Bulldog High School Academic Tournament 2014 (XXIII): Tonight I Can Write The Hardest Lines Written by Yale Student Academic Competitions Edited by Matt Jackson, with Ashvin Srivatsa and Jacob Wasserman

Packet 14 Tossups

1. In one play in this language, which contains a trial secretary whose name means "Light," Eve reveals that the judge Adam caused the title *Broken Jug*. Other characters from its drama include a guy who retranslates the Gospel of John and an outlaw who stabs Amalia named Karl Moor. In a two-part closet play from this language of *The Robbers*, the title character becomes Helen of Troy's lover, attends a Walpurgis Night celebration, and abandons the pregnant village girl Gretchen. For 10 points, name this language used by Kleist, Schiller, and an 18th-century rendition of the bargain with Mephistopheles, Goethe's *Faust*.

ANSWER: German language [or Deutsch] <JR>

- 2. This man wrote that the "polytheism" of incompatible "value spheres" implies a need for "value-free" science. He defined modernity as "disenchantment" and wrote critical surveys of *The Religion of China* and *India*. This man defined the state as an entity with a monopoly on legitimate force and warned of charismatic authority in "Politics as a Vocation." This sociologist revered Benjamin Franklin and noted that Dutch merchants could display their elect status through material wealth in a study which asked why Western Europe developed faster economically. For 10 points, name this early German sociologist who wrote *The Protestant Ethic and the Spirit of Capitalism*. ANSWER: Max Weber <MJ>
- 3. A scientist from this nation developed a diagram which depicts dihedral angles in proteins. Particles named for a mathematician from this country are characterized by integer spin. A mathematician from this country names a formula for the area of a cyclic quadrilateral. Another mathematician from this country solved problems about infinitely nested radicals and observed that 1729 equals "1 plus 1728" *and* "729 plus "1000" after G.H. Hardy found him. An astrophysicist from this country found that white dwarfs become neutron stars above 1.44 solar masses. For 10 points, name this nation home to Ramachandran, Bose, Brahmagupta, Ramanujan, and Chandrasekhar. ANSWER: the Republic of **India** [or **Bharat** Ganrajya] <NW>
- 4. A follow-up act passed a year after this law concerned the interpretation of an "exclusionary clause" in a state constitution. Jesse Thomas added a key provision to this act. James Tallmadge unsuccessfully sought to amend this law, which was called a "fire bell in the night" by a former president; Tallmadge's amendment would have freed some slaves at age 25. Massachusetts lost the land which became Maine under this law negotiated by Speaker Henry Clay, which used the latitude 36°30' as an upper bound for slavery in the territories. For 10 points, name this 1820 agreement later undone by the Kansas-Nebraska Act, named for the new slave state it admitted.

ANSWER: Missouri Compromise [accept Compromise of 1820 until "1820" is read] <JW>

5. One musical work of this type and number ends with six irregularly spaced chords, and that piece's most famous motif was inspired by the sight of sixteen swans taking flight. That work in E-flat major is by Jean Sibelius. Mahler's composition of this type and number begins with a funeral march in C-sharp minor and is best known for its *Adagietto* fourth movement. The finale of a piece of this type and number contains an interruption in which a theme from the scherzo returns. That piece features a "short-short-long" motif that has often been likened to "fate knocking at the door." For 10 points, give the type and number of that C-minor orchestral work by Beethoven. ANSWER: **fifth symphony** [accept equivalents like **Symphony** No. **5**] <KK>

- 6. This author wrote about a gun inscribed with the phrase "Et in Arcadia ego," owned by a man who incites a mob to murder a preacher accused of child rape at a revivalist meeting. In one of his novels, a gang collects \$100 per scalp and a huge albino man dances naked after killing "the kid." He also wrote of Carla Jean and Llewellyn Moss, who are murdered by a man who wields a cattle gun. This author of *Blood Meridian* described a boy and his father dodging cannibals as they travel through a post-apocalyptic wasteland in *The Road*. For 10 points, name this man whose Western-inspired Border Trilogy includes *All the Pretty Horses*, the author of *No Country for Old Men*. ANSWER: Cormac McCarthy <GL>
- 7. In this region, a strike on the Taff Vale railway led to a ruling curbing the power of unions. A titular ruler of this place wears a badge depicting three white feathers. This region is west of an eight-foot-wide ditch built by Mercia, called Offa's Dyke. Henry V, who claimed he was born in this region, pardoned rebels from here led by Owen Glendower. It was annexed by Edward I after its king Llewelyn the Last died, and its symbols include a red dragon. For 10 points, name this country in Great Britain, whose titular "Prince" is traditionally the crown prince of the UK. ANSWER: Wales [or Cymru] < MJ>
- 8. This principle is directly equivalent to the time-invariance of a system's dynamics, which is why it is locally but not globally true on a cosmological level. Early evidence for this principle came from an experiment in which a falling weight was used to heat up a container of water, performed by Joule. This principle proves that so-called "over-unity" devices do not exist. One version of this statement describes the change in internal energy as being the sum of heat input and work done. That version is the first law of thermodynamics. For 10 points, name this fundamental principle of physics, which states that the total amount of energy in a closed system is constant.

 ANSWER: conservation of energy [or conservation of mass-energy; accept first law of thermodynamics before it is read] <AS>
- 9. This body's Kerguelen islands were the site of a seal-hunting feud. Settlements in this body of water dominate the trade in "bourbon vanilla" beans. This body of water contains the Agulhas current and the Rodrigues triple junction under its surface. Contested islands in this body of water include Mayotte. In 2009, a national cabinet met underwater in this body of water to draw attention to climate change. The southern end of the Lombok strait is in this body of water, which contains Pemba and the French overseas possession of Réunion. Island nations in this body of water include Comoros and Seychelles. For 10 points, name this ocean east of Madagascar. ANSWER: Indian Ocean <MJ>
- 10. A major symbol of this deity was a knot called the tyet, and this deity was often depicted with a throne as a headdress. This deity once invoked the names of seven scorpions to heal a child of a poisonous bite. Other exploits by this deity include travelling to Byblos to retrieve a coffin and the creation of a serpent from another god's saliva. This deity received the secret name of Ra. With the aid of Nephthys, this deity recovered the body parts of her husband, allowing him to be resurrected as the ruler of the underworld. For 10 points, name this Egyptian goddess, the sister and wife of Osiris and the mother of Horus.

ANSWER: **Isis** [or **Aset**; or **Iset**; or **Ast**] <MW>

11. A woman in this novel wears her hair in the shape of a helmet and continues to stand on the shore despite rifle shots. A painting of a blindfolded woman holding a torch factors into this novel, in which a "universal genius" pens a report on the suppression of local customs which ends with the post-script "Exterminate all the brutes!" A hut surrounded by staked rebel heads in this novel is home to an ivory trader whose final words were not his fiancee's name, but rather "The horror! The horror!" For 10 points, name this novel in which Kurtz is visited by Marlow on a trip up a river into the Congo jungle, by Joseph Conrad.

ANSWER: *Heart of Darkness* <GL>

- 12. A holder of this office, who cancelled a fighter jet called the Avro Arrow, preceded one who was lifted up at Camp David and warned not to pee on Lyndon Johnson's rug. An earlier holder, whose authority was threatened by Lord Byng, was William Lyon Mackenzie King, and the Pacific scandal brought down the first one. A later one who helped resolve the Suez Crisis and roll out universal health care was Lester Pearson. The first female one was a Progressive Conservative named Kim Campbell. The War Measures act was invoked during the October crisis by its holder in 1970, Pierre Trudeau, to end secessionist unrest. For 10 points, name this parliamentary leader in Ottawa. ANSWER: **Prime Minister** of **Canada** [or **Premiership** of **Canada**; accept equivalents] <MJ>
- 13. In the field of chronobiology, this thing is considered a powerful entrainer. This thing is generated by GFP, making that protein suitable as a reporter. As proven by an experiment conducted with shoots of grass with their coleoptiles mutilated or removed, auxin was found to control the tropic ("troh-pick") response to this phenomenon. When rhodopsin interacts with this thing, rhodopsin is bleached. By disrupting melatonin secretion, it interferes with circadian rhythms. P680 and P700, in the photosystems, are designed to capture this thing. For 10 points, name this phenomenon which interacts with chlorophyll to initiate photosynthesis.

ANSWER: <u>light</u> [or <u>photon</u>s; or obvious equivalents] <AS>

14. In non-Jewish lore, King Solomon enslaved these non-human creatures and used them to build the Temple. The *qarin* are a subtype of these creatures who tag along with individual people, and they also include the watery *marid*. They're not demons, but the leader of these creatures refused to bow to Adam in the Garden of Eden; that being, Iblis, brought the "Satanic verses" to Muhammad. These beings, which include the especially-fiery *ifrit*, were given free will after Allah made them out of smokeless fire. For 10 points, name these spirits from Islamic and Arabic lore, who can be trapped in talismans such as magic lamps.

ANSWER: **jinn** [or **djinn**; or **jinn**i; accept "**genie**s"] <MJ>

15. The protagonist of one film set in this city takes a ride in a "rotor," climbing up the walls while pinned to them by centrifugal force. In that film set in this city, two boys watch a puppet show while plotting how to steal a typewriter. In another film set in this city, which popularized the jump cut, the American student Patricia tries to sell copies of the *New York Herald Tribune* and Michel imitates Humphrey Bogart. Directors who lived in this city, such as Jean-Luc Godard and François Truffaut, kicked off New Wave cinema here. For 10 points, name this setting of the films *Breathless* and *The 400 Blows*, whose opening shot features this city's Eiffel Tower.

ANSWER: Paris < JR>

16. Late in this century, Xiang Yu lost the battle of Gaixia to future emperor Liu Bang. The Earth's diameter was first roughly calculated during this century by Eratosthenes. A bloody campaign in the Kalinga province brought a king to pacifism in this century, during which Arsaces I founded the Parthian empire. The doctrine of legalism was developed after a Warring States period ended in this century, during which Ashoka spread Buddhist edicts across India. For 10 points, name this century in which the Qin ("chin") and Han dynasties of China were founded several generations before Christ.

ANSWER: <u>Third</u> Century <u>BC</u>E [or <u>200s BC</u>E; or <u>Third</u> Century <u>Before Christ</u>; or <u>Third</u> Century <u>Before</u> the <u>Common Era</u>; or <u>200s Before Christ</u>; or <u>200s Before</u> the <u>Common Era</u>; do NOT accept or prompt on "Third Century" or "200s" alone until the last word of the question is read, but accept <u>Third</u> or <u>200s</u> alone after that] <MJ>

17. One person who renounces this identity label asks "Why should I hold a candle to my shame?", steals a turquoise ring, and elopes with Lorenzo. A title character from this group of people drinks mandrake juice to escape from prison before dying in a hot cauldron. A man of this ethnicity, Jessica's father, asks "If you prick us, do we not bleed?" and aids Bassanio's efforts at wooing Portia. The cruel Barabbas is one of these people in a Christopher Marlowe play set in Malta, and a more famous one demands a "pound of flesh" from Antonio. For 10 points, name this minority religious group which includes Shylock in Shakespeare's *The Merchant of Venice*.

ANSWER: Jews [or Jewish persons; or Jewish people; or Judaism] <HX>

18. A famous player of this game has a pillow with a sharpie smiley face on it named Mr. Pillow. Unlike its spiritual predecessor, players of this game cannot "deny" by attacking friendly NPCs. A character in this game often says "Mix, mix, swirl, mix." Candy corn replaces this game's health potion during The Harrowing each October. A joke character in this game is the manatee Urf. Elementz' tier list was made for this game, whose maps include the Crystal Scar and the Twisted Treeline. Players control Irelia, Ezreal, Toemo, and other champions. For 10 points, name this massively online battle arena game based on DoTA ("DOE-tuh") and created by Riot Games.

ANSWER: League of Legends <LL>

19. The magnitude of this quantity equals the energy of the highest occupied molecular orbital. This property for silver is lower than one might expect, because it deviates from the aufbau principle to have a filled 4d subshell. For a hydrogenic atom, this quantity equals nuclear charge squared times 13.6 electron-volts. One analog of this quantity for solids is called the work function. Given this property's similarity to electron affinity, it is unsurprising that it increases towards the top right of the periodic table. For 10 points, give this name for the amount of energy required to remove an electron from a gas-phase atom.

ANSWER: first **ionization** energy [or **ionization** potential] <AS>

- 20. A painting of this event, the darkest in a triptych by English painter John Martin, shows it occurring under black clouds. Galileo Gall believes that this event will take place at the Canudos ranch in a novel which Antonio Conselheiro leads a cult in Brazil. Eschatology is the study of this event. Vishnu's avatar Kalki appears on a white horse at this event, whose namesake *War* titles a novel by Mario Vargas Llosa. In *The Hollow Men*, T. S. Eliot claimed this will happen "not with a bang but with a whimper." For Robert Frost, "Some say [this will happen] in fire / Some say in ice." For 10 points, identify this event which, in Norse mythology, occurs at Ragnarok. ANSWER: the **end** of the **world** as we know it [or **Armageddon**; or the **apocalypse**; or the **end** of **Kali Yuga**; accept any answer indicating the end of the human race; prompt on "*The Great Day of His Wrath*" or "*Great Day of His Wrath*" or "*Great Day of His Wrath*" before "Galileo"; do NOT accept "Last Judgment"] <HX>
- 21. At one point in this musical work, the choir sings that it would give up the whole world to have the queen of England lie in its arms. Another movement has a boys' choir echoing the baritone soloist's line, "Oh! oh! oh! Totus floreo." The "In the Tavern" section of this work uses only male chorus and soloists. This piece's opening movement begins with a "Pesante" section with pounding drums and massive chords sung by the choir, which gives way to a faster, whispered section. That movement is addressed to the Roman personification of luck. For 10 points, name this cantata set to medieval poetry by Carl Orff, best known for its "O Fortuna" movement.

ANSWER: Carmina Burana <KK>

Bonuses

- 1. Answer these questions about legends from ancient Mesopotamia, for 10 points each.
- [10] This storied king of Uruk was two-thirds god and one-third human. He befriends the wild man Enkidu in an epic that survived on Sumerian tablets.

ANSWER: Gilgamesh

[10] Utnapishtim escaped one of these huge events in the backstory to the epic of Gilgamesh. Other stories of this event follow the Indian Manu, or the Greek Deucalion and Pyrrha.

ANSWER: great **flood**s [or the **deluge**]

[10] This Sumerian god of wind and storms sent the flood to wipe out humanity, though his sea god brother Enki resisted his efforts. He was a son of the sky god An and the earth goddess Ki.

ANSWER: **Enlil** [or **Ellil**] <MJ>

- 2. The travel of these devices around a region was recorded in a document called a *periplus*, and they allowed travelers to get from Brundisium to Dyrrhacium in one day during Roman times. For 10 points each:
- [10] Name these vehicles whose military subtypes in ancient Greece included the pentekonter and the trireme. Many of these vehicles were used at the battle of Actium.

ANSWER: **ship**s [or **boat**s; accept equivalents]

[10] Under Periander, this ancient Greek city-state charged traders for the service of hauling ships overland across an isthmus that it controlled.

ANSWER: **Corinth** [or **Korinth**os]

[10] This coastal city was used by Athens to welcome trade ships and harbor its navy. It was connected to Athens by the Long Walls.

ANSWER: the **Piraeus** <MJ>

- 3. This highly exothermic process is usually preceded by pyrolysis. For 10 points each:
- [10] Name this reaction in which a fuel is violently oxidized, typically producing a flame.

ANSWER: combustion

[10] This kind of combustion occurs when not enough oxygen is present, leaving behind products of pyrolysis like carbon monoxide.

ANSWER: incomplete combustion

[10] The complete combustion of one molecule of this alkane with five molecules of oxygen yields some carbon dioxide and four molecules of water.

ANSWER: **propane** [accept **C3H8**] <JR>

- 4. Answer these questions about Jan Vermeer, for 10 points each.
- [10] Vermeer often used this primary color and yellow for people's clothing. *The Milkmaid*'s skirt and the lower part of the *Girl With a Pearl Earring*'s headdress are this color, made from crushed-up lapis lazuli.

ANSWER: blue

[10] Vermeer worked in this Dutch city, where his rivals included Pieter de Hooch. He painted a *View of* this city in which people look at it across a river.

ANSWER: Delft

[10] In *The Art of Painting*, Vermeer depicted himself painting two objects held by a blue-clad female figure wearing a wreath. Name *either* of those two objects.

ANSWER: a **book** and a **trumpet** [accept either underlined part alone; accept both if teams give both] <JR>

- 5. This book's title characters include Shiva of the Knees and the large-nosed telepath Saleem Sinai, who is sterilized at the behest of a female autocrat dubbed "The Widow." For 10 points each:
- [10] Name this novel whose title cohort of 1,001 people was born with special powers during the first hour of India's independence.

ANSWER: Midnight's Children

[10] This Indian-born British author of *Midnight's Children* received a *fatwa* from the Islamic Republic of Iran for his novel *The Satanic Verses*.

ANSWER: Salman Rushdie

[10] This living British author of Jamaican descent included an anti-Rushdie protest attended by Millat in her novel about Muslim immigrant Samad Iqbal, *White Teeth*. Her recent novels include *NW* and *On Beauty*.

ANSWER: Zadie Smith <MJ>

- 6. It is largely caused by indiscriminate overuse and dumping in the agricultural industry. For 10 points each:
- [10] Identify this phenomenon in which pathogenic bacteria increasingly do not respond to compounds like methicillin and vancomycin.

ANSWER: antibiotic resistance [or drug resistance]

[10] Bacteria sometimes acquire antibiotic resistance genes through this process, in which DNA is taken up directly from the environment into the bacterial cell.

ANSWER: <u>transformation</u> [do not accept or prompt "transduction"]

[10] To pick up naked DNA from the environment, bacteria must have this property. Incubating *E. coli* in calcium chloride endows them with this property.

ANSWER: competence <GL>

- 7. A reader poll run side-by-side with this award was won by King Jong-Un in 2012. For 10 points each:
- [10] Name this award given by a magazine to Pope Francis in 2013. Since its inception in 1923, every US president except Calvin Coolidge has received it.

ANSWER: TIME **Person of the Year** award [or **Man of the Year**]

[10] In 2006, this persona received the Person of the Year award for its role in digital media culture. The magazine cover recognizing this person featured a computer screen.

ANSWER: You [accept \underline{me} or \underline{I} if the player is indicating themselves; accept any answer given by a player in which that player says their own name]

[10] This symbol was superimposed over Adolf Hitler's head on a white background in a famous 1945 *TIME* Magazine cover. It was later reused over Abu Musaf al-Zarqawi's head in 2006.

ANSWER: a bloody red letter $\underline{\mathbf{X}}$ [or being **crossed out**] <LL>

- 8. Initially founded by Nathan Bedford Forrest, this organization was revived after the lynching of Jewish factory supervisor Leo Frank in Atlanta in 1915. For 10 points each:
- [10] Name this white supremacist paramilitary organization which burned crosses on victims' lawns and wore white hoods to threaten blacks and immigrants.

ANSWER: Ku Klux Klan [or KKK]

[10] Forrest founded the KKK in this state, where he committed the Fort Pillow massacre. The breakaway state of Franklin joined this modern state, where David Lilienthal led a New Deal era rural electrification project.

ANSWER: Tennessee

[10] This year's Democratic convention was called the "Klan-bake" due to the heavy influence of KKK members. Democrats nominated John W. Davis in this election against Progressive Bob LaFollette and an incumbent Republican.

ANSWER: United States presidential election of 1924 [accept equivalents mentioning "1924"] <MJ>

- 9. This novelist described Amsterdam's concentric rings of canals as analogues to the circles of Hell. For 10 points each:
- [10] Name this absurdist French-Algerian author of *The Rebel*, who wrote about Clamence, an ex-lawyer deeply affected by the suicide of a girl who he does not save, in *The Fall*.

ANSWER: Albert Camus ("ca-MOO")

[10] In this Camus novel, Meursault unthinkingly shoots the brother of Raymond Sintes' Arab girlfriend on a beach.

ANSWER: *The Stranger* [or *L'Etranger*]

[10] At this outdoor event early on in *The Stranger*, a weeping old man named Thomas Perez passes out from the heat as he walks, but Meursault doesn't feel much of anything.

ANSWER: the <u>funeral</u> of Meursault's <u>mother</u> [accept <u>Maman</u>'s <u>funeral</u>, or more general descriptions such as the **funeral** of his **mom**] <GL>

- 10. Its sits across from the Basilica di Santa Maria del Fiore in the Piazza del Duomo, and it is sometimes named for a saint whom Pisano depicted for its southern doors. For 10 points each:
- [10] Name this octagonal building whose front has Donatello's *The Feast of Herod* carved into it. Lorenzo Ghiberti's *Gates of Paradise* served as the north doors for this building.

ANSWER: Florence Baptistry [or Battistero di San Giovanni; or Baptistry of Saint John]

[10] This man lost the contest to design the Florence Baptistry doors to Ghiberti. He later designed the super-tall dome of the Duomo, Florence's cathedral.

ANSWER: Filippo Brunelleschi

[10] This man designed a bell tower which stands next to the Florence Cathedral. He painted the *Lamentation* fresco for the Scrovegni Chapel in the early 1300s, presaging the Renaissance with his realistic figures.

ANSWER: Giotto di Bondone <NW>

- 11. There are many interesting symbols and writing conventions in science. For 10 points each:
- [10] This symbol denotes "not" in many programming languages. It also is used for a function which is basically the gamma function restricted to positive integers, the factorial.

ANSWER: exclamation point [or exclamation mark; or bang]

[10] In chemistry, this symbol denotes an antibonding molecular orbital. In regular expressions, this symbol denotes an operation named for Kleene that denotes repetition zero or more times.

ANSWER: asterisk [or Kleene star]

[10] This is the first of two characters in the UNIX shebang. It is also is used at the beginning of comments in Perl and Python, and follows the letter "C" in the name of a Microsoft language that looks a lot like Java.

ANSWER: hash mark [or number sign; or #; or pound sign; or octothorpe; or sharp] HX>

- 12. She is often described as a "demon child" for her enthusiasm and willingness to throw stones at other children. For 10 points each:
- [10] Name this girl who wears red-and-gold gowns and stands on a scaffold one night with her mother and Arthur Dimmesdale. She refuses to recite the catechism for Reverend Wilson.

ANSWER: **Pearl** Prynne [prompt on "Prynne"]

[10] In this Nathaniel Hawthorne novel, Pearl is the illegitimate daughter of adulteress Hester Prynne, who is forced to wear the title shaming symbol on her chest.

ANSWER: The Scarlet Letter

[10] In this other Nathaniel Hawthorne novel, the gloomy lives of Hepzibah Pyncheon and her brother Clifford are brightened by the arrival of Cousin Phoebe.

ANSWER: The House of the Seven Gables <GL>

- 13. This author of *Anti-Duhring* co-wrote a critique of the Young Hegelians called *The Holy Family*. For 10 points each:
- [10] Name this wealthy author who traveled to Manchester to write *The Condition of the Working Class in England* in 1844.

ANSWER: Friedrich Engels

[10] Engels financially supported this bearded leftist author of "On the Jewish Question", with whom he co-authored *The Communist Manifesto*.

ANSWER: Karl Marx

[10] This attitude, the belief that goods have value intrinsically rather than deriving their value from relations between people, was critiqued by Marx and Engels in *Das Kapital*.

ANSWER: **commodity fetishism** [prompt on partial answer] <EB>

- 14. This man's intelligence service was run by Vladimiro Montesinos, who requested that ten thousand AK-47s be air-dropped to troops fighting against Abimael Guzman. For 10 points each:
- [10] Name this man of Japanese descent, who incurred many human rights violations for campaigns against the Shinng Path guerrillas during his ten-year rule.

ANSWER: Alberto Fujimori [fun fact: in Spanish, the "j" in this name is pronounced like an English "h"]

[10] Fujimori was president of this South American country which, like Bolivia, lost the War of the Pacific to Chile.

ANSWER: Republic of **Peru** [or República del **Perú**]

[10] This ideology was professed by the Shining Path guerrillas. It is named after a Chinese leader who updated Marxism to focus on the peasantry.

ANSWER: <u>Mao</u>ism [or <u>Mao Zedong Thought</u>; or <u>Mao Zedong Sixiang</u>; prompt on "Communism" or "socialism"] <JR>

- 15. For 10 points each, answer these questions about arid regions in sub-Saharan Africa.
- [10] This semi-arid desert has been home to the !Kung and San peoples, once called "Bushmen." It is found east of the Namib desert.

ANSWER: Kalahari Desert

[10] This country's arid terrain, largely covered by the Kalahari desert, is broken up by the more interesting Makgadigadi salt pan and the inland Okavango delta.

ANSWER: Republic of **Botswana** [or Lefatshe la **Botswana**]

[10] This arid region in western South Africa is divided into Nama and Succulent subregions. It name means "place of thirst," and mutton sheep in this region feed on shrubs called its namesake "bossies."

ANSWER: the Karoo <MJ>

- 16. The rate at which this process occurs is partially characterized by the Einstein "B sub 2 1" coefficient. For 10 points each:
- [10] Name this process, in which an electron interacts with a photon and drops to a lower level, thus emitting another photon.

ANSWER: **stimulated** emission [or **induced** emission]

[10] Stimulated emission is exploited by these devices, which produce intense, coherent light. It is inadvisable to point them at people's eyes.

ANSWER: <u>lasers</u> [or <u>light amplification by stimulated emission of radiation</u>]

[10] The first laser used this gemstone as its gain medium. This variety of corundum gets its color from chromium impurities.

ANSWER: ruby <AS>

- 17. The youngest person present at this observance asks the "Four Questions," and its other components include four cups of wine. For 10 points each:
- [10] Name this ritual meal whose name means "order," which requires at least three pieces of unleavened bread called matzah.

ANSWER: Passover **Seder** [prompt on "Passover" or "Pesach"]

[10] This book of the Bible tells the story recalled by the Seder on the first day of Passover. This book includes the splitting of the Red Sea by Moses.

ANSWER: Book of **Exodus** [or Sefer **Shemot**]

[10] This act is performed twice by Seder attendees, without a blessing during the Seder's second section *urchatz*, and with a blessing including the words "al netilat yadaim" in its sixth section, *rachtzah*.

ANSWER: washing one's hands <MJ>

- 18. This collection references La Noche Triste in the essay "The Sons of La Malinche." For 10 points each:
- [10] Name this essay collection about the culture of its author's native Mexico

ANSWER: The Labyrinth of Solitude [or El Laberinto de la soledad]

[10] This author of *The Bow and the Lyre* wrote *The Labyrinth of Solitude*.

ANSWER: Octavio Paz

[10] This 584-line poem by Octavio Paz begins and ends with six lines that start "willow of crystal, a poplar of water." The title object of this poem is perhaps a reference to the planet Venus.

ANSWER: <u>Sunstone</u> [or <u>Piedra de Sol</u>] <JR>

- 19. Answer the following about Czech composers of classical music, for 10 points each.
- [10] This composer wrote a popular "Humoresque" in G-flat major for piano, and during his time in Spillville, Iowa he wrote the "American" String Quartet. He also composed the "New World" symphony.

ANSWER: Antonín **Dvořák**

[10] This composer paid tribute to his homeland in *Má vlast*, which contains the tone poem "Die Moldau," which depicts the Vltava River. He also wrote the string quartet "From My Life."

ANSWER: Bedřich Smetana

[10] Dvořák wrote a frequently performed one of these works in B minor. It has been recorded by such performers as Mstislav Rostropovich and Yo-Yo Ma. Edward Elgar wrote one of these works for orchestra and a soloist in E minor.

ANSWER: cello concerto <KK>

- 20. The ordeals this man went through ended with the conviction of Ferdinand Walsin Esterhazy, and resulted in the separation of church and state in the Third Republic. For 10 points each:
- [10] Name this French army officer who was accused of treason in the 1890s, largely because France was bitter about the Franco-Prussian War and this man was a Jew.

ANSWER: Alfred **Dreyfus**

[10] A new type of this device had its specs transferred from the French army to Germany by Esterhazy's hand. During World War I, the "Big Bertha" was a German example of these weapons.

ANSWER: **cannon**s [or 120mm **howitzer**s; or **hydraulic brake** of the 120mm howitzer cannon; prompt on "guns," "artillery," or "brakes"]

[10] This historian wrote about the anti-Semitic newspapers covering Dreyfus in *The Proud Tower*. She wrote a detailed account of the days leading into World War I in *The Guns of August*.

ANSWER: Barbara Tuchman <MJ>

- 21. As a result of this event, Hermann Göring committed suicide. For 10 points each:
- [10] Name this set of tribunals, held in a namesake Bavarian city, during which Rudolf Hess and other leaders of a defeated government were prosecuted for crimes against humanity.

ANSWER: Nuremberg Trials [or Nürnberger Prozesse]

[10] Hess, Göring, and the primary defendants of the Nuremberg Trials were all members of this political party, which ran Germany during World War II.

ANSWER: <u>Nazi</u> Party [or <u>National Socialist</u> German Workers' Party; or <u>Nationalsozialist</u> ische Deutsche Arbeiterpartei; or <u>NSDAP</u>]

[10] This man apologized for his involvement in the Nazi regime at the Nuremberg Trials. This armaments minister and chief architect of Hitler wrote the memoir *Inside the Third Reich*.

ANSWER: Albert **Speer** [or Berthold Konrad Hermann Albert **Speer**] <JW>