

1. **This man spread vulgar propaganda against Fulvia before massacring the inhabitants of Perusia during a civil war. In this man's autobiography *Res Gestae*, he refers to his rival Sextus Pompeius as a "pirate." This ruler allegedly cried out, "Quinctilius Varus, give me back my (*) legions!" after his troops were ambushed by Arminius at the Battle of Teutoburg Forest. This founder of the Praetorian Guard ushered in the *Pax Romana* after defeating Mark Antony at Actium. For 10 points, name this successor to Julius Caesar, a member of the second Triumvirate who became the first Emperor of Rome.**

ANSWER: Augustus [or Octavian; or Gaius Octavius]

2. **Two children hold up a Swedish flag in front of five of these objects in a Caspar David Friedrich painting where they represent the stages of life. A nun plays a lute below an orange flag in a Hieronymus Bosch painting named for one of these objects. One of them is the main focus of the painting *Breezing Up*. JMW Turner painted one of these objects for an Anti-(*) Slavery Society meeting in 1840. A pyramid of corpses was painted by Theodor Gericault in painting titled for one of these objects called *Medusa*. For 10 points, name these vehicles, one of which transports colonists in Leutze's *Washington Crossing the Delaware*.**

ANSWER: ships [or obvious equivalents like boats or canoes or kayaks or rafts or nautical vessels; or ship of fools or slave ships or other more specific answers]

3. **A character in this novel ends a three-year vow of silence the day of the Hiroshima bombing. This novel's protagonist loses his memory after being hit by a spittoon and regains it from a snakebite, but soon after, gets castrated. A character in this book meets his wife by seeing her body through a peephole in a sheet. The ending of its first volume juxtaposes the "Tryst with Destiny" speech with a (*) baby-swap carried out by Mary Pereira. This novel's protagonist marries Parvati the Witch, feuds with Shiva-of-the-knees, and has an enormous, runny nose. For 10 points, name this book about telepath Saleem Sinai written by Salman Rushdie.**

ANSWER: Midnight's Children

4. **Section 215 of this law gags people who find out about the acquisition of "tangible things." An appeal against this law was denied because Brandon Mayfield lacked standing to sue. This legislation strengthens NSLs by amending the 1978 FISA Act. Rand Paul and Al Franken voted against a "lone wolf" provision extended to this law in 2011, though Russ Feingold was the (*) only senator to vote against its original version. This legislation controversially permits "sneak and peek" warrants and roving wiretaps. For 10 points, name this law passed in the aftermath of 9/11 which expanded the power of the FBI against terrorism.**

ANSWER: USA PATRIOT Act [or Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 because acronyms]

5. **The derivative of cross section with respect to scattering angle is the square of the "scattering" form of this quantity. The square of the "probability" form of this quantity gives the Born probability of a quantum state. In AC circuits, RMS current equals this property of the current divided by root 2. The log of this property of a pressure wave gives the relative (*) intensity of sound. Damping causes this property to decrease for objects in simple harmonic motion. Like frequency, audio signals can be transmitted by modulating this quantity. In the wave equation, it multiplies the front of the sine function. For 10 points, name this measure of the "height" of a wave.**

ANSWER: amplitude [or scattering amplitude; or probability amplitude; prompt on peak; prompt on magnitude]

6. **This event sparked a rebellion led by Robert Fitzwalter, backed by Prince Louis, against Angevin forces. In the bull *Etsi Kavissimus*, Pope Innocent III annulled the outcome of this action. The defeat of Otto IV by Philip Augustus at Bouvines secured Brittany for France and also prompted this event to occur. Archbishop of Canterbury Stephen (*) Langton argued that this event must occur to renew the Coronation Charter. This action led to the First Barons' War. It occurred at the meadow Runnymede along the Thames in June 1215. For 10 points, name this action forced upon King John, signing a document that limited the power of the English monarch.**

ANSWER: signing the Magna Carta [or signing the Magna Charta; or sealing or other synonyms; or Great Charter instead of Magna Carta]

7. A servant in this novel is fired for bringing shaving water heated to 84° F instead of 86. Characters in this novel are forced to tear apart a ship for fuel after the crew is paid to mutiny against Captain Speedy. One character is drugged with opium by Detective Fix, forcing him to join a troupe of long-nosed clowns. Earlier, a character impersonates a dead rajah in order to rescue (*) Aouda from a funeral pyre. The protagonist of this novel manages to win a 20,000 pound bet with his fellow Reform Club members after Passepartout tells him that he has gained an extra day. For 10 points, name this novel about Phileas Fogg's trip across the globe by Jules Verne.

ANSWER: *Around the World in Eighty Days* [or *Le tour du monde en quatre-vingts jours*]

8. Lehi has a vision of a rod of iron leading to one of these objects in the Book of Mormon. The Sidrat al-Muntaha is one marking the barrier of the Seventh Heaven in Islam. Jews celebrate them on Tu Bishvat and commemorate four of them on Sukkot. Jesus curses one of these objects in Mark 11. The word (*) "Druid" is derived from these objects, which were sacred to the Druids. Both Mahavira and the Buddha achieved enlightenment while sitting next to one. For 10 points, name these objects which were devoted to "Knowledge of Good and Evil" and "Life" in the Garden of Eden.

ANSWER: trees [or plants until "For the 10 points" and prompt afterwards; accept specific kinds of trees such as Tree of Life, banvan tree, etc.]

9. The "special pair", a dimer of BChl, is found in this organelle. A five-step oxidation which takes place in this organelle requires a manganese-iron cluster. Ribulose 1,5-bisphosphate is either carboxylated or oxygenated, depending on CO₂ levels, in this organelle. P680 and P700 are the two reaction centers located in it. Noncyclic electron flow in this organelle provides 9 ATP (*) and 6 NADPH from an electron transport chain. The fluid between its two membranes is called stroma, and is where the Calvin Cycle takes place. For 10 points, name this organelle which has thylakoids, where photosynthesis occurs.

ANSWER: chloroplasts

10. The Mesolithic settlement of Taxila is in this present-day nation. Lollywood films originate from this country. This nation's largest mosque is shaped like a tent, was named for Saudi Arabia's King Faisal, and is in this country's capital, which was built in 1960. Polio is still endemic to this nation, partly due to a widespread myth that the vaccine would cause (*) sterilization. This country's Federally Administrated Tribal Regions include Waziristan and are inhabited by the Pashtun. Urdu is spoken in this country. This is the only Muslim nation with nuclear weapons. For 10 points, name this country which disputes Kashmir with India.

ANSWER: Islamic Republic of Pakistan

11. Edgar Lee Masters wrote about a man with this job who has "a thousand memories and not a single regret" named Jones. Judith Thomson imagined this type of person with a kidney disease in a thought experiment about abortion. David Oistrakh and Giuseppe Tartini were renowned for their skill at this profession. One claw is much larger than the other, in a species of male crabs named for this profession. Sholom (*) Aleichem's stories about Tevye were adapted into a play titled for one of these people. Joshua Bell and Itzhak Perlman have this job. For 10 points, name this job held by a musician on a roof in a Broadway play.

ANSWER: violinists [or fiddlers; prompt on musicians or similar answers]

12. This musical work's theme has an oboe repeat an A minor triad in a dotted quarter-eighth note rhythm, before the horns enter playing the same melody. Riccardo Drigo revived this ballet's score. Four dancers clasp hands, then try to separate, and fall down in the process, in a scene choreographed by Lev Ivanov for a revival of this ballet with Marius (*) Petipa. A character in this work hunts with his buddies Benno and Wolfgang. The sorcerer Rothbart enchants Odile to resemble Siegfried's love interest in this ballet, but the curse is broken when the lovers die together. For 10 points, name this Tchaikovsky ballet in which Odette is transformed into a bird.

ANSWER: *Swan Lake* [or *Lebedinoye ozero*]

13. Irgun was a terrorist cell operating in this historical region. Herbert Samuel was High Commissioner of this area. It was the subject of Winston Churchill's 1922 White Paper. People who take their name from this historical region launched two *intifadas*. Following the Sykes-Picot treaty, the League of Nations granted this (*) mandate to England. Yasser Arafat founded a "liberation organization" for its people. The Balfour Declaration endorsed settlement of this region by European Jews. For 10 points, give this namesake of many of the inhabitants of the West Bank, a 20th century area in modern-day Israel.

ANSWER: Palestine [or Palestinians; prompt on Israel before "intifadas" is read]

14. Gerhard Ertl proposed the mechanism for the synthesis of this compound on a solid catalytic surface. Nernst first used the Third Law of Thermodynamics to prove that this compound could be synthesized efficiently. Because formation of this compound is exothermic by 92 kilojoules, synthesis usually occurs at very high pressures over an (*) iron catalyst. *Rhizobia* catalyzes the reduction of a triple bond to form this compound in root nodules. This compound is made during nitrogen fixation, and, industrially, by the Haber-Bosch process from its two constituent gases. For 10 points, name this compound found in fertilizers with formula NH_3 .

ANSWER: ammonia [or NH3 before it is read]

15. A character in this play tells the story of Dave Singleman, who died on a train wearing green velvet slippers, after being forced to listen to a child recite the US state capitals. In a flashback, a character in this play burns his shoes in a furnace after returning from Boston, and then gets into a fight with his neighbor Bernard. Near its end, the protagonist plants (*) seeds in the middle of the night. A character in this play steals a pen from ex-boss Bill Oliver, and later, the protagonist is convinced by a hallucination of his brother Ben to commit suicide to get life insurance money for Biff. For 10 points, name this Arthur Miller play about Willy Loman.

ANSWER: Death of a Salesman

16. "The Battle on the Ice" is the longest movement of a cantata by this composer about a 13th-Century prince. He adapted his own ballet *Ala i Lolli* into a work with an "Invocation to Veles and Ala," the *Scythian Suite*. A group of hunters are represented by the percussion section in one work by this composer of *Alexander Nevsky*. This composer included a "Troika" movement in his (*) *Lieutenant Kije* suite. The duck and the bird are characters in a work for narrator and orchestra by this man, which is most often performed for children. For 10 points, name this Russian composer of *Peter and the Wolf*.

ANSWER: Sergei Prokofiev

17. The big O complexity of bogosort is this function of N, times N. Fully crossed experimental designs are named for this function. The Lagrange error of an nth order Taylor approximation is inversely proportional to this function of n plus one. The nth derivative of x to the n equals this function of n; thus, it's in the denominator of the (*) Taylor series of e to the x. This function is recursively defined on n as n times this function of n minus 1. If all elements are distinguishable, this function gives the number of ways to permute N elements. For 10 points, name this function symbolized by an exclamation point, the product of all integers less than N.

ANSWER: factorial

Note to moderator: Read the full answerline of this question to yourself before reading the tossup to the teams.

18. Waste from the production of this commodity was originally used by the Kingsford Company to make charcoal. The Flivver was known as the "<this> of the air." These devices were produced for many years in a Highland Park factory. Sellers of these devices were forced to purchase subscriptions to "The International Jew" or "The (*) Dearborn Independent." This commodity could legendarily be any color "as long as it's black." This item, also called the "Tin Lizzy," was the first to be mass-produced using an assembly line. For 10 points, name this first car affordable to middle-class Americans, created by the Ford Motor Company.

ANSWER: the Ford Model-T [or the Tin Lizzy until mention; prompt on "car" or "automobile" or similar answers by asking "which one"; accept Ford cars or similar answers before "Tin Lizzy" is read and prompt on it afterwards]

19. This poet wrote that, “Those that I fight I do not hate, those that I guard I do not love” in a poem beginning, “I know I shall meet my fate.” This poet repeated the line, “A terrible beauty is born” in his most politically-charged work. In another of his poems, “Mere anarchy is loosed upon the world” since “the falcon cannot (*) hear the falconer.” This author created a speaker who announces that, “I will arise and go now” to “The Lake Isle of Innisfree.” This poet asked, “what rough beast, its hour come round at last, slouches toward Bethlehem to be born?” For 10 points, name this Irish poet of “The Second Coming.”

ANSWER: William Butler Yeats

20. While Menelaus was sailing to this land for his grandfather’s funeral, Helen was abducted. The Diktean Cave is located in this place. Two kings of this location later became judges of the dead. For his Seventh Labor, Heracles had to capture a bull that was ravaging this land.Adrastea and Amalthea raised a child on its Mount (*) Ida. After defeating Athens in war, one of its kings required seven men and seven women to be brought as sacrifice to this island. Ariadne helped Theseus negotiate the Labyrinth and kill the Minotaur on this island. For 10 points, name this birthplace of Zeus and home of the Minoan civilization.

ANSWER: Crete [prompt on less specific answers like “Greece”]

TB: This novel, which is introduced by a preface calling it a “just history of fact”, was followed by a sequel in which the protagonist destroys a wooden idol in Siberia. This novel’s protagonist teams up with Xury on a fishing expedition after he gets captured by Moorish pirates, and then he travels to a Brazilian plantation. This book’s cover depicts a single (*) footprint in sand. A man known as the “Spaniard” is captured during a war against cannibals in this novel. This book’s protagonist explores the Pyrenees with his Christianized friend Friday at this book’s end. For 10 points, name this novel by Daniel Defoe whose protagonist gets stuck on a desert island.

ANSWER: Robinson Crusoe

1. William Le Baron Jenney was known as the “father” of these structures. For 10 points each:

[10] Name these buildings. Dankmar Adler and Louis Sullivan designed an early one in St. Louis called the Wainwright Building.

ANSWER: **skyscrapers** [prompt on **office buildings** or similar answers]

[10] The construction of skyscrapers depended heavily on the cheap availability of this material, after the Bessemer process permitted it to be easily commercialized. Most skyscrapers’ frames are made of this material.

ANSWER: **steel** [do not accept or prompt on “stainless steel”]

[10] The man often credited with inventing skyscrapers, with Chicago’s 1889 Tacoma Building, has this surname. This is also the surname of an architect who designed the Dymaxion car and popularized the use of geodesic domes.

ANSWER: **Fuller** [or George A. **Fuller**; or Richard Buckminster **Fuller**]

2. Answer the following about the Ninth Crusade, for 10 points each:

[10] It was led by this English king who expelled all the Jews from England and fought against William Wallace to prevent Scottish independence.

ANSWER: **Edward I** [or **Edward Longshanks**; prompt on partial answer]

[10] Edward was attempting to rendezvous with the very weak remnants of this crusader kingdom centered in Acre, which was established during the First Crusade centuries before.

ANSWER: Kingdom of **Jerusalem**

[10] There was another Crusade after the Ninth: one led by Peter III, king of this Spanish region. King Ferdinand, from this region, married Isabella of Castile.

ANSWER: **Aragon**

3. The sum of this quantity around a closed current loop must be zero. For 10 points each:

[10] Name this quantity, the electric potential difference between two points in a circuit. It’s supplied by a battery.

ANSWER: **voltage** [prompt on **electromotive force** or **emf**]

[10] Though only relative values of voltage are usually relevant, this object is commonly used as a reference, since it acts as an infinite source or sink for excess charges. Three parallel lines represent this object in circuit diagrams.

ANSWER: the **ground** [or **grounding**; or the **Earth**; or same-knowledge equivalents]

[10] For a resistor in an electrical circuit, this quantity equals the voltage drop through the resistor multiplied by the current through the resistor, according to a law discovered by James Joule.

ANSWER: the **power** of resistive heating in the resistor [or **P**]

4. In a characteristic novel by this author, a little boy hangs himself and his siblings because there isn’t enough food to eat. For 10 points each:

[10] Name the British author who enjoyed placing his characters, like Jude the Obscure and Tess Durbeyfield, in thoroughly unenjoyable circumstances.

ANSWER: Thomas **Hardy**

[10] Michael Henchard sells his wife to a sailor, then finds out that she and his baby daughter are both alive, in this Hardy novel.

ANSWER: *The **Mayor of Casterbridge***

[10] Tess is raped by this character in *Trantridge*. Later, Tess is obligated to become his mistress, but then she stabs him and tragically gets executed as punishment.

ANSWER: **Alec** d’Urberville

5. This adjective describes multiple works by Alexander Borodin as well as two symphonies by the Austrian composer of the *Great C Symphony*. For 10 points each:

[10] Name this adjective describing Schubert’s eighth symphony, which only has two written movements.

ANSWER: “**unfinished**” [or “**incomplete**”; or synonyms]

[10] This Austrian composer left his tenth symphony unfinished at his death. This composer’s fifth symphony contains an often-performed “Adagietto” movement. He also wrote the song cycle *Kindertotenlieder*.

ANSWER: Gustav **Mahler**

[10] This German composer of the *Romantic Symphony* and a famous *Te Deum* was struck with the “curse of the ninth” when he could not finish his ninth symphony before his death.

ANSWER: Anton **Bruckner**

6. This quantity is represented by the area of a triangle lying to the right of surpluses, but left of the market-clearing price. For 10 points each:

[10] Name this quantity which is nonzero due to government influence on issues like price ceilings or taxation.

ANSWER: deadweight loss

[10] Zero deadweight loss can be achieved in this situation, where the consumer surplus also goes to zero. In this situation, each consumer purchases a product for the maximum price he'd individually pay for it.

ANSWER: perfect price discrimination

[10] Price discrimination is only possible in this type of market, which has only one seller. John D. Rockefeller's Standard Oil was an example.

ANSWER: monopoly [or word forms]

7. This event inspired the organization of the Stamp Act Congress eleven years following it. For 10 points each:

[10] Name this 1754 gathering of colonial representatives named for the city at which it took place. A "Plan of Union" created at this Conference would later influence the Articles of Confederation and the Constitution.

ANSWER: Albany Conference [or Albany Congress; or the Conference of Albany]

[10] This Founding Father wrote the "Albany Plan of Union." This inventor of bifocal glasses and author of *Poor Richard's Almanack* apocryphally discovered lightning while flying a kite.

ANSWER: Benjamin Franklin

[10] To compel Americans to get involved in the Revolution, Ben Franklin created a political cartoon with a snake divided into parts bearing the names of the colonies with this three-word phrase appearing at the bottom.

ANSWER: "Join, or die"

8. Answer the following about biological roles of vitamins, for 10 points each:

[10] Vitamin A is the precursor for an aldehyde, alcohol, and carboxylic acid named for this tissue. This light-sensitive tissue in the back of the eye contains rhodopsin.

ANSWER: retina

[10] Vitamin C is vital for the synthesis of this protein's fibrils. This massive protein is almost entirely composed of glycine and proline and is actually partly synthesized outside the cell.

ANSWER: collagen [or collagen I; or other numbered variants of collagen]

[10] Pantothenic acid, or vitamin B5, is a precursor to this coenzyme, which forms an ubiquitous thioester in biochemistry. This compound is linked to an acetyl group in a compound fed into the citric acid cycle.

ANSWER: coenzyme A [or CoA; or CoASH; or acetyl CoA or acetyl coenzyme A; prompt on partial answer]

9. This author guides Dante through Hell. For 10 points each:

[10] Name this Roman poet of the *Eclogues* and the *Aeneid*.

ANSWER: Virgil [or Publius Vergilius Maro]

[10] This Roman goddess is Aeneas' main adversary for much of the *Aeneid*. She stirs up the Furies and confuses Turnus to evacuate aboard a ship off the battlefield. The peacock is sacred to this goddess.

ANSWER: Juno [do not accept or prompt on "Hera"]

[10] Virgil invented this fictional locale of bucolic peace as the homeland of the god Pan for his *Eclogues*. It shares its name with a real, mountainous area of Greece.

ANSWER: Arcadia [or Arcady]

10. Answer the following about intellectual contributions made by Richard Dawkins, for 10 points each:

[10] Dawkins is known for his strong support of this biologist's ideas. This man's conception of natural selection influenced the eugenics movement with the idea of "survival of the fittest."

ANSWER: Charles Darwin

[10] Dawkins coined this word in his book *The Selfish Gene*. These objects are fundamental units of culture and appear to be passed between individuals in a way similar to actual genes.

ANSWER: memes

[10] Dawkins argued against intelligent design in a book criticizing this classic teleological argument: the idea that all the world's complexity necessitated some sort of a creator.

ANSWER: watchmaker argument

11. Answer the following about intermolecular attractive forces, for 10 points each:

[10] Nitrogen, oxygen, and this element immediately to oxygen's right on the Periodic Table can form hydrogen bonds. It's also the most electronegative element.

ANSWER: **fluorine** [or **F**]

[10] Octane has a higher boiling point than heptane because of these interactions, which are caused by instantaneous induced dipoles and are particularly strong for larger molecules.

ANSWER: **London** dispersion forces [or London **dispersion** forces; prompt on **van der Waals** forces]

[10] The highest boiling points, however, belong to molecules with this type of structure. This type of bonding is exemplified by diamond and silicon carbide, which, though not ionic, have long-range order similar to crystals.

ANSWER: **covalent network** bonding [or **network covalent** bonding]

12. Though members of the Titsingh mission did this action, members of the Macartney mission didn't. For 10 points each:

[10] Name this traditional gesture of respect which involves three kneelings and nine "knockings of the head" against the floor.

ANSWER: the **kowtow** [prompt on **prostration** or word forms; prompt on **bowing** or word forms]

[10] Kowtowing was expected if you encountered the holder of this hereditary office, whose final holder, Pu'yi, abdicated in 1912. The Mandate of Heaven governed the succession of this office.

ANSWER: **Emperor** of **China** [or **Chinese emperor** or equivalents; or **Huangdi**]

[10] The longest-serving emperor of China was this man, who led at the peak of the Qing Dynasty. His grandson, the also-long-serving Qianlong emperor, was the one snubbed by Macartney.

ANSWER: **Kangxi** Emperor [or **Shengzu**]

13. Rig taught his son Jarl how to use these objects. For 10 points each:

[10] Name these objects which Odin hanged himself in order to learn. These symbols of magic were effectively the alphabet in Norse culture.

ANSWER: **runes**

[10] Specifically, Odin hanged himself for this many days and nights to learn the runes. This is the number of worlds accessible from Yggdrasil.

ANSWER: **nine** [or **9**]

[10] Because he was god of these people, Bragi was often imagined as having runes inscribed on his teeth. These poets and bards in Scandinavian culture wrote poetry often contrasted with Eddic poetry.

ANSWER: **skalds**

14. Answer the following about early 20th century American nonfiction, for 10 points each:

[10] Satirist H. L. Mencken was known as the "Sage" of this Eastern city. In *The Narrative of the Life of Frederick Douglass*, Douglass lives with the Aulds in this city before moving north.

ANSWER: **Baltimore**, Maryland

[10] This muckraker wrote tracts like *The Brass Check* to expose corruption in American journalism, but he's probably best-known for writing about how rats ended up in sausages in *The Jungle*.

ANSWER: Upton **Sinclair**

[10] This author's 1917-1932 *Selected Essays* outlined his critical theory, such as his idea of the "objective correlative." This American poet converted to Anglicanism and became a British citizen in 1927.

ANSWER: Thomas Stearns **Eliot** [or TS **Eliot**]

15. This organization established the Bali Package, a rare successful endeavor, in December 2013. For 10 points each:

[10] Name this international organization which continues to carry out the failed Doha Development Round. It was formed under the Marrakech Agreement in 1995.

ANSWER: **World Trade Organization** [or the **WTO**]

[10] This European nation opposes a free trade deal between the US and the EU. This nation's Socialist president has moved to the right by appointing Manuel Valls as his prime minister.

ANSWER: **France**

[10] A free trade agreement has been put in place by MERCOSUR, for the countries on this continent. This continent is home to protectionist leaders like Cristina Fernandez, Dilma Rousseff, and Nicolas Maduro.

ANSWER: **South America** [or **Sur America**]

16. Answer the following questions about brothers, for 10 points each.

[10] In 2013, a trade reunited Marcus Morris with his brother Markieff in this NBA team. Charles Barkley led this team to the Finals in 1993, and Steve Nash spent most of his career here.

ANSWER: Phoenix Suns [accept either underlined answer]

[10] This directing pair based *O Brother, Where Art Thou?* on the Odyssey. They are better known for directing *The Big Lebowski* and for showing a guy getting shoved into a woodchipper in *Fargo*.

ANSWER: Joel and Ethan Coen [or Ethan and Joel Coen; or the Coen brothers]

[10] Constant feuding between Liam and Noel Gallagher eventually lead to the breakup of this British band, who performed “Supersonic” and a song that wonders “Maybe / You’re gonna be the one that saves me”.

ANSWER: Oasis

17. A gray house and a barn are situated in the horizon of this painting. For 10 points each:

[10] Name this 1948 painting depicting a polio-stricken member of the Olson family wearing a pink dress.

ANSWER: Christina’s World

[10] *Christina’s World* is the most iconic painting by this American painter, also known for his multiple portraits of his neighbor Helga Testorf.

ANSWER: Andrew Wyeth

[10] *Christina’s World* and many of the Helga portraits were done using this medium which utilizes a quick-drying solution. Botticelli’s *Birth of Venus* was done in this medium.

ANSWER: tempera

Note to moderator: Read _____ in the following bonus as “Blank”. “Major Blank de Coverly”, for instance.

18. Name some novels in which the author couldn’t be bothered to give the characters names, for 10 points each:

[10] Major _____ de Coverly is the boss of Major Major Major Major in this Joseph Heller novel depicting the insanities of war.

ANSWER: Catch-22

[10] In this 1982 Pulitzer Prize-winning novel set in the deep South, Mr. _____ mistreats Celie, his wife, but Celie falls in love instead with Shug Avery.

ANSWER: The Color Purple

[10] Characters like “the girl in dark glasses” and “the car thief” appear in this 1995 novel whose main protagonist is known only as the “doctor’s wife.”

ANSWER: Blindness [or *Ensayo sobre a cegueira*]

19. Name some conservationists, for 10 points each:

[10] The marine conservationist movement was kicked off by this Frenchman, who directed the documentary *The Silent World* based on some of his deep-sea dives. He also invented the Aqua-Lung.

ANSWER: Jacques Costeau

[10] This anthropologist was murdered in 1985 while conducting research in Rwanda; many people believe the death was orchestrated by poachers angry about her opposition to poaching of gorillas.

ANSWER: Dian Fossey

[10] This Scottish-American environmentalist founded the Sierra Club and was a huge advocate for the creation of Yosemite National Park.

ANSWER: John Muir

20. Exception handling is used to deal with this class of errors. For 10 points each:

[10] Name these errors which occur while a program is actually executing. An example of this type of error is a lack of available memory in which data can be stored.

ANSWER: run-time errors

[10] In C++, this property of a variable can be determined at run-time using RTTI, though it’s often checked at compile-time as well. Examples of this property for data include string, int, or boolean.

ANSWER: data type

[10] During compilation, errors can also occur during code generation, or the translation of the source code into this type of code. This type of code is directly comprehensible by the CPU, and is a step lower than assembly code.

ANSWER: machine code