

## DEES 2014: Desperate Editors Elicit Support

Edited by Will Alston, Rob Carson, Mike Cheyne, Ike Jose, Shan Kothari, John Lawrence, Brian McPeak, Victor Prieto, and Tejas Raje, with additional help from Saul Hankin, Mik Larsen, Jacob Reed and Matt Weiner.

Packet by McGill A (Sam Baker, Sebastian Drake, Derek So, Joe Su) and Penn B (Sarita Jamil, David Xu, David Ferguson, Max Isenberg)

### Tossups

1. One orchestral work by this composer has a main theme based on the notes “F - E-natural - D-flat - C - B-flat”. A programmatic symphony by this man opens with the title character’s theme stated immediately by a bass clarinet and three bassoons. That piece by this composer depicts the title hero wandering in the Alps and lamenting Astarte, and was based on a poem by Lord Byron. Another piece by this composer of the *Manfred Symphony* is a march written for Serbs wounded in fighting the Ottomans. He wrote an overture that opens with four cellos and two violas playing the hymn “God preserve they people”, quotes both “God save the Czar” and “La Marseillaise”, and calls for cannon fire at its conclusion. For 10 points, name this Russian composer of the *Marche Slave* and the *1812 Overture*.

ANSWER: Piotr Ilyich Tchaikovsky

2. An article about this event noted that “half-naked dead man” hangs “around our necks” and described the origins of the song “Lunchbox.” Brooks Brown was told to go home immediately before it took place and later wrote the book *No Easy Answers* about it. Apocryphal stories claim that Cassie Bernall was asked if she believed in God shortly before she died during this event. It occurred on Hitler’s birthday, and its perpetrators had earlier created special levels of the game *Doom*. This event was perpetrated by Eric Harris and Dylan Klebold, whose actions prompted moral panics over goth culture. For 10 points, name this April 1999 mass shooting that took place at a Colorado high school.

ANSWER: Columbine High School shooting

3. An author from this country created a protagonist who eats matches after her lover dies while having sex. A novel set in this country is named for a man who continuously carries a copy of *Don Quixote*; that title character is bludgeoned to death, buried, and then uninterred so that he can be properly killed by a firing squad. A novelist from here created a character who fell in love with Susana San Juan and ventures to the entirely dead town of Comala. A “novel in monthly installments with recipes, romances and home remedies” that is set in this country centers on Tita de la Garza and is titled *Like Water for Chocolate*. Harriet Winslow requests the dead body of Ambrose Bierce in a novel that is set here. For 10 points, name this home country of Laura Esquivel and the author of *The Old Gringo*, Carlos Fuentes.

ANSWER: Mexico

4. The variance of this quantity for fluid particles is related to the energy dissipation and the kinematic viscosity by independent predictions of Heisenberg and Yaglom. The non-linearity of the Navier-Stokes equations comes from using the chain rule when calculating this quantity for a fluid parcel. In a simple harmonic oscillator, the maximum value for this quantity is the amplitude multiplied by omega squared, and power is proportional to charge squared times this quantity squared according to Larmor’s formula. Velocity squared divided by radius gives this value for a body revolving along a circle of radius r. The amount of this due to gravity is about ten meters per second squared and it’s the second time derivative of position. For 10 points, force is mass times what quantity?

ANSWER: acceleration

5. Bogus Point is located on the southern shore of this body of water and houses the Braddock Point lighthouse. The largest freshwater sand dunes in the world are located by one beach on this body of water. The interior of this body of water contains the remnants of the glacial Admiralty Lake. The first person to swim across this lake was Marilyn Bell. The Golden Horseshoe wraps around the western end of this lake, which is overlooked by the rapidly eroding Scarborough Bluffs and is the southern terminus of the Rideau Canal. The Welland Canal is used by ships to bypass Niagara Falls when travelling between Lake Erie and this body of water, which empties into the St. Lawrence River. For 10 points, name this easternmost Great Lake, whose waterfront includes Toronto.

ANSWER: Lake Ontario

6. In a philosophical dialogue from this modern-day country, the king of the Khazars is shown that human flourishing consists in union with the tenth and lowest divine intellect. That work is the *Kuzari* by Judah Halevi. A school from this nation included the author of *Metaphysical Disputations* and a just war theorist who condemned his nation's actions in the Americas. An existentialist from this country discusses "men of flesh and bone" burdened with awareness of their mortality in *The Tragic Sense of Life*. Another philosopher from this country declared "I am myself and my circumstances" and denounced the "mass-man" in *The Revolt of the Masses*. For 10 points, name this modern-day country once home to José Ortega y Gasset, Miguel de Unamuno, and the School of Salamanca.

ANSWER: Spain [or España]

7. This leader succeeded a man who wrote a book called *The Gospel According to the Ghetto* and who fled the country in 1997 after being accused of sodomy. This leader worked with Kim Il-Sung to create the elite Fifth Brigade, which he used to target political opponents in the *gukurahundi* campaign. This leader ordered a slum-clearing called "drive out the rubbish" and was preceded in his current office by Canaan Banana. This leader feuded with Joshua Nkomo as the leader of ZANU-PF and was elected Prime Minister after Ian Smith lost power. In more recent years, his government has been opposed by Morgan Tsvangirai. For 10 points, name this current President of Zimbabwe.

ANSWER: Robert Mugabe

8. A character created by this author becomes a necrophile when he takes possession of a woman's body on Frog Mountain and becomes a serial killer after he burns his cabin down and starts to live in caves. The protagonist of another novel by this author cauterizes a gunshot wound by heating a pistol barrel and travels with his friend Lacey Rawlins while looking for work in Coahuila. This author wrote another novel that ends with its unnamed protagonist being brutally murdered in an outhouse during a meteor shower; characters in that book include scalpers led by John Glanton. This man wrote about Lester Ballard in *Child of God* and created the character of John Grady Cole in the first novel of his *Border Trilogy*, titled *All the Pretty Horses*. For 10 points, name this author of *Blood Meridian*.

ANSWER: Cormac McCarthy

9. This artist created a triptych in which each section features a dynamic red line with sparsely placed black splotches; that set of works is his *Blue I, II, and III*. This artist created a huge tile wall for the Wilhelm Hack Museum and reinterpreted paintings by Hendrik Martenszoon Sorgh and Jan Steen in his *Dutch Interiors*. A folded newspaper reading "jour" and a tree with an eye in it appear to the right of the wavy lines that represent the title object of one of his paintings, while the title character of another is depicted as a guitar with an elongated neck and a diamond-patterned shirt. For 10 points, name this artist of *The Tilled Field* and *The Harlequin's Carnival*, a Catalan surrealist who also painted *Dog Barking at the Moon*.

ANSWER: Joan Miró i Ferrà

10. One of the shortest of these events is named after the village of Laschamp. The Jurassic Quiet Zone is a span of time during which these events happened very often or not at all. The cause of these events is also the cause of the intensifying South Atlantic Anomaly, where the van Allen belts are coming closer to the Earth. The effects of these events create “stripes” validating the Vine-Matthews-Morley hypothesis. Simulations of the geodynamo predict the timing of these events. Sea-floor spreading was discovered by examining the effects of these events upon iron-containing rocks at the ocean’s floor. For 10 points, name these events in which the north and south pole swap places.

ANSWER: **geomagnetic reversal** [accept descriptions such as Earth’s **magnetic field flipping**]

11. This character arranged a marriage between a daughter of Alector and his own illegitimate son Megapenthes. A pivotal event in this man’s life occurred during his attendance at the funeral of his grandfather Catreus. This man’s only daughter gave birth to Tisamenus after marrying Orestes. After the death of his steersman Canobus, this man received advice from the nymph Eidothea on the island of Pharos that allowed him to capture Proteus. This father of Hermione was shot by Pandarus after soundly defeating Paris in a duel. During the sack of Troy, he killed Deiphobus but spared Deiphobus’s wife due to her beauty, taking her back to Sparta with him. For 10 points, name this king, the son of Atreus, brother of Agamemnon, and husband of Helen.

ANSWER: **Menelaus**

12. Every finite group with this property is solvable, which is equivalent to the statement that non-cyclic finite simple groups never have this property according to the Feit-Thompson theorem. If a subgroup of the symmetric group on  $n$  elements has *this property*, then it is also a subgroup of the alternating group on  $n$  elements. A graph with zero or two vertices with this property has at least one Eulerian circuit. The Fourier series of periodic functions with this property has only sine terms. If a polynomial has this property, its graph has an end that goes to infinity and another that goes to minus infinity. Groups with this property cannot have a subgroup with order 2. For 10 points, what is this property of either a vertex or monomial that has its degree indivisible by 2?

ANSWER: **odd** order [or **odd** degree]

13. The "pioneer" types of these structures grow faster than normal and can penetrate lamellopodia. The bacterial protein FtsZ bears a remarkable similarity to the composition of this structure. A family of tau proteins encoded by the MAPT gene stabilizes these structures, as does the anti-cancer drug paclitaxel, or taxol. They go through rescue and catastrophe phases in a process called dynamic instability. Dyneins and kinesins mechanically "walk" along these structures. During mitosis, spindle fibers made from these structures attach to the kinetochore to separate chromosomes. For 10 points, identify these structures that make up the cytoskeleton with intermediate filaments and microfilaments.

ANSWER: **microtubules** [prompt on **spindle fibers** until mention]

14. Gabriele Marranci conducted a three-year study of members of this religion in prison. A paper on “The Idea of an Anthropology of” this religion critiques Ernest Gellner’s swinging-pendulum theory of it. A book about this religion contrasts its “illuminationism” in one nation with the activist, moralist style of its practice in another. The book *What Went Wrong?* theorizes about the relationship between this religion and modernity. A term derived from this religion is contrasted with “McWorld” in the title of a Benjamin Barber book. “The Clash of Ignorance” by Edward Said attacks Samuel Huntington’s predictions of greater conflicts between adherents and non-adherents of this religion. For 10 points, name this religion that Clifford Geertz compared in Morocco and Indonesia.

ANSWER: **Islam** [accept **Muslims**]

15. This work relates the tale of Belpheobe, a woman who was born after her mother is impregnated by the rays of the sun. In that section of this work, Diana takes Belpheobe to “the first seminary of all things that are born to live and die” called the Garden of Adonis. In a later section, Satyrane finds Florimell’s girdle and saves her from a witch. “The ever-whirling wheel of change” is referenced at the beginning of this work’s two mutability cantos, which were intended as part of a book on “constancy.” Like its author’s *The Shepherd’s Calendar*, it features a shepherd named Colin Clout. The third book of this work centers on Lady Britomart, a female knight who embodies chastity. For 10 points, name this long poem featuring the Red Crosse Knight, an incomplete epic poem by Edmund Spenser.

ANSWER: *The Faerie Queene*

16. This ruler failed to marry his first daughter, Irene, to Valdemar Christian of Denmark because Valdemar didn’t convert to Orthodoxy. This ruler’s mother changed her name from Xenia to Martha while living in hiding as a nun, and his father was returned by the Truce of Deulino. This ruler’s diplomats ceded Ingria in the Treaty of Stolbovo and stopped the incursions of Sigismund III. This son of the patriarch Filaret was hiding in the Hypatia Monastery when the *zemsky sobor* announced his election. Ivan Susanin’s protection of this tsar was memorialized by Mikhail Glinka. For 10 points, name this ruler whose accession ended the Time of Troubles, the first Romanov tsar.

ANSWER: Michael Romanov [or Michael I; or Mikhail Fyodorovich Romanov; prompt on “Michael” or “Mikhail” until “Romanov” is read and accept either after that]

17. In this nation, the proposed Lekki Port will begin operations in 2018. After the governor of this country’s central bank suggested that nearly 50 million dollars were missing from oil revenues, its finance minister argued that only 10.8 million dollars were missing. The Eko Atlantic district is a planned region in this country’s largest city which has been blamed for degrading the coastline. In this nation, oil pipelines and platforms have been attacked by rebel group MEND, which seeks economic liberation for its namesake region. This country’s largest conglomerate is named after Aliko Dangote, the richest man in Africa. In 2014, 276 schoolgirls in this country were kidnapped by terrorist group Boko Haram. For 10 points, name this nation currently led by Goodluck Jonathan, the most populous country in Africa.

ANSWER: Nigeria

18. This country’s constitution originally mandated that 30 percent of its House seats be given to an ethnic minority, one of whose members had to be the Vice President. This country’s first High Commissioner was Garnet Wolseley while it was under British control, and the London and Zurich agreements later led to its independence from Britain. The TMT-backed *taksim* movement in this country clashed with a movement backed by EOKA and bishop Makarios III, the *enosis* movement. This country was invaded in 1974 by a neighbor following a Greek-backed coup d’etat. For 10 points, name this island country whose northern half is a Turkish-recognized breakaway state.

ANSWER: Republic of Cyprus [or Kypros; or Kypriake Republika; or Kıbrıs Cumhuriyet]

19. One character in this work admits that she did wrong to sacrifice her youth to a man three times her age before getting the pneumonia that finished her. Another character in this work points out that it’s not mere chance that the two sofas in his current room are a “livid green” and “wine-red.” A speech in this work compared a certain character to a well-trained dog that comes when his mistress calls; he is also called a coward repeatedly and strokes an ornamental bronze mantelpiece in its climax. Another character in this work claims that she dropped her baby off a balcony while in Switzerland, which causes her husband to kill himself. In this play, a character dismisses torture-chambers, fire and brimstone, and the “burning marl” as old wives’ tales before realizing that “Hell is other people.” For 10 points, name this play by Jean-Paul Sartre.

ANSWER: No Exit [or Huis Clos]

20. One aria in this opera has a coloratura passage beginning with a turn on A, followed by eight eighth notes on high C, and a descent down a fifth to F; that passage is then repeated down a third. One character in this opera forgives the woman who was ordered to stab him in the aria "*In diesen heil'gen Hallen*". At the end of the first act of this opera, several characters can sing only the sounds "Hm! Hm! Hm! Hm!" in a quintet, after their mouths have been padlocked to prevent them from lying. A soprano in this opera has to hit a high F6 in the aria "*Der Holle Rache*". The protagonist of this opera tries to rescue Pamina from Sarastro with the help of the birdcatcher Papageno, on orders from the mysterious Queen of the Night. For 10 points, name this *singspiel* by Mozart, titled after a musical instrument.

ANSWER: *The Magic Flute* [or *Die Zauberflöte*]

21. This man's father died in Ur of the Chaldees. From that place, he traveled with his grandfather and uncle to go to Canaan, ultimately settling in Haran. To prevent quarreling over cattle, his traveling companion suggested they part ways and allowed this man to choose left or right. This man fathered the patriarchs of the Moabites and Ammonites when his two daughters got him drunk so that he would impregnate them. This man offered his virgin daughters instead of his two angel visitors to a mob outside his door. Those angels helped this man and his family leave that city which was about to be destroyed because he was the only righteous man in it. For 10 points, name this nephew of Abraham whose wife turned into a pillar of salt when she turned back to look upon the destruction of Sodom and Gomorrah.

ANSWER: Lot

## DEES 2014: Desperate Editors Elicit Support

Edited by Will Alston, Rob Carson, Mike Cheyne, Ike Jose, Shan Kothari, John Lawrence, Brian McPeak, Victor Prieto, and Tejas Raje, with additional help from Saul Hankin, Mik Larsen, Jacob Reed and Matt Weiner.

Packet by McGill A (Sam Baker, Sebastian Drake, Derek So, Joe Su) and Penn B (Sarita Jamil, David Xu, David Ferguson, Max Isenberg)

### Bonuses

1. The assumption that every degree of freedom had to contribute one half  $kT$  to the energy of these things led to the ultraviolet catastrophe. For 10 points each:

[10] Name these idealized objects which reflect no light and emit electromagnetic radiation with a continuous spectrum.

ANSWER: **black body**

[10] The Stefan-Boltzmann law states that this quantity for a blackbody is proportional to the fourth power of the temperature.

ANSWER: **power** of the emitted radiation

[10] Wien's displacement law says that the temperature is inversely proportional to this value for the wavelength distribution.

ANSWER: **peak** (accept obvious equivalents like **maximum** or **highest point**)

2. Scandinavia wasn't that exciting in the 19th century. Answer some questions about it anyway, for 10 points each.

[10] This country was united under the Swedish monarchy during the 19th century. It was previously in longstanding union with Denmark, which is one reason why its language is far closer to Danish than Swedish.

ANSWER: Kingdom of **Norway** [or Kongeriket **Norge**]

[10] A Danish king of this name ceded Norway to Sweden in order to avoid an occupation of Jutland. A much earlier ruler of the Palatinate with this name was known as the "Winter King."

ANSWER: **Frederick** [or **Frederik**; accept **Frederick** VI or **Frederick** V or **Frederick** the Winter King]

[10] In January 1814, the United Kingdom and Sweden signed this peace treaty with Denmark and Norway to end hostilities of the Napoleonic Wars.

ANSWER: Treaty of **Kiel**

3. Answer questions about some fan theories about movies, for 10 points each:

[10] One theory is that the title character of *Ferris Bueller's Day Off* and his girlfriend Sloane are imaginary friends of this character, who wears a Red Wings jersey and wrecks his dad's Ferrari.

ANSWER: **Cameron Frye**

[10] A plausible theory is that the end of this Scorsese movie is actually the main character's fantasy. In it, the Robert De Niro-played Travis Bickle rescues the child prostitute Iris and is treated as a hero.

ANSWER: **Taxi Driver**

[10] Throughout *Inception*, Dom Cobb claims that his totem is a top that he spins, leaving the ending of the film ambiguous. However, it is theorized that his actual totem is this item, which he is only seen wearing in dream scenes.

ANSWER: his **wedding ring**

4. This artist filmed himself dancing to “Gangnam Style” in handcuffs and co-curated the “Fuck Off” exhibition in 2000 with Feng Boyi. For 10 points each:

[10] Identify this Chinese dissident artist of *Han Dynasty Urn with Coca-Cola Logo*, who designed the “Bird’s Nest” stadium for the 2008 Olympics.

ANSWER: Ai Weiwei

[10] In 2010, Ai filled the floor of the Tate Modern’s Turbine Hall with millions of porcelain replicas of the seeds of this flower. Vincent van Gogh created a series of paintings of these flowers for the Yellow House in Arles.

ANSWER: sunflowers [or tournesols]

[10] Ai collaborated on the Beijing National Stadium with this Swiss architectural firm, whose two senior partners made their names by converting the Bankside Power Station into the Tate Modern.

ANSWER: Herzog & de Meuron Basel Ltd. [or Herzog & de Meuron Architekten; or Jacques Herzog and Pierre de Meuron]

5. This country was led by John Curtin, who was imprisoned for refusing to get a medical examination required for conscription in World War I. For 10 points each:

[10] Name this country, whose more recent Prime Ministers have included Tony Abbott.

ANSWER: Commonwealth of Australia

[10] This World War II-era Prime Minister of Australia served for a record 18 years. After an electoral defeat, he formed the Liberal Party to provide conservative opposition to the Labor Party.

ANSWER: Robert Menzies

[10] Menzies built credit among the middle class by calling them by this name, which titles a notable 1942 speech he made emphasizing his connections to ordinary people.

ANSWER: The Forgotten People

6. Charles-Louis Hanon wrote a series of these called *The Virtuoso Pianist*, and Charles-Valentin Alkan’s set of twelve in all the minor keys ends with “The Feast of Aesop”. For 10 points each:

[10] Name these technical studies of which Franz Liszt wrote “Transcendental” ones.

ANSWER: etudes

[10] Liszt was a student of this Austrian composer and pianist who wrote several collections of etudes, such as *160 Eight-Measure Studies* and *The School of Velocity*.

ANSWER: Carl Czerny

[10] In 1812, Czerny gave the Vienna premiere of this piano concerto in E-flat major by his teacher, which begins with three cadenzas for the piano, punctuated by orchestral tutti chords.

ANSWER: Ludwig van Beethoven’s Piano Concerto No. 5 in E-flat major, Op. 55 “Emperor” [accept either underlined part]

7. Beowulf is considered a wise and good king, but he had at least one enemy who wasn’t a monster. For 10 points each:

[10] Name this boastful character who immediately dislikes Beowulf and makes sly comments about him during dinner, until Beowulf points out that he has been unable to defeat a certain monster thus far and that monster even murdered his own family.

ANSWER: Unferth [or Hunferth]

[10] Unferth points out that Beowulf lost a swimming match to this childhood friend, a Bronding, before Beowulf counters that he had to stop and kill sea monsters in the middle of the week-long race.

ANSWER: Breca

[10] Although Unferth has a tendency to challenge Beowulf, he generously gives him the Hrunting which ends up being unable to defeat this monster’s mother. This monster is the first that Beowulf slays.

ANSWER: Grendel

8. This bodhisattva's blue aspect, known as Ekajati, is a guardian of secret mantras and a principal protector of the Nyingma school. For 10 points each:

[10] Name this bodhisattva particularly venerated by Tibetan Buddhists, who recite a praise hymn to her twenty-one emanations. She is considered a deity of liberation and compassion.

ANSWER: Arya Tara [or Jetsun Dolma; or Tara Bosatsu; or Duoluo Pusa]

[10] Tara is sometimes said to have arisen from this bodhisattva of compassion, who is worshipped in much of East Asia as the mercy goddess Guanyin. The Dalai Lama and other high lamas are emanations of this bodhisattva.

ANSWER: Avalokiteshvara

[10] Kings of this country were often treated as bodhisattvas. Emperor Ashoka sent his children Mahinda and Sanghamitra to bring Buddhism to this country, whose Sinhalese majority remains mostly Buddhist.

ANSWER: Sri Lanka [or Ceylon]

9. Organic chemists have developed a variety of unconventional ways to perform simple tasks. For 10 points each:

[10] In accordance with the principles of green chemistry, a great way to reduce waste and cut costs is to run reactions without using these substances, common examples of which include toluene, ether, and water.

ANSWER: solvents [or solvent free reactions]

[10] Often in introductory labs, this kind of environment is created using balloons filled with nitrogen gas and attached to a flask. Sensitive reactions are run in this kind of environment, typically with nitrogen or argon gas.

ANSWER: inert environment [or air-free environment, prompt on non-reactive, oxygen-free or water-free environment]

[10] These machines accelerate chemical reactions by heating them, much like oil baths or hotplates, but use electromagnetic radiation instead, greatly decreasing the necessary time.

ANSWER: microwave ovens [or anything that heats the reaction using microwaves]

10. One of this man's short stories, "Pericalypsis", reviews the proposal to eliminate bad literature by paying people not to be creative. For 10 points each:

[10] Name this author of *The Futurological Congress*, *Memoirs Found in a Bathtub*, and *The Cyberiad*.

ANSWER: Stanisław Lem

[10] This novel by Stanisław Lem concerns a team of cosmonauts studying a planet ruled by a single enormous lifeform. It was adapted into a film by Andrei Tarkovsky that won the Grand Prix at Cannes in 1972.

ANSWER: Solaris

[10] In 1974, this author of *Do Androids Dream of Electric Sheep?* wrote a letter to the FBI claiming that Lem did not exist, because he believed the author was actually a team of communists from Poland.

ANSWER: Philip Kindred Dick



11. Answer some questions related to the Da Vinci Machine, or the Multi Language Virtual Machine, which gives support for dynamic programming languages. For 10 points each:

[10] The Da Vinci Machine is a project completed by Sun Microsystems to extend the “virtual machine” named for this language. The most noted change is the addition to that virtual machine of the “invokedynamic” instruction to give custom linkage behavior to a dynamic call site.

ANSWER: **Java** Virtual Machine (or **JVM**)

[10] This term describes the way type-checking happens in the Java programming language. This kind of type-checking happens at compile time, in contrast to “dynamic” type-checking, which happens at runtime.

ANSWER: **statically**

[10] Since Java is statically typed, generic type definitions undergo this procedure at compile time. However, at call sites, type information is still kept to allow for type inference, which is the opposite of this process.

ANSWER: **type erasure**

12. Stories from this country about Feboald Feboaldson, who caught fish with a magnet after feeding them iron-rich raisins, are unfortunately a form of what Richard M. Dorson calls “fakelore”. For 10 points each:

[10] Name this country, the source of inauthentic but still beloved folktales about a giant sailor named Old Stormalong and a giant lumberjack named Paul Bunyan.

ANSWER: The **United States** of **America** [accept either underlined portion; or the **U.S.A.**]

[10] Joe Magarac acted as a tireless protector for the men in this industry. He lived in the fictitious “Hunkietown” district of Pittsburgh and was made of this substance from head to toe.

ANSWER: **steel**

[10] A sailor named Peg Leg Joe supposedly taught escaping slaves this song, which contained coded directions for the Underground Railroad. Unfortunately, there’s no evidence of it existing until the 1910s.

ANSWER: **“Follow the Drinking Gourd”**

13. Two classifications of these occurrences are indel or frameshift. For 10 points each:

[10] Name these events in which the DNA sequence of an cell is changed.

ANSWER: **mutations**

[10] This test is used to see if unknown mutagens cause indels or frameshifts. A mutagen with known effect is applied to a bacterial culture, and the unknown mutagen is then given to the bacteria to see if they revert to a normal phenotype.

ANSWER: **Ames** test

[10] Most mutations at the molecular level have no effect on an organism’s ability to survive and reproduce, according to this Japanese scientist’s neutral theory of molecular evolution.

ANSWER: Motoo **Kimura**

14. This philosopher used the term “biopower” to denote the ways in which states achieve control over bodies in *The History of Sexuality*. For 10 points each:

[10] Name this philosopher who developed panopticism in a book that begins with a description of Robert-Francois Damiens’s public execution for regicide, *Discipline and Punish*.

ANSWER: Michel **Foucault**

[10] This concept that Foucault developed in his late lectures at the Collège de France denotes the means that regimes use to produce ideal, self-regulating citizens. He used it to analyze transitions from the medieval state of justice to the early modern administrative state.

ANSWER: **governmentality**

[10] In this earlier work, Foucault developed the notion of *episteme* as the historical *a priori* that underlies discourse. It opens with an exegesis of Velasquez’s *Las Meninas* and argues that, after Kant, we need an analytic of human finitude.

ANSWER: *The **Order of Things*** [or *Les **Mots et les Choses***]

15. The tendency of this quantity to fall over time as capital accumulates is an important tenet of Marxian economics, though in reality this quantity tends to be higher in capital-intensive industries. For 10 points each:

[10] Identify this quantity, two types of which are differentiated by taking into account the opportunity cost of a firm’s inputs.

ANSWER: **profit** [the two types are normal **profit** and economic **profit**]

[10] This economist names an equation that relates a firm’s profit to its supply function. He also names a rule that describes optimal pricing for non-renewable resources, such as fossil fuels.

ANSWER: Harold **Hotelling**

[10] Hotelling did work on these market structures, which are dominated by a small number of large firms. Collusion may be a problem in these market structures, but is made difficult because of defecting.

ANSWER: **oligopoly** [or **oligopolies**]

16. In this author’s most notable work, he laments that he and his companions cannot “go up to the top of Pisgah, to view from this wilderness a more goodly country to feed their hopes” upon arriving in New England. For 10 points each:

[10] Name this author who recounted the trials and tribulations of a Massachusetts colony in his *History of Plymouth Plantation*.

ANSWER: William **Bradford**

[10] William Bradford also wrote about this man, the colony’s military adviser. This captain falls in love with John Alden’s wife Priscilla Mullens in a poem about his “courtship.”

ANSWER: **Myles Standish** [accept either name]

[10] This American poet wrote “The Courtship of Miles Standish.” His other narrative poems include “Evangeline” and “The Song of Hiawatha.”

ANSWER: Henry Wadsworth **Longfellow**

17. Job Shattuck was later pardoned for his actions during this event. For 10 points each:

[10] Name this event which threatened the administration of Governor James Bowdoin. It occurred during the Annapolis Convention, helping to convince delegates of the urgency of another meeting the following year.

ANSWER: Shays' Rebellion

[10] Shays' Rebellion demonstrated the weakness of this document which governed the United States prior to the creation of the Constitution.

ANSWER: Articles of Confederation and Perpetual Union

[10] During Shays' Rebellion, dissidents reportedly tried to gain the support of this Mohawk leader, who allied with Great Britain during the Revolution. He was dubbed the "Monster" for possibly ordering the Wyoming and Cherry Valley Massacres.

ANSWER: Joseph Brant [or Thayendanegea]

18. Answer the following about Walter Sickert, who despite what Patricia Cornwell would have you believe was almost certainly not Jack the Ripper, for 10 points each.

[10] Sickert did create a series of paintings about a prostitute murdered in this district of London, alternately titled *What Shall We Do For The Rent?* Sickert also co-founded the 16-man group of artists named after this district.

ANSWER: Camden Town [or the Camden Town Group]

[10] Sickert befriended this French artist, who painted him as one of the *Six Friends at Dieppe*. This man's creepy *Interior*, also known as *The Rape*, was presumably more of an influence on Sickert than his *Cotton Office in New Orleans*.

ANSWER: Edgar Degas [or Hilaire-Germain-Edgar De Gas]

[10] Sickert first met Degas while transporting a portrait of this person to a French salon on behalf of another mentor, its artist. That painting of this person was originally given the title *Arrangement in Grey and Black, No. 1*.

ANSWER: Anna McNeill Whistler [or James Abbott McNeill Whistler's mother; prompt on partial answer; prompt on "the artist's mother" or equivalents]

19. This system went into decline when recruitment was opened up to Muslim subjects. For 10 points each:

[10] Name this "blood tax" imposed on Christian families under Ottoman rule, in which their male children would be taken for training to serve in the army or bureaucracy at a young age.

ANSWER: devşirme ["dev-SHIR-meh"; prompt on "collecting"]

[10] The *devşirme* was the primary method of recruiting these elite Ottoman soldiers, who mainly served as infantry and bodyguards. These troops regarded their regimental cooking pots very highly.

ANSWER: Janissaries [or the Janissary Corps; or Yeniceri; prompt on "New Soldiers"]

[10] The Janissaries were violently disbanded during this event on June 15th, 1826, in which Sultan Mahmud II turned his newly trained artillery corps on the Janissaries' barracks and set it ablaze.

ANSWER: Auspicious Incident [or Auspicious Event; or Fortunate Event; or, oddly enough, Unfortunate Event; or Vaka-i Hayriye; or Vaka-i Şerriyye]

20. Wendy Doniger claims that this god is a continuation of Indra, though the Vedic god he is more commonly associated with is Rudra, the leader of a group of storm gods. For 10 points each:

[10] Name this rider of the bull Nandi. He and his wife Parvati are the parents of Ganesh, and he serves as the “destroyer” in the Hindu Trimurti.

ANSWER: Shiva [or Siva; or Shiv; prompt on “Mahadeva”]

[10] Shiva’s older son is this peacock-riding god of war, who uses a spear called the Vel. This god once ran three times around the world during a race with Ganesh, who wins the race by running three times around their parents.

ANSWER: Kartikeya [or Skanda; or Murugan; or Subramaniyan]

[10] Shiva often wears this snake around his neck in appreciation for his willingness to serve as the rope wrapped around Mount Mandara during the churning of the ocean.

ANSWER: Vasuki

21. A chapter in this work entitled “The White Kitten” relates the story of Georgi Tenno, who escapes from the title location only to be recaptured after he refuses to kill innocent villagers. For 10 points each:

[10] Name this work that is comprised of experiences of 227 different people in the Soviet political prison system.

ANSWER: *The Gulag Archipelago*

[10] This man was the author of *The Gulag Archipelago*. He spent 10 years in the gulags, and lived in exile in the United States until he returned to Russia after the fall of the USSR.

ANSWER: Alexander Solzhenitsyn

[10] Author Varlam Shalamov was sent to a gulag after he praised the works of this author, which include the novel *The Village* and the short story “The Gentleman from San Francisco.”

ANSWER: Ivan Bunin