

VETO 2014

Packet by Waterloo A (Jeffrey Baer, Faith Barrett, Christine Irwin, Arjun Sondhi)

With additional question from Aayush Rajasekaran

1) The setting of this work is described by its author as “sometime between World War II and the present.” One of the characters in this work nurtures a “feeble little plant” which is nearly forgotten at the work’s conclusion. That character is Mama, who is actually the grandmother of Travis. The plot of this play was inspired by a trial over African American land ownership in which the author’s father was a defendant. This play’s action centres around a \$10,000 insurance cheque and the various uses for this money: Mama wants to buy a house, Beneatha wants it to pay for medical school, and Walter wants to invest in a liquor store. For 10 points, name this 1959 play about the Younger family, the magnum opus of Lorraine Hansberry.

ANSWER: **A Raisin in the Sun**

2) This figure married Autonoe, one of the daughters of Cadmus and Harmonia. In one tale, it is this figure’s pursuit of Eurydice that leads to her death from snakebite. One child of this figure incurred Hera’s wrath when she fed the infant Dionysus, while a better known child of his pissed off Artemis when he spied her bathing. This father of Macris and the hunter, Actaeon, forced the river-prophet Proteus into revealing the cause of the death of his swarm. For ten points, name this minor god of many talents, including cheesemaking and trapping, who may be best-known as the mythological inventor of bee-keeping.

ANSWER: **Aristaeus**

3) The present name of this island was endowed by Spanish naval officer Juan de Ayala, although many believe that Ayala’s name was intended for another island about 4 kilometres southeast. Ownership of this island was transferred away from Spain after the Treaty of Guadalupe-Hidalgo. This island was a military fort during the U.S. Civil War and home to the first lighthouse on the west coast of the United States. The fort continued under the operation of the U.S. Military until 1933, when it was transferred to a subdivision of the U.S. Department of Justice. Notable 20th century residents of this island included George Kelly, Frank Morris, Robert Stroud, and Al Capone. For 10 points, name this island that housed a maximum security federal penitentiary from 1934 to 1963.

ANSWER: **Alcatraz** Island [accept **Angel** Island before mention of the word ‘southeast’]

4) This author references real places and events of his own experience in his poems, including the *Alice May*, which was based off a real derelict steamship. The title character of one of his poems is also based in fact, although the real person was from San Francisco, not Plumtree, Tennessee. This poet first arrived in Dawson ten years after the beginning of the Gold Rush, after his most famous works about it were already written and published in his first anthology, *Songs of a Sourdough*. For 10 points, name this poet who penned such lines as “the Lady that’s known as Lou” and “there are strange things done in the midnight sun,” in works such as “The Cremation of Sam McGee” often called “the Bard of the Yukon.”

ANSWER: Robert William **Service**

5) This equation can be used to obtain the energy eigenvalues of a system, and was validated by giving a solution that was consistent with previous results by Johann Balmer for the hydrogen atom. The most general form of this equation is stated as i times Planck’s constant divided by τ , times the time derivative of a function equals the function’s Hamiltonian operator. It is the quantum equivalent of Newton’s second law in classical mechanics, but its solution yields a wave function, which can be used to find the probability density of a particle’s position if its position is measured. For ten points, give this partial differential equation which describes the change in state of a quantum system, named for an Austrian physicist.

ANSWER: **Schrodinger** equation

6) The Chattru Yuva Sangharsh Samiti serves as the student wing of this institution, from which Vinod Kumar Binny was expelled for being rebellious in 2014. One member of this institution was recorded attempting to force an elderly Muslim to swear on the Qu'ran that he would vote for this party; that member is Shazia Ilmi. Medha Patkar and Yogendra Yadav are among the members of this party that was born when a movement led by Anna Hazare fell apart. Brooms and white caps were symbols employed by this party, which is the political spin-off of the India Against Corruption movement. For 10 points, identify this very young political party that fielded 434 candidates in the 2014 Indian general elections, 4 of whom were victorious; a party led by Arvind Kejriwal.

ANSWER: **Aam Aadmi Party**

7) Yedoma is a type of this phenomenon in Siberia that dates from the Pleistocene, which is notable for its high concentration of carbon. The Qinghai-Tibet railway uses elevated track and cooling systems to combat the barely-permanent type of this phenomenon. Earth-covered ice hills, or pingos, can only form in conjunction with this phenomenon, which the Trans-Alaska pipeline is counteracting by using insulated pipes. For 10 points, name this phenomenon which covers over 50% of Canada, and occurs when soil is below 0 degrees Celsius for more than two years.

ANSWER: **Permafrost**

8) This religion is sometimes translated as the “Diamond” or “Thunderbolt” Way. This religion emphasizes the role of rituals and chanting of mantras in order to become a Bodhisattva, in particular tantra. A particularly accomplished tantric practitioner was known as a “Mahasiddha”, and there are 84 Mahasiddhas in the traditions of both this religion and Hinduism. Scholars of this religious school of thought claim it represents the third turning of the Dharma wheel. This Buddhist denomination is sometimes considered to be a part of Mahayana Buddhism, from which it originally grew out of in India. For ten points, name this Buddhist denomination, predominant in Tibet and Nepal, which is also known as Tantric Buddhism.

ANSWER: **Vajrayana** Buddhism (prompt on Mahayana and accept Tantric before mention)

9) The first Commissioner General for this event resigned shortly after assuming the post because of concerns about his workload and the event's location; his successor was a diplomat named Pierre Dupuy. A stamp commemorating this event features an inverted pyramid, and 9 smaller pyramids are also pictured. A 30-day transit strike in the middle of this event forced visitors to find alternative means of accessing the two islands on which this event was located. One of these islands, Ile Notre-Dame, was artificially constructed in 1965 for the specific purpose of hosting this event. For 10 points, name this world's fair and centennial celebration that ran for six months in Montreal, Quebec.

ANSWER: **Expo 67** [or The **1967 International and Universal Exposition**]

10) This idea was first parodied by Gaunilo of Marmoutiers, using an analogy of the perfect island. One person who wrote concerning this idea was a mathematician who refused to publish his work on it, because he didn't want his contemporaries to think he believed in it. That mathematician was Kurt Gödel. This argument usually relies on *a priori* theories about the organisation of the universe, and it was famously critiqued by such philosophers as Kant, Aquinas and David Hume, on the basis that the argument has absurd consequences. For 10 points, name this type of philosophical argument for the existence of God, first posited by Anselm of Canterbury and since argued by philosophers such as Descartes and Leibniz, which is a form of deductive argument stating that God's existence is self-evident.

ANSWER: **Ontological** argument for the existence of God

11) When his fiancée called off his engagement, this man planned to kill her, her new fiancé, and his mother while in disguise as a woman, but did not go through with it. This man was also friends with Franz Liszt, who would transcribe his most famous work for piano. In one work by this composer, the English horn plays in unison with the cellos in the 9/8 time Lacrimosa movement; that work is the Grande Messe des morts. The English horn and oboe

represent two shepherds in the “Scene in the Fields” movement of a symphony by this composer. In the following movement entitled “March to the Scaffold”, a solo clarinet plays the *idée fixe*, a term this composer coined. For 10 points, name this French Romantic composer of *Symphonie Fantastique*.

ANSWER: Hector **Berlioz**

12) The first entry in this franchise was a short film co-produced by the National Film Board of Canada, starring Zoe Newman as Ida Lucas. In its most recent episode, Mr. Yates is suspended under suspicion of sleeping with Tristan Milligan after Maya Matlin discovers their affair. Maya’s older sister Katie used to date Drew Torres, who was later engaged to Bianca DeSousa. Bianca had a feud with Alli Bhandari, who also dated Drew, who slept with her best friend, Clare Edwards after Bianca broke up with him. Clare was friends with Drew’s transgender stepbrother Adam, who dies after texting his girlfriend Becky Baker while driving. Before dying, Adam had made out with Imogen Moreno, who had previously dated Fiona Coyne, who had previously dated Adam, before she came out as a lesbian. Fiona also kissed her twin brother Declan in order to drive away his then-girlfriend Holly J Sinclair, who was the younger sister of Heather Sinclair, an unseen character who was the rival of former queen bee Paige Michalchuk. Paige was once called a “hag” by Ashley Kerwin, who dated Craig Manning on multiple occasions. Craig cheated on Ashley with Manny Santos, resulting in her pregnancy, and in an episode titled “Accidents Will Happen”, she has an abortion. This episode was not broadcast in the United States for two years. This franchise aired TV series from 1987 through 1991, and was then revived in 2001 with the subtitle “The Next Generation”, with episodes continuing to air today. For ten points, name this epic Canadian teen drama franchise, which was named for a fictional school and actual street in Toronto.

ANSWER: **Degrassi**

13) A 1926 painting by this artist features a table, one of whose legs resembles a human leg. That painting was revised forty years later and removes the table, but maintains a baluster from a staircase. A baluster with a human arm attached to it is found in this artist’s *The Birth of the Idol*, which is set in a stormy night, as is the aforementioned *The Difficult Crossing*. A cannon is aimed at a wall in one work by this artist; that wall contains panels depicting a nude female torso, a scene in the woods, and some bright blue sky. In addition to *On the Threshold of Liberty*, blue sky is also prominently featured in his *The Empire of Light* as well as a painting by him titled for a ruined city in the Indian state of Andhra Pradesh. That painting features several well-dressed men seemingly suspended in the sky, moving neither upwards nor downwards. For ten points, identify this surrealist who depicted a man in a bowler hat with his face obscured by a green apple in *The Son of Man*.

ANSWER: Rene **Magritte**

14) This compound can, along with iodine, be used as a reactant in a cycle that produces hydrogen, and can also be used with salt to make hydrogen chloride in the Mannheim process. This compound was originally produced by burning saltpeter along with a certain element in a process created by Johann Glauber and improved by, among others, John Glover. However, that method was supplanted by a process that first used platinum before changing to vanadium oxide because of catalyst poisoning. Those methods are called the lead chamber process and the contact process, which also produces oleum. A common use for this compound is as the electrolyte in car batteries. For 10 points, name this acid with compound formula H_2SO_4 .

ANSWER: **sulfuric acid**

15) In an epic written in this language, a woman breaks open an anklet to reveal rubies, rather than pearls, thus proving the innocence of her husband. That work is *The Tale of an Anklet*, which ends with the protagonist cursing a city into flames. A number of famous writings in this language are attributed to Avaiyar, which likely refers to multiple female authors of religious literature. Unrelated devotional sayings in this language include, “Cling to the one who clings to nothing; and in so clinging, cease to cling,” which is found in the *Thirukural*. Modern writings in this language were published in the periodical *Ananda Vikatan* which published the writings of such independence

activists as Kalki, writing out of Madurai. For ten points, identify this language whose Sangam period contains the Five Great Epics; an Indian language that has mercifully seen very minor - practically negligible - contributions from horrid Sri Lankan authors.

ANSWER: **Tamil**

16) Moosehide Hills and King Solomon's Dome are two of the large hills that surround a riverside town in this sub-national polity. The largest city in this polity lies along the same river and is encircled by three mountains: Grey Mountain, Haeckel Hill, and Golden Horn Mountain. There are over 100 volcanic centres in this polity, including Volcano Mountain and Fort Selkirk Volcanic Field. This polity contains the largest non-polar icefield in the world, located in the same national park that contains this polity's highest mountain, also the highest mountain in Canada. For ten points, name this Canadian territory which contains the Kluane Icefields, Mount Logan, the town of Dawson City, and the city of Whitehorse.

ANSWER: **Yukon** Territory

17) This compound is synthesised from shikimic acid or anthranilate in plants and microorganisms. After cases of eosinophilia-myalgia syndrome killed 37 people in the US in 1989, this amino acid was linked to its outbreak, and it was subsequently banned from sale in the US. This amino acid is the main precursor to niacin and auxin, and fructose malabsorption prevents this amino acid from being absorbed, which can lead to depression. This essential amino acid contains an indole functional group and is a direct precursor of serotonin. For 10 points, name this amino acid that occurs in high levels in most meats, though it was previously thought that its occurrence specifically in turkey meat causes drowsiness

ANSWER: **Tryptophan**

18) In one novel by this author, the main characters attempt to identify a modern skeleton found at an archeological expedition, and the possible involvement of the state in his death. That novel is *Anil's Ghost*. Another novel, which parallels Anna's family in 1970s California and the family of the French poet she is researching, won this author his fifth Governor General's award. In this author's most famous novel, the protagonist falls in love with a woman upon hearing her read Herodotus. Count Almàsy is the titular person in the novel by, for 10 points, this Sri-Lankan born author of *Divisadero* and *The English Patient*.

ANSWER: Michael **Ondaatje**

19) On an esplanade just outside this museum, there is a series of bronze sculptures known as the *Six Continents*. Victor Laloux won a competition to design the train station in which this museum is housed. This museum has benefited from the donation of a number of paintings to offset inheritance taxes, including Gustave Courbet's *Femme Nue au Chien* and *L'Origine du Monde*. A recently-completed exhibition called *Van Gogh, the Man Suicided by Society* led to the relocation of several works in this museum's permanent collection, including a portrait of Docteur Gachet painted only 40 kilometres away. For ten points, name this museum opened in 1864 on the left bank of the Seine to display one of the world's greatest collections of Impressionist paintings.

ANSWER: *Musee d'***Orsay**

20) In preparation for this conflict, many triremes were built; a consequence of this was increased political power to the lower-class thetes, as they were required to man the ships. A leader of one side in this war whipped the water after the bridge made of ships to cross the Hellespont broke apart; he would later retreat after suffering defeats at Mycale and Plataea. The location for one battle fought in this war was chosen due to the narrow pathway that the invading force would have to pass through; this battle, lost by Sparta after facing a much larger army as well as the Immortals, was Thermopylae. Fought between Greece and a people led by Xerxes, for 10 points, name this war that followed one that ended at the Battle of Marathon.

ANSWER: **Second Greco-Persian** War (or "**Second Persian** invasion of **Greece**", prompt on partial answer)

TB1) This man's daughter was Madame Germaine de Stael, known as "the woman whom Napoleon hated most" due to her political opposition. Before the French Revolution, this man successfully advocated doubling the representation of the Third Estate in the Estates-General; however, the voting procedure of one vote per estate did not change. This man later advised Louis XVI to hold a Séance Royale in order to calm tensions between the estates, which also failed, and led to the National Assembly openly defying the king. This man was disliked by Marie Antoinette, and his dismissal led to the storming of the Bastille prison. After being recalled, this man only stayed in office for another year before retiring to Switzerland. For ten points, name this three-time French Finance Minister under Louis XVI, who tried really hard to avert the French Revolution.

ANSWER: Jacques Necker

TB2) An "action" related to one of these objects upon a set is a mapping which serves to permute the elements of the set. Finite types of them are used in Burnside's lemma, which simplifies the counting of certain equivalence classes in a set. A common example of these mathematical objects is the set of integers under addition, while a more complex one is the set of all Rubik's cube moves. These objects consist of a nonempty set with an operation, and the cyclic type of these contains a generator element, from which all other elements can be obtained by repeatedly applying the operation. The operation is invertible and associative, while the set contains an identity element and is closed under the operation. For ten points, name these objects in abstract algebra, which are referred to as "abelian" when the operation is commutative.

ANSWER: groups

TB3) An extension of his work by Amartya Sen states that no social system can result in Pareto efficiency while respecting individual freedoms, and is known as the "liberal paradox". This economist is also known for showing the existence of a learning curve, or the improvement of production efficiency with experience, and is currently a professor emeritus at Stanford University. He is most famous for his PhD thesis, containing his "impossibility theorem," which states that no rank-order voting system can satisfy individual preferences under fair voting conditions without being dictatorial. For ten points, name this American economist who won the Nobel Prize in Economics in 1972 with John Hicks for his work in general equilibrium and welfare theory.

ANSWER: Kenneth Arrow

TB4) Though much of this novel's narrative is based off true political events, the country's name is never mentioned, and historical figures in it are referred to as "the President" or "the Poet." In this novel, Pedro Segundo helps rebuild Las Tres Marias after green-haired Rosa the Beautiful dies suddenly and her fiance marries her younger sister. Against her father's wishes, Pedro Tercero and Blanca become lovers and their daughter, Alba, becomes a political revolutionary who fights against the military coup that kills her uncle Jaime (pronunciation: HI-may). For 10 points, name this Chilean novel about the multigenerational family of Clara del Valle and Esteban Trueba, the debut novel of Isabel Allende.

ANSWER: *The House of the Spirits* (or *La casa de los espíritus*)

Bonuses

1) Name these Canadian Ministers of Finance for ten points each.

[10] This Conservative MP replaced Jim Flaherty as Minister of Finance upon Flaherty's resignation on March 18, 2014.

ANSWER: Joe **Oliver**

[10] This Conservative politician served as Minister of Finance between January 1887 and May 1888 – 20 years after serving as premier of pre-Confederation Nova Scotia, and almost 8 years before serving as Canadian prime minister.

ANSWER: Sir Charles **Tupper**

[10] This lawyer and banker served as Minister of Finance during all of World War One. For six months ending in May 1919, he assumed the role of Acting Prime Minister while Robert Borden was in Europe to negotiate the Treaty of Versailles.

ANSWER: William Thomas **White**

2) For ten points each, answer some fun questions on the dismal science, economics.

[10] This function gives the maximum possible output of a firm, conditional on the input variables, which usually include labour and capital.

ANSWER: **production** function

[10] These curves represent all possible combinations of multiple input variables that give the same level of production, and can be used to identify if variables are substitutes or complements.

ANSWER: **isoquants**

[10] In this type of production function, the output is modeled as the product of exponential functions of inputs. The unknown constant parameters represent the elasticities of each input.

ANSWER: **Cobb-Douglas** production function

3) Despite this play's title, only six of the 15 main characters are related to each other by blood or marriage. For ten points:

[10] Name this play with an all-female cast of characters that takes place in a single tenement room in 1960s Montreal, which had a profound effect on modern Quebec culture.

ANSWER: ***Les Belles-soeurs***

[10] *Les Belles-soeurs* is the most popular work written by this Quebecois playwright and novelist. His other works deal with themes such as homosexuality and working-class Quebec as oppressed by the Catholic Church.

ANSWER: Michel **Tremblay**

[10] A staunch separatist, Tremblay declined to receive this recognition, though he later accepted a Governor General's award. Other notable refusers of this appointment include Glenn Gould and Mordecai Richler.

ANSWER: **Ordre du Canada** (or **Order of Canada**)

4) Prove that you are not Jordan Palmer and have some REAL Organic Chemistry knowledge by performing these super-simple conversions, for ten points each:

[10] Starting off with acetic acid, you need to produce methane, which obviously requires a simple decarboxylation. Treating the acetic acid with excess of this base will get the job done. In a more boring reaction, this base reacts with hydrochloric acid to produce table salt.

ANSWER: **NaOH** (or "**Sodium Hydroxide**")

[10] If you needed to produce an alcohol instead, you would simply treat that acetic acid with this compound, a more powerful reducing agent than NaBH₄. Until the advent of this compound, converting carboxylic acids to alcohols was a real pain in the ass.

ANSWER: **LiAlH₄** (or "**Lithium aluminium hydride**", or "**LAH**", or "**LithAl**")

[10] Having produced ethanol, you foolishly add some H₂SO₄ to it at 443K. The result is, naturally, this compound.
ANSWER: **Ethylene** (or "**Ethene**", or "**C₂H₄**")

5) What's better than going a long period of time without food and water? Name these holidays involving fasting for ten points each.

[10] This Jewish Day of Atonement involves a fast that starts at sundown and ends 24-25 hours later. Along with Rosh Hashanah, this holiday bookends an annual period known to Jews as the High Holidays.

ANSWER: **Yom Kippur**

[10] Adherents of this faith fast from sunrise to sunset for 19 days during the month of Alá, following rules prescribed in the Kitáb-i-Aqdas.

ANSWER: **Bahá'í**

[10] This Christian denomination supports a monthly fast on the first Sunday of each month, known as 'Fast Sunday,' and members are encouraged to donate money saved on food as a 'Fast Offering' to the less fortunate.

ANSWER: **Mormonism** (accept **LDS** Church or The Church of Jesus Christ of the **Latter Day Saints**)

6) Germans are famous for things apart from their vaaaaaastly superior football skills. For ten points each, name some Germans.

[10] Though he originally served for Denmark, this man led the Prussian forces in the Austro-Prussian and Franco-Prussian wars. He shares a name with his nephew who led German forces at the beginning of World War I.

ANSWER: Helmuth von **Moltke**

[10] After von Moltke the Younger was removed from command, this man succeeded him for the first two years of World War I, until after the Battle of Verdun.

ANSWER: Erich von **Falkenhayn**

[10] Falkenhayn was in turn replaced by Paul von Hindenburg, who later became President. It is argued that most power was held by this man, Hindenburg's deputy, who later became a Nazi supporter.

ANSWER: Erich **Ludendorff**

7) Given the following music clips, name the composers of the following waltzes for ten points each.

[10] (instruction for moderator: open "Waterloo A Music Clip 1" and play through to its conclusion or until interrupted)

ANSWER: Pyotr Ilych **Tchaikovsky**

[10] (instruction for moderator: open "Waterloo A Music Clip 2" and play through to its conclusion or until interrupted)

ANSWER: Frederic Francois **Chopin**

[10] (instruction for moderator: open "Waterloo A Music Clip 3" and play through to its conclusion or until interrupted)

ANSWER: Emile **Waldteufel**

8) Watashi wa oyogimasu~! For ten points each, answer some questions about works of literature where a character might be swimming.

[10] After jumping into the pond, the frog might go swimming in this author's most famous haiku.

ANSWER: Matsuo **Basho**

[10] The effect on a family when two of their children drown at a beach is the subject of the short story "Death in Midsummer" by this author. He might be better known for novels like the *Sea of Fertility* tetralogy.

ANSWER: Yukio **Mishima**

[10] The protagonist of this novel by Natsume Sōseki first meets the Sensei at a beach. The story of his life and reasons for his suicide make up its final part.

ANSWER: **Kokoro**

9) This man was the one of the first to examine human development as having “stages,” as opposed to the predominantly held “sapling” theory of the time. For ten points each:

[10] Name this Austrian doctor, the first to describe the concept of transference and the founding father of psychoanalysis.

ANSWER: Sigmund **Freud** (also accept Sigismund Schlomo **Freud**)

[10] Early research on the Oedipus Complex and castration anxiety came largely from this case study Freud conducted on Herbert Graf, a son of one of his close friends. In the study, Herbert’s fear of horses was at first attributed to a fear of their large penises.

ANSWER: **Little Hans** (or **Analysis of a Phobia in a Five-year-old Boy**)

[10] During this stage of Freud’s theory of psychosexual development, children have the potential to develop either an Oedipus or an Electra complex. Occurring between the ages of 3 and 6, it should end with the child internalising morality as a result of identifying with a parent.

ANSWER: **Phallic** stage (prompt on “Third” Stage)

10) Who doesn’t love birdwatching? Enjoy this visual bonus based off a relaxing hobby, wherein you must identify the famous face flipping the bird. For five points each (images in file PicturesforBonus10.pdf):

ANSWERS:

- a) Evangeline **Lilly** b) **M.I.A.** (or Mathangi "Maya" **Arulpragasam**) c) **Lady Gaga** (or Stefani Joanne Angelina **Germanotta**) d) Diane **Keaton** e) Justin **Timberlake** (or **J.T**) f) **Rihanna** (or Robyn Rihanna **Fenty**)

11) Divorced, beheaded, died; divorced, beheaded, survived! Wives of Henry VIII had it rough. For ten points each:

[10] Name this first wife of Henry the VIII, daughter of Ferdinand II and Isabella of Castile. She was married to Henry’s older brother Arthur and married Henry upon Arthur’s death, claiming the marriage had never been consummated.

ANSWER: **Catherine of Aragon** (also accept variations of Catherine, like Catalina; prompt on just Catherine)

[10] Arguably the most boring of Henry’s wives, this woman gave birth to his only surviving male heir, Edward VI. She served both Catherine of Aragon and Anne Boleyn before becoming Henry’s lover.

ANSWER: Jane **Seymour**

[10] Katherine Howard, Henry’s fifth wife, was beheaded for committing adultery with Francis Dereham and this man. Because he was a favourite of the king, he was simply beheaded, as opposed to being hanged, drawn, and quartered like Dereham.

ANSWER: Thomas **Culpepper**

12) In 2010, Jenna Rose released a terrible song called “My Jeans,” declaring that Hannah Montana, Ashley Tisdale, and Keke Palmer were wearing her jeans. For ten points each, answer some questions about genetics.

[10] When one allele is expressed over another at the same location on a gene, it is said to be dominant. An example is the mutant allele for this disease, which causes random movements, cognitive impairment, and psychiatric illness.

ANSWER: **Huntington’s** disease

[10] When multiple alleles are expressed together, they are said to have this relationship. An example of this is the AB blood type.

ANSWER: **codominance**

[10] This type of genetic inheritance refers to phenotypes resulting from interactions between multiple genes and environmental factors.

ANSWER: **multifactorial**

13) Mothers can, on occasion, be complete bitches in the Hindu pantheon. Answer some questions about godly Casey Anthonys, for ten points each:

[10] This figure's mother was too impatient to wait for her eggs to hatch, so she smashed one open, leading to his brother being born deformed. Fortunately, she spared his egg, leading this large eagle and mount of Vishnu to be born super-powerful.

ANSWER: **Garuda**

[10] This mother of the Pandavas in the Mahabharata was curious what it would be like to fuck a god, so she called on the Sun to sleep with her. She later regretted her pre-marital tryst so deeply that she abandoned that son, Karna, to float down a river.

ANSWER: **Kunti**

[10] This figure's stepmother was so horrible that she guilted his father into exiling him from the kingdom for thirteen years. He used that time to pal around with Hanuman, kill the Lankan Ravana and save his beautiful, but remarkably dull, wife, Seetha.

ANSWER: **Rama**

14) It turns out that there are a surprising number of characters in literature called Sor(r)el. Let's try to get them straight once and for all, for ten points each.

[10] Sorel Bliss is the daughter of the central family in this play, who each invite a guest but manage to drive them out due to their craziness.

ANSWER: **Hay Fever**

[10] Julian Sorrel is the protagonist of this novel by Stendhal, who becomes involved with the aristocratic Mathilde de la Mole.

ANSWER: **The Red and the Black**

[10] Hetty Sorrel is nearly executed for, out of fear of ostracism, killing her baby by leaving it outside in this novel by George Eliot.

ANSWER: **Adam Bede**

15) Answer the following questions on milestones in American tobacco regulation for ten points each.

[10] This organization tried to assume control for American tobacco regulation in 1996, when it issued an eponymous rule aimed at reducing illegal sale of tobacco to minors. However, this organization's authority was challenged by Big Tobacco in court, and it wasn't until 2009 that its authority was explicitly prescribed by Congress.

ANSWER: U.S. **F**ood and **D**rug **A**dministration

[10] This flavour of cigarette was the only non-tobacco flavour permitted after the FDA's 2009 Family Smoking Prevention and Tobacco Control Act banned most flavoured cigarettes, including those with characterizing fruit, candy, and clove flavours.

ANSWER: **Menthol**

[10] Way before the FDA got involved in tobacco regulation, this U.S. Surgeon General issued the first official government report on smoking and health in 1964. His report demonstrated the causal relationship between smoking and lung cancer, and it provided motivation for mandatory health warnings on cigarette packages six months later.

ANSWER: Luther **Terry**

16) Name these continuous statistical distributions for ten points each.

[10] Central Limit Theorem states that the average of a large number of independent, identically-distributed random variables will follow this symmetric distribution.

ANSWER: **Normal** distribution [or **Gaussian** distribution]

[10] This special case of the gamma distribution is parameterized with k degrees of freedom, where k is generally a positive integer. The distribution gives its name to a test for independence developed by Karl Pearson.

ANSWER: **Chi-square** distribution

[10] In a Poisson process, the waiting time between successive events has this memoryless distribution.

ANSWER: Negative **exponential** distribution

17) While being tortured, the characters will only say the title town did it. For ten points each:

[10] Name this play, which ends with everyone being set free after no one confesses to killing their town's cruel Commander.

ANSWER: **Fuenteovejuna**

[10] Fuenteovejuna is by this Spanish Golden Age author, who also wrote La Arcadia, in addition to as many as 1800 plays.

ANSWER: Felix Arturo **Lope de Vega** y Carpio

[10] This is the lead female of the play, who loves Frondoso and motivates the men of the village to strike back against the commander.

ANSWER: **Laurencia**

18) Name these Canadian UNESCO World Heritage sites for ten points each.

[10] UNESCO praises this provincial park in the Alberta badlands for containing "some of the most important fossil discoveries ever made from the 'Age of Reptiles.'"

ANSWER: **Dinosaur** Provincial Park

[10] UNESCO calls the centre of this Nova Scotia town a "well preserved example of 18th century British colonial urban planning," noting that 95% of its historic buildings are made of wood.

ANSWER: Old Town **Lunenburg**

[10] UNESCO can't get enough of the geography of this Newfoundland national park, where continental drift has exposed "deep ocean crust and the rocks of the earth's mantle," and glacial activity has created "fjords, glacial valleys, sheer cliffs, [and] waterfalls."

ANSWER: **Gros Morne** National Park

19) Name these athletes who have been awarded the Order of Canada for ten points each.

[10] This athlete was named the youngest ever Companion of the Order of Canada in September 1980, the same year as he won the Lou Marsh Award as Canada's top sportsman. His award was presented in a special ceremony in Vancouver.

ANSWER: Terrance Stanley (Terry) **Fox**

[10] This Olympian is the all-time leading scorer for Canada's National Women's Hockey team. She was named an Officer of the Order of Canada in 2011 in recognition of her athletic prowess and international humanitarian work.

ANSWER: Hayley **Wickenheiser**

[10] Along with partner Kathleen Heddle, this rower won double gold at the 1992 Barcelona Summer Olympics. She became an Officer of the Order of Canada in 2013.

ANSWER: Marnie Elizabeth **McBean**

20) This technique was first used by George Méliès by rewinding the negative after shooting a scene. For 10 points each:

[10] Name this film technique that was used to transition from the Paramount logo to a mountain in Peru in Raiders of the Lost Ark.

ANSWER: **dissolve**

[10] Numerous dissolves are used in the Salvador Dali-designed dream sequences in this film, where the new director of a mental hospital may not be who he says he is.

ANSWER: **Spellbound**

[10] This silent film used many dissolves, most notably in the transformation scene where Maria's face dissolves into that of the robot.

ANSWER: **Metropolis**

21) One of his philosophical ideas was “Justice as Fairness,” which stated that everyone should have basic, inalienable liberties, and that the disadvantaged are guaranteed benefits. For ten points each:

[10] Identify this American political philosopher.

ANSWER: John **Rawls**

[10] Rawls is best known for this book, where he tries to solve social justice with the social contract, and discusses the veil of ignorance. A 2013 musical of the same name follows Rawls as he attempts to write this book.

ANSWER: **A Theory of Justice**

[10] This philosopher wrote “Anarchy, State, and Utopia” in opposition to “A Theory of Justice”, advocating a minimal state, and claiming that Rawls’ concept of inalienable rights could lead to voluntary slavery.

ANSWER: Robert **Nozick**