

**ACF Fall 2014: *Nemo auditur propriam derpitudinem allegans***

**Packet by Colonel By High School A (Ted Gan, Cameron Amini, Yana Brion, Isaac Cowan, Janusz Gacek, Anubhav Srivastava) and University of Ottawa A (Jordan Palmer)**

**Edited by Jordan Brownstein, Jacob Reed, Max Schindler, Richard Yu, and Ben Zhang**

**Head-editing by Gautam Kandlikar and Gaurav Kandlikar**

**Tossups**

1. These structures are arranged along the spadix in members of the Araceae family, and are arranged in "heads" in members of Compositae. In a model of these structures, A, B, and C type transcription factors direct cell division and patterning in them. Generally, these structures can be thought to consist of three whorls called the perianth, androecium, and gynoecium. In dicots, separate parts of these structures appear in sets of four or five, while in monocots, they generally appear in threes. Sepals grow around them for protection, and they often produce nectar to attract pollinators. For 10 points, name these plant reproductive structures which contain stamens, pistils, and petals.  
ANSWER: **flowers** [prompt on "petals" until "androecium"]
2. In this country, the PINSTECH institute and a site at Kahuta were created as part of Project 706. Atrocities committed by this country's military during Operation Searchlight were decried in the Blood Telegram. With its eastern neighbor, this country signed the Shimla Agreement and fought the Kargil War. This country was Islamized by Zia-ul Haq, who came to power by overthrowing Zulfikar Ali. This country's first governor-general was Muhammad Ali Jinnah of the Muslim League, and the leader of its People's Party was assassinated at a 2007 rally. For 10 points, name this country whose prime ministers have included Benazir Bhutto and Nawaz Sharif.  
ANSWER: **Pakistan** [or Islamic Republic of **Pakistan**]
3. One character in this story describes how he has to step aside when men spit rice pudding at him, since they lose their appetite after experiencing a certain procedure for six hours straight. In this story, a character is discovered asleep at two in the morning despite being required to salute his captain every hour, leading him to be whipped across the face. A gravestone in this story prophesies the return of a Commandant, who is revered by the Officer. In this story, the Officer attempts to write the words "Be just!" on his own body, but is instead brutally killed by an electric execution machine. For 10 points, name this Franz Kafka story in which "the Traveler" visits a prison island.  
ANSWER: "**In the Penal Colony**" [or "**In the Penal Settlement**"; or "**In der Strafkolonie**"]
4. This thinker used the phrase "double reciprocal incarnation" to describe his idea of the basis of sexual desire. This man used the example of being unable to find Pierre in a cafe to explain the title concept of the chapter "The Origin of Negation". He described the example of a man who acts "a little too rapid" and "a little too eagerly" because he is acting to try to fit his perceived characteristics as a waiter, thereby acting in bad faith. This thinker wrote an essay describing his philosophy "as a humanism." This man wrote a book describing how being-for-itself cancels out being-in-itself. For 10 points, name this existentialist author of *Being and Nothingness*.  
ANSWER: Jean-Paul **Sartre** [or Jean-Paul Charles Aymard **Sartre**]

5. This city's Art Deco Kavanagh building was the first in the world to have centralized air conditioning. A large cemetery in this city is located in one of its wealthiest neighborhoods, Recoleta. This city is home to a stadium called "La Bombonera," which is home to the Boca Juniors futbol club. The Teatro Colon, this city's opera house, and the enormous Plaza de la Republica, which contains this city's giant obelisk, are both located along its 14-lane wide 9 de Julio Avenue, which is the widest in the world. Its Plaza de Mayo is home to a Presidential palace called Casa Rosada, or the Pink House. For 10 points, name this city on the south end of the Rio de la Plata, the capital of Argentina.

ANSWER: **Buenos Aires** [or Autonomous City of **Buenos Aires**; or Ciudad Autónoma de **Buenos Aires**]

6. During this battle, a force led by Robert Abercrombie attempted to spike enemy cannons, but only managed to temporarily disable seven. The band of the losing side in this battle played "The World Turned Upside Down" during its aftermath. A fleet led by the Comte de Grasse defeated a naval force led by Thomas Graves and thus blocked a naval escape route during this battle. Forces led by the Comte de Rochambeau helped force the British to surrender during this battle after a month-long siege on the namesake Virginia peninsula. For 10 points, name this battle of the American Revolution in which Cornwallis surrendered to George Washington for the final time.

ANSWER: Battle of **Yorktown**

7. In one of this author's novels, Leach and Johnson attempt a mutiny aboard the *Ghost*; in that work, Maud Brewster is courted by Humphrey van Weyden and a man whose brother is named "Death". In another of his works, the protagonist is kidnapped by Judge Miller's gardener and quickly learns the "law of the club." In that novel by this author, three fools die while crossing a poorly-frozen river, though the protagonist refuses to accompany them and is rescued by John Thornton. This author wrote about Wolf Larsen in *The Sea-Wolf* and penned a novel whose protagonist defeats Spitz in a fight, gaining the respect of his pack. For 10 points, name this author, who wrote of the sled dog Buck in his novel *The Call of the Wild*.

ANSWER: Jack **London** [or John Griffith **London**; or John Griffith **Chaney**]

8. In  $P_{xy}$  ["P-sub-x-y"] and  $T_{xy}$  ["T-sub-x-y"] diagrams for binary mixtures, these quantities mark the intersection of the bubble point and dew point curves. According to Trouton's rule for liquids, dividing the change in enthalpy by this quantity will often yield a change in entropy equal to about 88 joules per kelvin per mole. The change in this quantity for a solution can be calculated by multiplying the molality of the solution, the van't Hoff factor, and a constant termed  $K_b$  ["K-sub-B"]. When this point is reached, the vapor pressure is equivalent to the atmospheric pressure. For 10 points, name this temperature at which substances transition from a liquid to a gas phase.

ANSWER: **boiling point**

9. Leaves from the bael tree are offered to this deity on a holiday that commemorates his performing of the *tandava nritya*. A version of this god called Bhikshatana is a beggar who traveled carrying a skull in repentance for cutting off the fifth head of Brahma. This god is surrounded by a ring of flames in statues depicting him as "the lord of dance," Nataraja. This god is often worshipped in the symbolic form of the lingam. This god drank a poison created by the churning of the ocean of milk, but only his throat turned blue because he was preventatively strangled by his wife Parvati. For 10 points, name this deity who is the "destroyer" aspect of the Hindu Trimurti.

ANSWER: **Shiva** [or **Mahadeva**; accept **Nataraja** until read]

10. This character's boss says that he thought this character was joking about his diabetes—which is funny because "it's a very serious disease and I don't like you." This character says "Yeah! Hit that!" when he walks in on his stuffed dog Rowdy "humping" his friend's leg. This character finds out that "someone named Cocoa Bosco" is sick of him saying "that's what I'm talking about." Because of his frequent victory dances, this character is accused of being "Cox-ish" by his wife, Carla. This character, who is played by Donald Faison, eventually becomes chief of surgery at Sacred Heart Hospital. For 10 points, name best friend of JD, a black doctor on *Scrubs*.

ANSWER: Dr. Chris **Turk** [prompt on "Turkleton," "Gandhi," or any variation of "Chocolate Bear"]

11. A red one of these structures in Scotland is shaped like three elongated hexagons because of its unusual cantilevered design and is named for the River Forth. The largest of one type of these structures is partially named for the Kaikyo rail line. One of these structures, which is made of stone, was moved to Arizona from London, and is confused with one which is named for the Tower of London. The first of these to be made of cast iron was built in 1781 and is located near Coalbrookdale in England. John Augustus Roebling designed one of these in New York City that crosses the East River and is named for Brooklyn. For 10 points, name these structures exemplified by San Francisco's Golden Gate.

ANSWER: **bridges**

12. The cosmic censorship hypothesis sets an upper limit on this quantity for a black hole of a given mass. A quantity similar to this one is crossed with this quantity in the first term of the Laplace-Runge-Lenz vector. Black holes with zero value for this quantity are described by the Einstein field equation solution named for Reissner and Nordstrom. Kepler's second law is a result of the conservation of this quantity. For a particle in a circular orbit, this quantity equals "mass times radius times velocity", and the time derivative of this quantity is torque. For 10 points, name this quantity equal to the product of moment of inertia and angular velocity, whose linear analogue equals mass times velocity.

ANSWER: **angular momentum** [or **moment of momentum**; or **rotational momentum**; prompt on "L"; prompt on "J"; do not accept or prompt on "momentum", "linear momentum" or "p"]

13. A god sitting in this character's lap erases memory, creating a situation in which "the inward fire eats the soft marrow away, and the internal wound bleeds on in silence." This character tricks King Iarbas into giving her as much land as can be covered by an oxhide, which she cuts into strips to encircle a hill, leading that territory to be called Byrsa. Her husband Sychaeus appears to her as a ghost, urging her to flee from her brother Pygmalion in Tyre. This woman kills herself on a funeral pyre after the departure of her lover, who had escaped from the fall of Troy and went on to found Rome. For 10 points, name this queen of Carthage who appears in Virgil's *Aeneid*.

ANSWER: **Dido** [or Dido **Elissa**]

14. Gerald Kaufman decried this party's manifesto as "the longest suicide note in history." During one election, a newspaper asked that the last person to leave the country "please turn out the lights" if this party were to win. This party implemented the reforms proposed by the Beveridge report, and its first government was led by Ramsay MacDonald. This party's leader James Callaghan lost an election after the "Winter of Discontent". This party of Clement Attlee advocated for a "third way" under Tony Blair. For 10 points, name this British party, the official opposition to David Cameron's Conservatives in the British House of Commons.

ANSWER: **Labour** Party of the United Kingdom

15. It's not Aeetes, but Jason married the daughter of a king who shares his name with this man, and who died with his daughter Glauke after she received a cursed dress. This man's son committed suicide by throwing himself off the city walls because it was prophesied that the death of Menoeceus would save the city. This man was the brother of Jocasta, and his wife Eurydice committed suicide after the death of his son Haemon. One of his decrees was broken by a daughter of Oedipus, who buried her brother Polyneices after he was killed by Eteocles. For 10 points, name this king of Thebes who sentenced Antigone to death.

ANSWER: **Creon**

16. Some characters in this play listen for the ticking of a half-hunter watch that a character received from his grandfather. In this play, a man forgets the lyrics to a round about a cook who beats a dog to death with a ladle. A character in this play gives another man a turnip after being asked for a carrot. This play includes a monologue that mentions "the heights of divine apatheia" which is prompted by an order to "think." The bowler hat-wearing protagonists attempt to hang themselves with a belt at the end of this play, which also features Pozzo and his slave Lucky. For 10 points, name this play about Vladimir and Estragon by Samuel Beckett.

ANSWER: **Waiting for Godot** [or **En Attendant Godot**]

17. A non-zero element of a ring  $R$  is one of these elements if it is not a unit, and, for any elements  $x$  and  $y$  in  $R$ , if it divides  $x$  times  $y$ , it also divides  $x$  or  $y$ . A number  $n$  is one of these numbers if and only if " $n$  minus one factorial" is congruent to "negative one modulo  $n$ ", according to Wilson's theorem. An integer raised to the power of one of these numbers and that integer are congruent modulo the exponent, according to Fermat's little theorem. When they are equal to "one less than a power of two", these numbers are named for Mersenne. These numbers can be found using the sieve of Eratosthenes. For 10 points, name these numbers divisible only by themselves and one.

ANSWER: **prime** numbers [or **prime** elements]

18. In a painting inspired by the art of this country, a woman in a black dress with a red sash tied around her waist stands on a blue rug. That painting inspired by this country's art hangs in the Freer Gallery, and is partially titled *Rose and Silver*. The style of Whistler's *Peacock Room* was inspired by art from this country. In this country, many paintings of beautiful women, called *bijin-ga*, were created by Utamaro. Fifty-three stations along this country's Tokaido road were painted by Hiroshige. For 10 points, name this country home to creators of *ukiyo-e* woodblock prints like Hokusai, whose *The Great Wave off Kanagawa* is part of his *Thirty-six Views of Mount Fuji*.

ANSWER: **Japan** [or **Nippon**; or **Nihon**]

19. A child of questionable parentage born into this family was known as the Infans Romanus. A member of this family had Alfonso of Aragon smothered with a pillow. One member of this family led the Romagna campaign and took the title of Duke of Valentinois. Johann Burchard described an event held by this family at which fifty prostitutes crawled around the floor picking up chestnuts. Members of this family include a pope who issued the papal bull *Inter Caetera* and split the New World via the Treaty of Tordesillas, as well as the dedicatee of Machiavelli's *The Prince*. For 10 points, name this family whose members included Alexander VI, Lucrezia, and Cesare.

ANSWER: **Borgia** family [or the **Borja** (bor-hah) family]

20. Prokofiev's C-major third work in this genre begins with an elegiac clarinet solo. Bartok's first work in this genre begins with ominous repeated notes in the timpani. Shostakovich's first one of these works uses an orchestra of only strings and trumpet. Gershwin's only work in this genre also begins with a timpani solo and is in F Major. Rachmaninoff's second work in this genre was his first piece after a period of writer's block. Paul Wittgenstein commissioned Prokofiev's fourth and Ravel's D-minor works in this genre, both of which only use the soloist's left hand. For 10 points, name these works for a keyboard instrument and orchestra.

ANSWER: **piano concerto** [accept any answer indicating **concerto** or **concerti** for **pianoforte** and orchestra; prompt for instrument on just "concerto" or word forms]

### Extra

This agent's long terminal repeats contain between one to three binding sites for NF kappa B, which is released when its membrane fuses with the host cell's membrane. The *env* gene in this agent codes for gp160, which is later cleaved by furin. The V3 loop of this agent's gp120 protein binds to CXCR4 receptors to enter its target cells, but this virus more commonly enters cells using CCR5 receptors. The replication of this virus is inhibited by a thymidine analogue called AZT, which interrupts the activity of reverse transcriptase. This virus infects CD4+ ["C-D-4-Positive"] helper T cells, which weakens the immune system of the host. For 10 points, name this retrovirus that causes AIDS.

ANSWER: **HIV** [or **Human Immunodeficiency Virus**; do not accept or prompt on "AIDS"]

In a story by this author, the imaginary boy Jimmy Jimmerino is run over by a car. That story by him features Eloise, who remembers the nickname her fiancée Walt gave her ankle. In a story by this author, the main character is accused of looking at a woman's feet in a hotel elevator and letting a child named Sharon sit next to him while he played piano. In that story by this author, Sybil searches for the title greedy animals while on the beach with Seymour. He also wrote a novel in which the protagonist loses his the fencing team's foils and wonders where the ducks in Central Park go in the winter. For 10 points, name this author of "Uncle Wiggily in Connecticut," "A Perfect Day for Bananafish," and *Catcher in the Rye*.

ANSWER: J. D. **Salinger** [or Jerome David **Salinger**]

## Bonuses

1. At the end of the second of these conflicts, one of the countries involved ceded territory in the Treaty of Bucharest and the Treaty of Constantinople. For 10 points each:

[10] Name this series of early 20th century conflicts, the first of which was won by an anti-Ottoman league.

ANSWER: **Balkan Wars**

[10] The Balkan Wars increased the Serbian nationalism that led to the assassination of this archduke by Gavrilo Princip, a member of the Black Hand. His death was the immediate cause for World War I.

ANSWER: Archduke **Franz Ferdinand** of Austria-Hungary

[10] This country was the instigator and loser of the second Balkan War. Byzantine emperor Basil II earned his nickname by blinding thousands of soldiers from this country after the Battle of Kleidion.

ANSWER: **Bulgaria** [or **Bǎlgarija**]

2. The cover artwork on this band's debut album *Hybrid Theory* features a winged soldier, and the most successful single from that album was "In the End". For 10 points each:

[10] Name this American rock band fronted by Chester Bennington, who have also written the theme song for every live-action *Transformers* film.

ANSWER: **Linkin Park**

[10] This other vocalist of Linkin Park is the band's rapper. He also founded the rap group Fort Minor.

ANSWER: Mike **Shinoda** [Michael Kenji **Shinoda**]

[10] The music video for this Linkin Park song from the album *Meteora* follows the daily life of an artistic but socially ostracized student. The lyrics of this song include "all I want to do is be more like me and be less like you".

ANSWER: "**Numb**"

3. Name the following about a certain class of subatomic particles, for 10 points each.

[10] Particles are divided into bosons, which have integer spins, and the class of particles named for this man, which have half-integer spin. This Italian physicist helped create the first nuclear reactor at the University of Chicago.

ANSWER: Enrico **Fermi** [accept **fermions**]

[10] These fermions obey the Pauli exclusion principle, but are not affected by the strong force. When they have no charge, they are called neutrinos.

ANSWER: **leptons**

[10] This most massive lepton was discovered by Martin Perl. It's so heavy that it can decay into hadrons, and its neutrino counterpart was discovered by the deliciously named DONUT experiment.

ANSWER: **tauon** [or **tau** particle; do not accept "tauon neutrino"]

4. Like Sobek, he was a son of the war goddess Neith. For 10 points each:

[10] Name this serpent who attacks Ra's solar barge each night.

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

[10] This fiendish desert god helps Ra fight Apep each night. This god killed and dismembered his brother Osiris, after which he fought a protracted war with his nephew Horus over control of Egypt.

ANSWER: **Seth**

[10] After Set ate some of this foodstuff in which had Horus had ejaculated, Horus was able to call his semen from within Set and thus prove his superiority over him.

ANSWER: **lettuce**

5. After an uprising in this country, the native leader Tedbury offered to murder its imprisoned governor with his spear. For 10 points each:
- [10] Name this country whose first European settlement was established by Arthur Phillip at Sydney. Its state of New South Wales was originally used as a British penal colony.
- ANSWER: Commonwealth of **Australia**
- [10] William Bligh was overthrown as Governor of New South Wales in this rebellion, which resulted from his attempts to curtail trade of its namesake liquor. This rebellion was led by John Macarthur and George Johnston.
- ANSWER: **Rum** Rebellion
- [10] The Castle Hill rebellion was led by prisoners exiled to Australia for participating in this other uprising. This rebellion is sometimes named for a secret society founded by Wolfe Tone.
- ANSWER: **Irish** Rebellion of **1798** [or **United Irishmen** Rebellion; prompt on partial answers]
6. After being cooked in Lao Tzu's crucible for forty-nine days, this character gains the ability to see through any disguise using his "fiery-eyes golden-gaze". For 10 points each:
- [10] Name this Chinese mythological figure who is born from a stone egg, and who is trapped under a mountain for five-hundred years after he urinates on the hand of the Buddha.
- ANSWER: **Sun Wukong** [or **Monkey**; or the **Monkey King**]
- [10] Sun Wukong accompanies the monk Xuanzang ["soo-en zang"] and the sand demon Sha Wujing to Vulture Peak in India in this book, one of the four great novels of Chinese literature. It was written by Wu Cheng'en.
- ANSWER: **Journey to the West** [or **Xi You Ji**; prompt on "**Monkey**"]
- [10] The other companion of Xuanzang, Zhu Bajie ["joo bah-jeh"], is an anthropomorphic one of these animals, which is the meaning of his surname. He was reincarnated as this animal for sexually harassing the moon goddess Chang'e ["chang uh"].
- ANSWER: a **pig** [or **Pigsy**]
7. This notation can be used to circumvent the need for parentheses, as  $a + b$  multiplied by  $c$  is expressed differently from  $a + b$  all multiplied by  $c$ . For 10 points each:
- [10] Name this notation in which the operation is placed after the operands, in contrast to the more usual infix notation.
- ANSWER: **Reverse Polish** Notation [or **postfix** notation; or **RPN**; do not accept or prompt on "prefix notation" or "Polish Notation"]
- [10] These data structures can be used to implement Reverse Polish Notation by popping the operands, performing the operation, and pushing the answer back onto them.
- ANSWER: **stacks**
- [10] Data in stacks is stored in this order, which is why only their topmost element is accessible. This order is contrasted with that used by queues.
- ANSWER: **last in, first out** [or **first in, last out**; accept equivalents like **last come, first served**; accept abbreviations like **LIFO** or **FILO** or **LCFS**; do not accept or prompt on "first in, first out" or "last in, last out" or "FIFO" or "LIFO"]

8. This city is home to the Sainte-Chapelle, a chapel commissioned by King Louis IX to house Jesus' Crown of Thorns. For 10 points each:  
[10] Name this city also home to churches like Saint-Sulpice and La Madeleine, as well as Les Invalides and Père Lachaise Cemetery.  
ANSWER: **Paris**, France  
[10] This stadium, the largest in France, is located just north of Paris in Saint-Denis. It was the venue of the 1998 FIFA World Cup Final, and it is presently home to both the French national soccer and rugby union teams.  
ANSWER: **Stade de France**  
[10] Paris's district La Défense is home to a massive one of these structures inaugurated on the bicentennial of the French Revolution. Another huge one of these structures stands at the western end of the Champs-Élysées.  
ANSWER: triumphal **arches** [or **arches**; or **arcs**; accept La **Grande Arche** de la Défense; or La **Grande Arche** de la Fraternité; or **Arc de Triomphe** de l'Étoile]
9. This character uses accounts from the *L'Etoile* newspaper and Mr. Beauvais to help solve the murder mystery of perfume shop worker Marie Rogêt. For 10 points each:  
[10] Name this detective who, in another story, recovers a certain item from Minister D—.  
ANSWER: C. **Auguste Dupin** [accept either underlined part]  
[10] C. Auguste Dupin discovers that a sailor's escaped orangutan killed Madame Camille L'Espanaye with a razor and stuffed her daughter's corpse up the chimney in this short story.  
ANSWER: "The **Murders in the Rue Morgue**"  
[10] "The Murders in the Rue Morgue" was written by this American author, who wrote a poem about a bird that repeats "Nevermore" in "The Raven."  
ANSWER: Edgar Allan **Poe**
10. This thinker engaged in a long dispute with John Wallis over his essay *De Corpore*. For 10 points each:  
[10] Name this author who argued that a war of "all against all" could only be prevented by a strong central sovereign in his treatise *Leviathan*.  
ANSWER: Thomas **Hobbes** of Malmesbury  
[10] In *Leviathan*, Hobbes argued that this type of agreement is formed when individuals cede their rights to the sovereign, thus ending the state of nature. This type of agreement is the name of a work by Jean-Jacques Rousseau.  
ANSWER: **social contract** [or *Of the **Social Contract***, or *Principles of Political Right*; or *Du **Contrat Social** ou Principes du Droit Politique*]  
[10] This thinker denounced Rousseau's social contract in his book *General Idea of the Revolution*. This "father of anarchism" declared that "Property is theft!" in his book *What is Property?*  
ANSWER: Pierre-Joseph **Proudhon**



11. A cook named Christine advises this play's title character against pursuing her dream to open an inn near Lake Como. For 10 points each:  
[10] Name this play in which Jean decapitates a pet canary after having an affair with the title aristocratic woman, who commits suicide with a razor.  
ANSWER: **Miss Julie** [or **Fröken Julie**]  
[10] *Miss Julie* was written by August Strindberg, who hails from this home country of 2011 Nobel Laureate Tomas Tranströmer. This country's Astrid Lindgren created Pippi Longstocking.  
ANSWER: Kingdom of **Sweden** [or Konungariket **Sverige**]  
[10] Julie's lover Jean is a person with this profession. Bertie Wooster employs one of these men named Reginald Jeeves in many of P.G. Wodehouse's stories.  
ANSWER: **servant** [or **butler**; or **valet**]
12. These cells can be harvested from the inner cell mass of a blastocyst. For 10 points each:  
[10] Name these pluripotent cells, which can differentiate into any of the three germ layers. The harvesting of these cells from surplus attempts at *in vitro* fertilization is a source of controversy.  
ANSWER: **embryonic stem** cells [prompt on "stem cells"; prompt on "ESCs"; do not accept or prompt on any other specific types of stem cells]  
[10] Unlike totipotent cells, embryonic stem cells are unable to differentiate into the cells that comprise this organ. The umbilical cord connects the fetus to this organ during pregnancy.  
ANSWER: **placenta**  
[10] Embryonic stem cells can form these benign tumors, which generally contain tissue from all three germ layers. These tumors often contain hair or bone tissue, and, in rare cases, contain fully formed organs.  
ANSWER: **teratomas** [do not accept or prompt on "teratocarcinoma"]
13. This country sent young women to America in the King's Daughters program and chartered the Company of One Hundred Associates. For 10 points each:  
[10] Identify this country which hired Giovanni da Verrazano to explore the Atlantic coast.  
ANSWER: **France**  
[10] This French explorer claimed Canada for France while exploring the St. Lawrence River. He also was told about Saguenay, a gold city inhabited by blonde people, by Chief Donnacona of Hochelaga.  
ANSWER: Jacques **Cartier** [or Jakez **Karter**]  
[10] This other mythical gold city took its name from an equally mythical chief who covered himself in gold dust and jumped into a lake. Walter Raleigh searched for it in the highlands of Guyana.  
ANSWER: El **Dorado** [or **Manoa**]

14. Identify the following about Latin terms used in legal terminology, for 10 points each.

[10] This prerogative writ is granted by the Supreme Court of the United States when it reviews a case from a lower court. This term translates as "apprise" or "inform."

ANSWER: **certiorari** [or writ of **certiorari**]

[10] Granted to Guantanamo inmates in *Boumediene v. Bush*, this other prerogative writ requires a detaining jurisdiction to show why it should keep a person prisoner. This term translates as "you may have the body."

ANSWER: **habeas corpus** [or writ of **habeas corpus**]

[10] Prerogative writs are sometimes called this kind of writ. This term refers to a type of law defined by judges in respect of precedent, following the principle of *stare decisis*. It is distinguished from civil law, and is followed in the U.S. and Britain.

ANSWER: **common** law [or **case** law]

15. It is the first rite through which a Christian child passes, though some sects believe it should be withheld until the person in question can profess their own faith. For 10 points each:

[10] Name this sacrament usually consisting of a blessing and the immersion of a person in water.

ANSWER: **baptism** [accept word forms]

[10] This practice was based on the premise that the church possessed a "treasury of merit" earned by saints that could be applied to sinners. Martin Luther condemned the Catholic Church's granting of these remissions.

ANSWER: **indulgences**

[10] Unlike an indulgence, which is given by the Church, this act of moving a sinner from a state of sin to a state of grace or righteousness is done solely by God.

ANSWER: **justification** [accept word forms]

16. Name the following about US involvement in Iran, for 10 points each.

[10] This former Allied commander was the President of the US when the CIA helped overthrow Mohammed Mossadeq in 1953 during Operation Ajax.

ANSWER: Dwight David **Eisenhower**

[10] This crisis occurred after the American embassy in Iran was captured and its staff taken captive during Jimmy Carter's term. Although it plagued Carter's presidency, this crisis ended soon after he left office.

ANSWER: Iran **hostage** Crisis

[10] The Reagan administration triggered the Iran-Contra affair when they violated this amendment by selling arms to Iran to fund anti-communist efforts in Nicaragua.

ANSWER: **Boland** Amendment

17. This law is a consequence of the first law of thermodynamics and the fact that enthalpy is a state function. For 10 points each:
- [10] Name this law which states that the enthalpy change of a reaction is independent of its pathway. It allows one to find the total enthalpy change by summing the enthalpy changes of intermediate steps.  
ANSWER: **Hess'** law of constant heat summation
- [10] The Born–Haber cycle uses Hess' law to calculate this quantity for an ionic compound. This quantity is defined as the energy released by the formation of a crystal from a metal and a non-metal.  
ANSWER: **lattice** energy [or **lattice** enthalpy]
- [10] When using Hess' law to calculate lattice energy, the enthalpy change for one of the intermediate steps is equal to this quantity for the metal atom. It is defined as the energy needed to remove one electron from the atom.  
ANSWER: first **ionization energy**
18. Identify the following about the paintings of Diego Velázquez, for 10 points each.
- [10] Velázquez depicted himself in this painting that includes a dwarf standing next to a dog. In this painting, a reflection shows Philip IV watching his daughter, the Infanta Margarita.  
ANSWER: *Las **Meninas*** [or *The **Maids of Honor***]
- [10] This painting is sometimes called *Las Lanzas* for the numerous lances in its upper right corner. It depicts Justin of Nassau giving the key to the title Dutch town to the Spaniard Ambrogio Spinola during the Eighty Years' War.  
ANSWER: *The **Surrender of Breda*** [or *La **Rendición de Breda***]
- [10] Francis Bacon has painted several reinterpretations of Velázquez's portrait of one of these people. In Bacon's version, this person is screaming.  
ANSWER: **pope** [the pope is Innocent X]
19. In a poem, one of these animals "came to my water-trough / On a hot, hot day." For 10 points each:
- [10] Identify this animal, which that poem's speaker "dared not kill." In a Rudyard Kipling story, Rikki-Tikki-Tavi protects a family from a pair of them named Nag and Nagaina.  
ANSWER: **snakes** [accept **cobras**]
- [10] This author wrote the aforementioned poem "Snake." He kept falling afoul of obscenity laws with books like *The Rainbow* and *Lady Chatterley's Lover*.  
ANSWER: David Herbert **Lawrence**
- [10] After throwing a log at a snake, the narrator of another poem wishes for its return and compares it to this other literary figure. The man who shoots this beast with a crossbow later laments there being "water, water every where" but "not any drop to drink."  
ANSWER: the **albatross** from "Rime of the Ancient Mariner"

20. Italian architect Renzo Piano recently designed the second-tallest building in Europe, which is a twisting glass pyramid in this city. For 10 points each:

[10] Name this European city home to "The Shard," which surpassed the Canary Wharf skyscraper One Canada Square. It is also home to a giant Ferris wheel—its namesake "Eye"—as well as Westminster Abbey.

ANSWER: **London**, England [or **London**, U.K.]

[10] This Argentine architect of One Canada Square is better known for designing a pair of skyscrapers near KLCC Park joined by the world's highest bridge between two buildings, the Petronas Twin Towers in Kuala Lumpur.

ANSWER: César **Pelli**

[10] This Taiwanese skyscraper surpassed the Petronas Towers as the tallest building in the world in 2004. It consists of stacked inverted trapezoidal prisms and is named for the number of floors it contains.

ANSWER: **Taipei 101** [or **Taipei Yi Ling Yi**]

### Extra

This man worked with his wife Alva on the book *Crisis in the Population Question*, which proposed solutions to Sweden's low birth rate. For 10 points each:

[10] Name this Swedish economist whom the Carnegie Foundation supported in writing a study of race relations in the U.S., titled *An American Dilemma*. That book was cited in *Brown v. Board of Education*.

ANSWER: Gunnar **Myrdal** [or Karl Gunnar **Myrdal**]

[10] Gunnar Myrdal won a Nobel Prize alongside an economist from this country. This country's namesake school of economics focused on individual choice and included Ludwig von Mises and Murray Rothbard.

ANSWER: Republic of **Austria** [or Republik **Österreich**]

[10] Myrdal shared his Nobel with this Austrian economist, who warned that collectivism and central planning will inevitably lead to the loss of freedom and the rise of totalitarianism, in his book *The Road to Serfdom*.

ANSWER: Friedrich August von **Hayek**

A gold funerary mask found at this site was dubbed the "Mask of Agamemnon" by Heinrich Schliemann. For 10 points each:

[10] Name this archeological site. It names a phase of the Greek bronze age which followed the Minoan civilization and was likely destroyed by the Dorian invasion.

ANSWER: **Mycenae** [or **Mycenaean** Greece/Civilization/etc]

[10] The Mycenaean civilization built many of these structures in the tholos, or beehive, style.

ANSWER: **tombs** [or **graves**; or obvious equivalents]

[10] The earlier Minoan civilization had built a palace at Knossos on this island. This island is home to Mount Ida and lies south of mainland Greece.

ANSWER: **Crete** [or **Kriti**]