Harvard Fall Tournament VII

Round 4

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1. In the study of these objects, the technique of forcing can be used to prove independence, while one theorem states that any of these can be given a well-ordering. One statement about these says that the Cartesian product of non-empty ones is non-empty, and the "power" one of these has higher cardinality than the underlying one of these. One named after Cantor is formed by recursively removing the middle thirds of intervals, and they often are studied using Zermelo-Frankel axioms, which do not include the axiom of choice. For 10 points, identify these mathematical objects which can be combined using unions and intersections and are collections of distinct objects.

ANSWER: sets

2. The surrender of Italy to the Allies resulted in the massacre of the Italian *Acqui* Division stationed in this country by German troops. A constitutional crisis called the Apostasia of 1965 led to a coup in this nation, resulting in a seven-year military rule known as the Regime of the Colonels. A society known as *Filiki Eteria* organized this nation's independence movement, during which a capital was established at Nafplion and a British-led allied fleet crushed the Ottomans at the Battle of Navarino. That revolution was led by Alexander Ypsilantis. For 10 points,

name this Balkan nation that has been undergoing a severe debt crisis since 2009 and is currently led by Antonis

Samaras.

ANSWER: Greece [Accept Kingdom of Greece, Hellenic Republic, Ellada, or Elliniki Dimokratia.]

- 3. During the reign of Caligula, Alexandria experienced riots caused by negativity towards these people. Members of this group were besieged at Lydda after their leader Lukuas fled from the approaching legions of Lusius Quietus, and they had earlier overwhelmed the *Legio XII Fulminata* at the Battle of Beth Horon. That defeat prompted the sack of this group's traditional capital, an event depicted in the Arch of Titus. Julius Severus assisted Hadrian in suppressing another revolt by these people, who were led by Simon bar Kokhba. For 10 points, name this ethnic and religious group, one of whom famously stated, "Give to Caesar what is Caesar" and was born in Bethlehem. ANSWER: **Jews** [Accept **Jewish** people and **Yehudim**.]
- 4. This city was captured after the diversion of a river allowed troops to march through a dry river bed under its walls. That event in this city, which was excavated by Robert Koldewey, caused the overthrow of its king Nabonidus, who also lost the Battle of Opis. Home to the Etemenanki temple, it was ruled by the Kassite and Chaldean dynasties. One structure here was made for the queen Amytis, and this city had a law that architects who built buildings that collapsed and killed people would be put to death. This home of the Ishtar Gate was ruled by Nebuchadnezzar and Hammurabi. For 10 points, name this Mesopotamian city home to the Hanging Gardens. ANSWER: **Babylon** [Accept **Babil** and **Babel**.]
- 5. This man's vision of modernity featured a transition from traditional and charismatic power to rational-legal power in the form of bureaucracy. This thinker denied the possibility of true Christian morals in government and defined the state as the entity with monopoly on legitimate use of force in *Politics as a Vocation*. He developed the concept of the iron cage of rationality to describe the dehumanizing effect of over-rationalization in a work which argues that Calvinist influences led people in certain countries to work harder and lead their own enterprises. For 10 points, name this German sociologist who wrote *The Protestant Ethic and the Spirit of Capitalism*.

  ANSWER: (Maximilian Karl Emil) "Max" **Weber**

- 6. Early cases citing this amendment included *Yick Wo v. Hopkins*, which concerned Chinese Americans operating laundry businesses. Another of its components was interpreted with *Lochner v. New York*, but that "freedom of contract" philosophy was repudiated in *West Coast Hotel v. Parrish*. Its "privileges or immunities" clause was interpreted under the *Slaughter-House Cases*, and the "separate but equal" doctrine was created to satisfy this amendment in *Plessy v. Ferguson*. For 10 points, name this 1868 amendment to the United States Constitution that guarantees due process and equal protection under the law for all citizens, including newly freed black slaves. ANSWER: **Fourteenth** Amendment
- 7. The Blackburn variety of these objects can be represented with the Lissajous curve, and their Q factors include a gamma factor in the denominator due to Archimedes's principle and air resistance. Though it breaks down at high amplitudes, the small angle approximation allows the period of these systems to be represented as 2 pi times the square root of L over the acceleration due to gravity. A common use of these objects is to knock over dominoes or to trace lines in the sand to demonstrate the rotation of the earth. For 10 points, name these systems which feature a suspended weight swinging freely from a fixed point, including a variety named for Leon Foucault.

  ANSWER: pendulums [Accept pendula. Prompt on simple harmonic oscillator before mention.]
- 8. One character in this novel claims that he holds an "ace" in his hand because he has evidence that the coffin of the spy Roger Cly is empty. Earlier in this work, Gaspard avenges himself on a man whose carriage had run over his son, and that man's family is denounced by a letter found in another character's former prison cell. At the end of this novel, Miss Pross and Jerry Cruncher help Lucy escape from the murderous Madame Defarge, while her husband Charles Darnay is rescued by an alcoholic lawyer who sacrifices himself to the guillotine. For 10 points, name this Dickens novel about Sydney Carton and the French Revolution, which begins, "It was the best of times." ANSWER: A Tale of Two Cities
- 9. A section of the Cecil Rhodes Memorial shows one of these works titled *Energy* featuring a man shielding his eyes from the sun. Two white shields with black chevrons appear at the base of a Paolo Uccello fresco of this type titled *Funerary Monument to Sir John Hawkwood*. The *condottiero* Erasmo of Narni was memorialized in Padua with one of these works created by Donatello called the "Honeyed Cat," and that work was strongly influenced by a Roman depiction of Marcus Aurelius located on the Capitoline Hill, which also takes this form. For 10 points, name these depictions exemplified by *Gattamelata* and *The Bronze Horseman*, featuring a certain hoofed animal. ANSWER: equestrian works [Accept anything referring to works of art showing people on horses. Prompt on partial answers.]
- 10. The composer of this work used a French Overture form to compose its opening, an E minor string overture titled "Sinfony." This work also contains a section inspired by shepard-bagpipers, titled "Pifa." The librettist for this work previously set texts for its composer's *Saul* and *Israel in Egypt*. This work, with libretto by Charles Jennans, saw Susannah Cibber perform at its premiere in England, where it was called the "New Sacred Oratorio." George II is said to have stood up in appreciation during one section of this work that contains the words "he shall reign for ever and ever." For 10 points, identify this oratorio that contains the "Hallelujah" chorus, a work by George Frideric Handel.

ANSWER: Messiah

11. This poet described a certain insect as "perfect, ancient, Sanskrit, machines that admit of no appeal" in his poem "Fleas Interest Me So Much." The speaker of another poem by this man tells the addressee that "I want to do with you what spring does to cherry trees," while his best known collection ends with a poem featuring the refrain, "In you everything sank!" This poet also penned odes to an artichoke, a tuna at the market, and his socks, in addition to writing about climbing up to an Incan ruin in "The Heights of Macchu Picchu." For 10 points, name this Chilean poet of the *Canto General* and *Twenty Love Poems and a Song of Despair*.

## ANSWER: Pablo **Neruda** [Accept Neftali Ricardo Reyes **Basoalto**.]

12. Ozonolysis of alkenes is one type of this class of reactions, as is the transformation of NADH to NAD<sup>+</sup>. The addition of chromic acid to alcohols converts them to carboxylic acids and ketones in this type of reaction. A common and powerful reagent in this type of reaction is potassium permanganate, and in combustion reactions hydrocarbons undergo this process. While generally -2, the "number" associated with this process for oxygen is -1 in peroxide. For 10 points, name this type of reaction, which is accompanied by a loss of electrons and often happens simultaneously with reduction.

ANSWER: **oxidation** [Prompt on **redox**.]

- 13. Quetzalcoatl entered the Aztec version of this place to acquire the greenstone bones, after which he was chased away by a flock of quails sent by its ruler Mictlantecuhtli. Pwyll once chased away some red-eared dogs belonging to Arawn, the Welsh ruler of this location known as Annuvin. Theseus was stuck to the chair on which he was sitting after trying to kidnap the Greek queen of this location, who was forced to live here after eating pomegranate seeds. That location was guarded by the three-headed hound Cerberus and visited by Orpheus when he came to win his wife back. For 10 points, name these places ruled by figures like Hades and inhabited by dead souls.

  ANSWER: underworld [Accept land of the dead] and equivalents before "dead souls." Accept Mictlan before "Mictlantecuhtli."]
- 14. Sankhya thought typically uses the term purusha to characterize this entity. The Qur'an discusses Nafs, the evil kind of this. The term translated as this in Kaballah and the Old Testament is Nephesh. Ancient Chinese writers discuss Hun, a rational principle, which is also the subject of ancestor worship. Medieval Christians called this Anima because it functions as a principle of motion or life. In the Upanishads, this metaphysical concept is alternatively called Jiva or Atman, which stands in relation to Brahman, the "world" variety of this. For 10 points, name this imperishable part of a person that might be taken up to Heaven or reincarnated into a cucumber, contrasted with the mind and body.

ANSWER: soul

15. Conflict between the Othman Alawite clans and another group in Qardaha in this country has led to worries about the recreation of an independent Alawite state in this country. This country has recently seen massacres in its Hama and Houla regions, as well as defections by Manaf Tlass and its ambassador to Iraq, Nawaf al-Fares. Turkey recently retaliated against an attack by this country against its town of Akcakale. This country is currently embroiled in a conflict between Ba'ath Party loyalists and an army led by Riad al-Assad. For 10 points, name this country led by President Bashar al-Assad and with cities Aleppo and Damascus.

ANSWER: <u>Syria</u>n Arab Republic [Accept Al-Jumhūrīyah Al-'Arabīyah As-<u>Sūrīyah</u>.]

16. The lone fox howling at the center of Franz Marc's *The Fate of the Animals* was painted this color, a distinct shade of which was created by Yves Klein, who made many monochromes in this color. The treatise *Concerning the Spiritual in Art* identifies this color as a concentric, receding movement, unlike yellow. This color makes up several grazing horses in another work by Franz Marc, and fills the upper half of the background of Matisse's *The Dance* and helps name a movement titled after a Kandinsky painting in which a man on a horse wearing a cloak of this color rides across a grassy landscape. For 10 points, name this color that makes violet with red.

ANSWER: blue

17. One variety of this process uses reverse transcription to deduce gene expression levels based on varying amounts of mRNA present. One parameter in this process is dependent on the GC-content of primers used because of differences in stability, and magnesium chloride appears as part of the "master mix" due to its role as a co-factor for the primary enzyme used. Often using a chemical taken from the bacterium *Thermus aquaticus*, this technique uses a

thermocycler to carry out the temperature-dependent steps of denaturaton, annealing, and elongation. For 10 points, name this biochemical technique used to rapidly copy DNA strands.

ANSWER: Polymerase Chain Reaction [Be lenient and accept any types of PCR.]

- 18. One author from this country wrote a novel in which Tony has two disastrous marriages, Thomas dies of a toothache, and the titular family dies out when the pianist Hanno dies of typhus. Another author from this country wrote about the destruction of St. Anthony's Abbey by Robert Faehmel, the grandson of its architect. In a third work from this country, Jan Bronski dies in a fight for the Polish Post Office, while the protagonist robs stores by shattering glass with a scream. That character, Oskar Matzerath, stopped growing at age three. For 10 points, name this country home to the author of *The Tin Drum*, Gunter Grass, who was president of the Berlin Academy of Arts. ANSWER: Federal Republic of Germany [Accept Bundesrepublik Deutschland.]
- 19. The preface to one work by this thinker states that it has always been more dangerous to discover new countries than to found new institutions; that work argues that the defeats of the Samnites and Latins had more to do with skill than luck as the author deals with the titular Roman historian. In another work, this author discourages the use of mercenaries and makes frequent references to the personification of Lady Fortune. This author of *Discourses on Livy* warned the titular figure of another work to be both a lion and a fox. For 10 points, name this thinker, who advised rulers that "it is better to be feared than loved" in his book of advice to the Medici, *The Prince*.

ANSWER: Niccolo (di Bernardo dei) Machiavelli

20. One character in this novel takes first pick of cakes from his Aunt Chloe, and later rides after this novel's title character to hand him a dollar. Two women in this novel hide in a man's attic and pretend to be ghosts, and those women later meet Madame de Thoux, the sister of George Harris. Another character in this novel is chased by Marks and Loker across the Ohio River, which had frozen over. George Shelby helps Cassy and Emmeline escape from slavery in this novel, and the titular character saves Eva St. Claire from a river. For 10 points, name this novel in which Simon Legree mistreats the title slave, written by Harriet Beecher Stowe.

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

## Bonuses

- 1. One character in this novel is arrested after seeing the assassination of the local director of education from a cafe. For 10 points:
- [10] Name this novel in which the poet Ka returns to his hometown in order to investigate a series of mysterious suicides by Orhan Pamuk.

ANSWER: **Snow** [Accept **Kar**.]

[10] Orhan Pamuk is a writer from this country. Pamuk was put on trial in 2005 for speaking out against the Armenian Genocide which happened in this country.

ANSWER: Turkey

[10] Pamuk wrote about Kemal's love for Fusun in a work titled for a "museum" of this concept. Edith Wharton wrote about Newland Archer in a novel titled for an "age" of this.

ANSWER: innocence [Accept The Museum of Innocence or The Age of Innocence.]

- 2. In this movement of a larger work, the main character, who has taken opium, dreams that he is going to be executed for killing his beloved. For 10 points each:
- [10] Identify this movement that takes music from *Les francs-juges* in which the protagonist is killed by guillotine. ANSWER: "March to the Scaffold"
- [10] "The March to the Scaffold" is a part of this programmatic symphony which is pervaded by the *idée fixe* and also contains "A Ball" and "Dreams of a Witches' Sabbath." It was based on the composer's love for Harriet Smithson.

ANSWER: Symphonie Fantastique: Épisode de la vie d'un Artiste ... en cinq parties

[10] Symphonie Fantastique was composed by this French composer.

ANSWER: Hector Berlioz

- 3. In electromagnetism, this property is equal to the magnetic flux over the current. For 10 points each:
- [10] Name this property measured in Henries, which for solenoids is proportional to the square of the number of turns divided by its length.

ANSWER: **Inductance** 

[10] Inductance can be derived from this law, named for an English scientist, which sets the negative rate of change in magnetic flux equal to the induced voltage and explains how electrical generators work.

ANSWER: Faraday's law of electromagnetic induction

[10] In these circuits, one device stores energy in electric fields while the other stores energy in magnetic fields. These circuits exhibit harmonic oscillation until internal resistance makes the oscillations die out.

ANSWER: **LC** Circuits

- 4. Name these things related to accounts of creation. For 10 points each:
- [10] In the opening verses of this text, God creates the world over the course of six days. He then creates Adam, takes one of his ribs to make Eve, and kicks them out of the Garden of Eden for disobeying him.

ANSWER: **Genesis** [or **Bereishith**.]

[10] God was able to call out Adam and Eve for eating the forbidden fruit because they were hiding from him, ashamed that they were in this condition.

ANSWER: **naked**ness [Accept equivalents.]

[10] Similarities between this Babylonian account of creation, in which the ocean goddess Tiamat is slain by Marduk, and Genesis have led some scholars to believe that the two accounts have a common basis.

ANSWER: Enuma Elish

- 5. In one story this god was tricked into getting extremely intoxicated and sleeping with his sister, after which he killed himself in shame and placed his heart in the sky as Venus. For 10 points each:
- [10] Name this "feathered serpent" god who many Aztecs believed was the identity of Hernando Cortez when he landed in Mexico.

ANSWER: Quetzalcoatl

[10] This brother of Quetzalcoatl guided Aztec souls to the underworld. He didn't like to deal with Death himself, though, so he changed himself into a corn stalk and a salamander to avoid it.

ANSWER: Xolotl

[10] Xolotl was often depicted with the head of one of these animals. Cerberus was a big three-headed one of these, but it's unclear whether he barked at strangers and liked to gnaw on bones.

ANSWER: dogs

- 6. The ABC system describes this process, which includes the transformation of apical meristem function through the *AP1* and *LFY* genes in *Arabidopsis thaliana*. For 10 points each:
- [10] Name this process which allows sexual reproduction in angiosperms.

ANSWER: **flower development** [Accept clear-knowledge equivalents.]

[10] In the ABC model, this portion of the flower is only present with the co-expression of A and B genes. Its bright colors attract pollinators and it is collectively known as the corolla. Roses usually have five of these.

ANSWER: petals

[10] Petals in groups of 4 or 5 exemplify this angiosperm division also known for having taproots as opposed to fibrous systems and circular vascular bundles.

ANSWER: dicotelydons

- 7. Castlereagh and the Duke of Wellington attended a meeting in this city, where it was decided that Ferdinand IV of Sicily would regain control of Naples from Joachim Murat. For 10 points each:
- [10] Name this Austrian capital that hosted an 1814 to 1815 meeting that sought to settle issues regarding the post-Napoleonic political landscape in Europe.

ANSWER: Vienna [Accept Wien.]

[10] The Congress of Vienna was hosted by this Austrian statesman, who later issued the Carlsbad Decrees after the assassination of August von Kotzebue.

ANSWER: Prince Klemens (Wenzel Furst) von Metternich

[10] Much earlier, Vienna had been saved from an Ottoman siege by this Polish king, who brought his Winged Hussars to assist von Starhemberg's garrison.

ANSWER: Jan III Sobieski [Accept John III Sobieski.]

- 8. When mixtures of reagents are allowed to sit for enough time, they eventually reach a composition that is intermediate for both reactants and products. For 10 points each:
- [10] Name that state, in which both forward and reverse reactions occur at the same rate, and hence reactant and product concentrations in a reaction are effectively constant.

ANSWER: dynamic equilibrium

[10] This law, developed by Guldberg and Waage, gives the equilibrium constant as a function of product concentrations divided by reactant concentrations, both of which are raised to their stoichiometric powers.

ANSWER: law of mass action

[10] These coefficients multiply concentrations in the law of mass action to improve precision. When multiplied by concentrations, these coefficients give quantities analogous to fugacity that are used in equilibria calculations.

ANSWER: activity coefficients

- 9. This character's son Nelson attended Kent State University and failed to save the flower child Jill from a house fire. For 10 points each:
- [10] Name this former high school basketball star who has a number of lovers, including one with the part-time prostitute Ruth Leonard, despite the fact that he's married to Janice Springer.

ANSWER: **Harry** "**Rabbit**" **Angstrom** [Accept any underlined part.]

[10] Rabbit is a creation of this American author, whose novels include *Rabbit, Run*, and *Rabbit Redux* in addition to short stories like "A&P."

ANSWER: John **Updike** 

[10] *Rabbit is Rich* and *Rabbit at Rest* won this literary award in 1981 and 1990, respectively. Recent winners include *Tinkers* by Paul Harding and *A Visit from the Goon Squad* by Jennifer Egan, though no award was given in 2012.

ANSWER: Pulitzer Prize for Fiction

- 10. It was the subject of a 1946 study that exemplified "anthropology at a distance." For 10 points each:
- [10] Name this subject of *The Chrysanthemum and the Sword*, which contrasted this country's "shame" culture with "guilt" culture. That concept of shame can be seen in practices like *seppuku*, the ritual suicide of samurais.

ANSWER: **Japan** [or **Nippon**.]

[10] The Chrysanthemum and the Sword is a work by this student of Franz Boas, who also wrote Patterns of Culture and Zuni Mythology.

ANSWER: Ruth **Benedict** [Accept Ruth **Fulton**.]

[10] In *Patterns of Culture*, Benedict contrasted the emphasis on "abandon" in Great Plains tribes and the emphasis on "restraint" in these Native American communities of the American Southwest.

ANSWER: **Pueblo** communities

- 11. This process spanned the Johnson and Grant administrations and was the subject of Abraham Lincoln's Ten Percent Plan. For 10 points each:
- [10] Name this period following the US Civil War that concerned the readmission of former Confederate States and the rights of newly freed Southern slaves.

ANSWER: **Reconstruction** 

[10] This plan for Reconstruction, proposed by the Radical Republicans and written by an Ohio Senator and Maryland Representative, would have required all readmitted states to take the Ironclad Oath.

ANSWER: Wade-Davis Bill

[10] Reconstruction was officially ended with a deal that granted this man the Election of 1876 over Democrat Samuel Tilden.

ANSWER: Rutherford B(irchard) Haves

- 12. This author wrote a short story in which a magician comes to be a metaphor for fascist charismatic leaders. For 10 points each,
- [10] Name this author who wrote about Cipolla's assassination in "Mario and the Magician" and wrote a Faust-inspired work about Adrian Leverkuhn.

ANSWER: Thomas Mann

[10] This Mann novel features debates between all sorts of opposing characters like Settembrini, Peeperkorn, and Naphta. At the end of the novel, Hans Castorp leaves the titular sanitarium to fight in World War I.

ANSWER: The Magic Mountain

[10] Mann's novella about Gustav von Aschenbach is titled for "A Death" in this city. Aschenbach dies after watching Tadzio fight with Jasiu while sitting on a beach in this Italian city on the Adriatic.

ANSWER: Venice

- 13. The upper section of one painting by this artist show the clouds parting to make way for the titular nobleman in Paradise, while Saint Augustine and Saint Stephen carry his body in the lower section. For 10 points each:
- [10] Name this Spanish painter of *The Burial of the Count of Orgaz*, who is most commonly referred to by his true nationality.

ANSWER: El Greco

[10] Dark clouds part across a navy sky in this landscape by El Greco, which shows the Alcazar on the right part of the city it depicts, the artist's home.

ANSWER: <u>View of Toledo</u> [Accept <u>Vista de Toledo</u>.]

[10] Originally titled *Profane Love*, this El Greco work shows a scene from Revelation with a blue-clad John raising his arms toward the sky. Red, yellow, and green cloths can be seen in the middle ground.

ANSWER: **Opening of the Fifth Seal** [Accept The **Fifth Seal of the Apocalypse** and The **Vision of Saint John**.]

- 14. Name these things about a early modern philosopher. For 10 points each:
- [10] This co-discoverer of calculus asserted in his *Theodicy* that all events, including those caused by God, do not occur without a sufficient reason.

ANSWER: Leibniz

[10] In a work named for these, Leibniz describes them as independent from all other things except God, each a mirror of the whole universe, and arranged in a pre-established harmony.

ANSWER: monads

[10] Leibniz believed that God chose to create the best of all these that is logically possible, the one in which we live.

ANSWER: possible worlds

15. The first member of this family to gain power, Cosimo the Elder, was a patron of Fra Angelico and Fra Lippo Lippi. For 10 points each:

[10] Name this family whose heads were *de facto* rulers of Florence during the Renaissance. It also included Pope Leo X and Lorenzo the Magnificent.

ANSWER: the **Medici**s

[10] The Medicis temporarily lost power when this Dominican friar urged the Florentines to form a republic. He led the Bonfire of the Vanities, where lots of books and art were burned.

ANSWER: Girolamo Savonarola

[10] Florence was rocked by this popular revolt in 1378, when the namesake group of wool carders briefly achieved a democratic political order before being put down a union of the major guilds.

ANSWER: Revolt of the Ciompi

- 16. Two characters in a play by this author are the trusting Sir Epicure Mammon and his aloof friend, Pertinax Surly. For 10 points each,
- [10] Name this playwright, creator of the con-man Face who tells Sir Epicure he will be able to create the philosopher's stone in his play *The Alchemist*. He also wrote *Volpone*.

ANSWER: Ben Jonson

[10] The prostitute Dol Common pretends to be the Queen of these creatures to the clerk Dapper. In another play, Titania and Oberon are the queen and king of these creatures.

ANSWER: fairies [Accept word forms.]

[10] In this other Jonson play, Grace Wellborn allows the madman Troubleall to choose her lover. She ends up marrying Winwife, while Justice Overdo wanders through the titular location trying to remedy evils.

ANSWER: Bartholomew Fair

- 17. This work contains a section signifying the calm following a storm that contains a "Ranz des Vaches," or call to the dairy cows. For 10 points each:
- [10] Identify this overture that ends with a cavalry charge in the "March of the Swiss Soldiers."

ANSWER: William Tell Overture

[10] This composer wrote the opera *Moses in Egypt* in addition to the aforementioned *William Tell* in which the protagonist shoots an arrow through an apple above his son's head.

ANSWER: Gioachino Rossini

[10] In this Rossini opera, Prince Ramiro weds the title character who has a stepfather Don Magnifico and two evil stepsisters rather than three. The title character is identified by matching bracelets rather than the canonical glass slippers.

ANSWER La Cerenterola [Accept Cinderella.]

- 18. Name these island territories controlled by the United States. For 10 points each:
- [10] Part of this Caribbean archipelago was purchased from Denmark in 1916. American holdings include the islands of St. John, St. Thomas, and St. Croix, while the rest of the archipelago is held by Britain.

ANSWER: Virgin Islands

[10] This island, "Where America's Day Begins," has Chamorro as an official language and has its capital at Hagatna. It is the largest island in Micronesia.

ANSWER: Guam

[10] Both Guam and the northern portion of this archipelago are unincorporated territories of the United States. Guam is the southernmost and largest member of these islands.

ANSWER: Mariana Islands

- 19. This dynasty saw Zhang Daoling's Way of the Five Pecks of Rice Rebellion and was succeeded by the Three Kingdoms period. For 10 points each:
- [10] Name this Chinese dynasty founded in 206 BC by Liu Bang that also names China's current majority ethnic group. It was interrupted by the usurper Wang Mang.

ANSWER: Han dynasty

[10] The Han dynasty's defeat of the Xiongnu nomadic people allowed them to establish this vast trading network with the West. The expansion of the Mongol Empire in the 1200s helped bring this trade route back.

ANSWER: the **Silk Road** [Accept **Silk Route**.]

[10] This penultimate chancellor of the Han Dynasty was defeated at the Battle of Red Cliffs by Liu Bei and Sun Quan, but later became the King of Wei in 217 BC.

ANSWER: Cao Cao

- 20. Large boulders moved by these objects are called erratics, while material ground up by these entities is called till. For 10 points each:
- [10] Identify these objects that can carve out U-shaped valleys. They are large sheets of ice.

ANSWER: glaciers

[10] Lines of glacial debris are given this name. Types of this structure include the terminal, lateral, and medial versions, and they can be used to find the maximal extent of a glacier.

ANSWER: moraines

[10] This is the name for a ridge that can be found between two parallel U-shaped valleys carved out by glaciers. It is also the structure found between two cirques.

ANSWER: arête