote poems in this form's elegiac type, which is composed of one hexameter line, followed by one pentameter line. In general, this form is simply a pair of metered lines.

ANSWER: **couplet** [accept elegiac **couplet**; do not accept "heroic couplet"]

[10] This Roman included many elegiac couplets about Corinna in his *Amores*. This poet played love guru in *Ars Amatoria*, and wrote the *Metamorphoses*.

ANSWER: Publius **Ovidius** Naso <ZP>

TB. Answer these questions about things in and around the Milky Way, for 10 points each:

[10] This bright radio source in a namesake constellation is thought to be a supermassive black hole at the center of the Milky Way.

ANSWER: **Sagittarius A*** ("A-star")

[10] In his millstone model, this American astronomer posited that the Milky Way was made up of many stars all in one rotating plane. He also related a galaxy's distance to its recessional velocity using a linear function.

ANSWER: Edwin **Hubble**

[10] Hubble used this dimensionless quantity, generally symbolized z , as a proxy for a galaxy's recessional velocity in order to relate it to the galaxy's distance. This also results from gravitational fields and the expansion of the universe.

ANSWER: **redshift** <ZP>