

DRAGOON 2013

Round 1

Questions by the University of Illinois at Urbana-Champaign

Tossups

(Note to moderator: Read this question to the teams as though it were tossup 1. However, this tossup is a joke, so do not count it towards the score.)

0. **This item, which apparently comes with a ten year warranty and is used by Olympic divers, can be purchased by calling 1-800-951-7807. One man who talks about this product states “you following me cameraman” and notes that “you’re throwing your money away” because you “spend \$20 a month” on other products anyway. That man also notes you should get one of these “for the house, one for the car, two for the (*) kitchen and bathroom.” This product is good because it is “made in Germany, and the Germans always make the good stuff.” This product takes its name from a type of leather made out of a namesake material and is known for holding “20 times its weight in liquid.” For zero points, in addition to the Slap-Chop, Vince Offer is known for advertising what cleaning product with a fantastic name?**

ANSWER: **Sham-wow!**

(The next question is the real tossup 1. There will be no further joke tossups in this set.)

1. **Cells which are named for this protein can be surrounded by an envelope containing cystatin A and lorixin. IRS cells produce large amounts of trichohyalin and this other protein. Filaggrin helps facilitate aggregation of this protein, whose acidic and basic types form type I and type II (*) intermediate filaments. Cells that produce this protein are located in abundance in the stratum granulosum and the stratum lucidum. Large amounts of this protein are produced in a hardening process known as cornification. In the epidermis this protein makes skin waterproof and contributes to its structural integrity. For 10 points, name this protein found in abundance in hair and fingernails.**

ANSWER: **keratin**

2. **This work’s second epilogue was written by Joseph Craddock of Gumley; its first epilogue was written by the author and is to be spoken by Mrs. Bulkely. It begins with a section written by David Garrick, in which Mr. Woodward appears with a handkerchief and cries about the death of the Comic Muse. A subplot concerns the retrieval of the jewels of (*) Constance, who wishes to marry Hastings. After Tony Lumpkin takes her to an alehouse, the female lead of this play performs the title action by disguising herself as a barmaid. For 10 points, name this comedy about Kate Hardcastle’s tricks to woo Sir Charles Marlow, a work of Oliver Goldsmith.**

ANSWER: **She Stoops to Conquer**

3. **This thinker used a dollar sign, a less than sign, a greater than sign, followed by the letter a, to create the “matheme,” a symbol that shows interconnection between various entries of a “vector of desire.” He divided life into the phases of the real, the symbolic and the imaginary in a lecture that ultimately rejects any simple definition of truth. He argued that the title document is a signifier of the unknown in his seminar on (*) Poe’s *The Purloined Letter*. This thinker argued that babies perceive of themselves through an object that is able to induce apperception. For 10 points, name this psychoanalyst whose thought is collected in *Ecrits*, and who proposed the mirror phase.**

ANSWER: Jacques **Lacan**

4. During the initial rehearsal for this piece, the composer was unsatisfied with the use of side drum sticks for a timpani roll, and so two coins were used instead. The clarinet quotes from Mendelssohn's *Calm Sea and Prosperous Voyage Overture* to depict a journey to Australia in a movement which is designated as a "Romanza," although that movement is marked with three asterisks. In another movement, the woodwinds imitate a (*) stutter. The most famous movement of this work is a pun on the name of Augustus Jaeger. It has been claimed that this work is based on "Auld Lang Syne" or "God Save the King," though the composer rejected both of those claims. Including a movement called 'Nimrod', for 10 points, name this orchestral work by Edward Elgar which depicts his friends and contains a hidden, unplayed theme.

ANSWER: Enigma Variations [or Variations on an Original Theme: "Enigma"]

5. This group oversaw the creation of a system called "The Association" that set up inspection committees and anti price-gouging measures to provide for scarcity of goods. Members of this group supported resolves made by Mecklenburg and Tryon counties, whose aims would be revisited in the Suffolk Resolves. Joseph (*) Galloway submitted a "Plan of Union" to this gathering, but was rejected. Henry Middleton and Peyton Randolph presided over this event that lasted from September to October 1774. For 10 points, name this administrative body formed to combat the Intolerable Acts, whose successor oversaw colonial involvement in the American Revolution.

ANSWER: First Continental Congress [prompt "Continental Congress"]

6. Hassler Whitney created an ordered pair called a matroid to show that these methods are correct if they feature an underlying exchange argument. Typically, one may prove that these procedures are correct by considering a dynamic programming solution to a problem, then showing that there need be only one choice in each instance of a subproblem. These kinds of methods are exemplified by (*) Prim's algorithm and Kruskal's algorithm, both of which make minimum spanning trees. They are most often illustrated with a change-making algorithm. For 10 points, name these algorithms that always take the locally optimal step.

ANSWER: greedy algorithm

7. In order to obtain charms to make a boat, this character pries open the mouth of a giant and descends into its belly, where he begins smithing and refuses to leave until he gets the charms. After his axe slips and injures him, he bleeds profusely until he finds an expert blood stauncher. This character recommends that the child of the virgin (*) Marjatta be put to death, for which the child chastises him. Later, he sails away forever on a copper boat and leave his harp behind as a source of joy. This character uses an oar to fight the shapeshifting Louhi to protect a magic mill called the Sampo. Earlier, he had convinced Ilmarinen to forge the Sampo so that he could marry the maid of North Farm. For 10 points, name this Finnish hero, the protagonist of the *Kalevala*.

ANSWER: Väinämöinen

8. This emperor exempted the people of Ilium from military service, on the grounds that they were the ancestors of the Romans. He refused to build temples to himself in Egypt, as described in his "Letter to the Alexandrians." As a scholar, he wrote a twenty-volume history of the Etruscans and an eight-volume text on the Carthaginians. This emperor captured Camulodunum and incorporated (*) Britain as a province, which led one of his sons to be named Britannicus. Suetonius claims that this emperor was controlled by his third wife Messalina and that he was murdered at the behest of his fourth wife Agrippina the Younger. For 10 points, name this Roman emperor who succeeded Caligula, and who inspired two Robert Graves novels.

ANSWER: Claudius [or Tiberius Claudius Drusus Germanicus, but do not prompt on any non-underlined part by itself]

9. The preparation of *Zampone* sausage from Modena, Italy involves stuffing these objects with skin and meet. The Woolworth Company, known for its art deco skyscraper, changed its name to one whose first word is this sort of item. Wes Welker had to miss the first play of a game after he made references to these objects during an interview in which he poked fun at (*) Rex Ryan. A movie titled after these objects features the character of Mumbo, who is an outcast because he can't produce a "heartsong" for mating. These objects title a 2006 animated movie featuring penguins, one of which is voiced by Elijah Wood. For 10 points, what body part of a rabbit is often held to be a sign of good luck?

ANSWER: feet or legs [accept "pig's feet" on the first clue. Accept "Happy Feet," or "Foot locker." On the second sentence, prompt on "locker," because that company is "Foot Locker."]

10. One novel by this author intersperses the memories of Tony, Charis, and Roz, who recall how Zenia had stolen their boyfriends. Another novel by this author is narrated by 12 maids that are eventually hanged by the narrator's husband. The epilogue to another of her novels features scholars at a symposium informing the audience that the text we just read is a series of audiotapes from 200 years in the past. This author of (*) *The Robber Bride* created a character who meditates on a Latin phrase that is translated as "Don't let the bastards grind you down." In addition to authoring *The Penelopiad*, she wrote about a woman who learns of the Mayday resistance and serves as a two-legged womb. That character lives in Gilead and is named Offred. For 10 points name this Canadian author of *The Handmaid's Tale*.

ANSWER: Margaret Eleanor Atwood

11. One painting by this artist was initially thought to depict woman workers of St. Isabel, but that painting is now believed to depict a mythical weaving competition. This artist of *The Fable of Arachne* painted a scene in which Apollo informs Vulcan of his wife's adultery. One of his artistic subjects has grape leaves in his hair and is seen crowning a man in a yellow coat while sitting on a (*) barrel full of wine. A subject of a popular portrait by this artist was later depicted "screaming" by Francis Bacon. The most famous painting by this artist of *The Triumph of Bacchus*, and the *Portrait of Pope Innocent X*, depicts a dog and a dwarf to the right of the Infanta Margarita, while the artist himself is seen working on a large canvas. For 10 points, name this Spanish painter of *Las Meninas*.

ANSWER: Diego Velazquez

12. This scientist is the first namesake of a method where the magnetization of a bar is flipped, causing a change in angular momentum which allows for measurement of the gyromagnetic ratio. This namesake of that method with de Haas also names three parameters which characterize the rates of absorption, spontaneous emission, and stimulated emission in a two-level system. This scientist names a tensor equal to a constant times the stress-energy tensor minus the product of the (*) metric tensor and the cosmological constant by his namesake field equations. He won a Nobel Prize in Physics for his 1905 explanation of the photoelectric effect. For 10 points, name this German physicist famous for postulating that the rest energy of a particle equals its rest mass times the speed of light squared.

ANSWER: Albert Einstein

13. Raymond Williams stated that this concept is "ordinary" in a book that links the structure of the family with the organization of production. The "honeymoon phase" and "negotiation phase" are two parts of a four-stage model about how this phenomenon affects a foreigner. The etic approach to this idea objectively analyzes it using a universal framework and stands in contrast to the emic approach. It is defined as (*) "personality-writ large" in a book that analyzes the Dobu, Kwakiutl and Zuni using the concepts of the Apollonian and the Dionysian. Regions wherein this concept remains homogenous were put into namesake areas in a model developed by Alfred Kroeber. A book about its patterns that champions relativism was written by Ruth Benedict. For 10 points, name this concept, the set of values a civilization possesses.

ANSWER: culture [accept "culture shock"]

14. As this story opens, a woman recalls her grandfather's mansion with a double staircase that leads to the second story, as well as her nurse Caroline. Later, her son takes off his tie to look like a thug. Its protagonist, who wants to be a writer and sells typing machines, proceeds to annoy a man that is reading a newspaper when he asks him for a match. This story takes its title from a quote of (*) Pierre Teilhard de Chardin, and it was published in a namesake collection that also includes "Parker's Back" and "Revelation." At its climax, the female lead tries to give the cute boy Carver a penny, which angers Carver's mother. That incident causes her to have a stroke while walking home. For 10 points, name this story that describes a bus trip taken by Julian and his racist mother, a story by Flannery O'Connor.

ANSWER: "Everything that Rises Must Converge"

15. B.R. Ambedkar resigned from this politician's government following the defeat of a bill intended to bring about religious unity and reform religious codes. After the death of his mentor, he gave a speech which lamented that "the light has gone out of our lives." This man wrote an outline of the history of the world in the form of letters from prison, which were published as (*) *Glimpses of World History*. This leader claimed that his country would "awaken to life and freedom" at the stroke of midnight in the "Tryst of Destiny" speech, which he gave on the eve of his country's independence. This leader's daughter was assassinated after attacking the Golden Temple at Amritsar. For 10 points, name this father of Indira Gandhi, the first prime minister of independent India.
ANSWER: Pandit Jawaharlal Nehru

16. For the city of Zürich, this artist sculpted the implicitly erotic *Sheep Piece*. He was assisted by Sir Anthony Caro, who created *Dream City* in his characteristic style after his death. During WW2, he produced thousands of sketches of London bomb shelters; more characteristic works of his include a sculpture which was decapitated in Dumfries, *King and Queen*. Situated near the Regenstein Library is his piece that commemorates the (*) Chicago Pile-1 reactor, *Nuclear Energy*. The piercing shapes of his rival Barbara Hepworth and the poses of Mayan statues inspired another series of his, which typically shows concave human forms in supine positions. For 10 points, name this British sculptor known for his *Reclining Figures* series.
ANSWER: Henry Moore

17. In one of this writer's works, the speaker declares "I have seen the low-hanging sun speckled with mystic horrors, lighting up long violent coagulations." He described "the peace of the furrows which alchemy prints on broad studious foreheads" in a poem that imagines "silences crossed by Worlds and by Angels." This man recounted the story of his insanities in (*) "Alchemy of the Word," one of two "Delirium" sections of a prose poem. This author's works include one in which a vessel's haulers are killed, thus leaving the ship to wander the sea aimlessly, as well as a poem which assigns a color to each of the five vowels. This author of "The Drunken Boat" penned *Illuminations* and had an affair with Paul Verlaine. For 10 points, name this Frenchman who penned *A Season in Hell*.
ANSWER: Arthur Rimbaud [Pronounced "Ram-beau," but be lenient.]

18. David Glantz has debunked several myths about this battle in a book titled for 'Armageddon at' it. One side in this battle was trapped in a pocket which they dubbed 'the Cauldron' where they were forced to eat their own horses. In this battle, the invaders were stalled by the 1077th anti-aircraft regiment, which was composed mostly of women just out of high school. During this battle, a tractor factory was modified to produce (*) T-34 tanks. The tide of battle turned after Georgy Zhukov unleashed Operation Uranus, and this battle ended shortly after the capture of Friedrich Paulus. For 10 points, name this battle of World War II in which the Soviets defeated Germany at a city on the Volga River which was then named for the Soviet premier.
ANSWER: Battle of Stalingrad

19. This quantity is plotted on the y-axis of an Evans diagram. One common standard for this quantity uses a potassium chloride solution and mercury (I) chloride, a substance known as calomel. The difference in the experimentally observed and thermodynamically calculated values of this quantity is proportional to the log of the current density divided by the exchange current density. This quantity is equal to change in (*) Gibbs free energy divided by the product of the number of moles of electrons and the Faraday constant. This quantity at some temperature is equal to this quantity at standard conditions minus $R T$ over $n F$ times the natural log of the reaction quotient. For 10 points, name this quantity determined by the Nernst equation, which measures the strength of reaction in an electrochemical cell.
ANSWER: voltage or electric scalar potential [accept more specific answers like "standard electrode potential," or "reduction potential," do not accept "overpotential"]

20. **One of these documents warns that if a fly lands in your drink, one of the wings is poison and the other contains the cure. A number of these documents state that eclipses are not caused by the death of someone and that whenever they occur, men should continuously pray. One of these texts warns that Jews will hide behind trees and rocks, but that the trees and rocks will give (*) away their location, and that Judgment Day will not come until the Jews are killed. Unreliable ones are often classified as 'Daif,' or 'weak.'** The most trusted collections of these documents include the Muwatta and the Sahih al-Bukari, and they are second only to the Quran in their authority as religious law. For 10 points, identify these collected sayings of the Prophet Muhammad.

ANSWER: hadith

21. **During a victory speech, this politician proclaimed "A new day has broken, has it not?" Andrew Gilligan accused this politician's government of "sexing up" an intelligence dossier. During one campaign, this politician proclaimed that his three main priorities for government were "education, education, and education." This politician successfully lobbied for an overhaul of Clause IV of his Party's Constitution, as part of a move towards the (*) "Third Way" of politics. During his time in office, he repeatedly denied claims that he planned to join his wife Cherie as a Catholic, only to convert after leaving office. Sometimes criticized as "Bush's Poodle,"** for 10 points, name this Prime Minister of the United Kingdom from 1997 to 2007.

ANSWER: Tony Blair

Bonuses

1. The first holder of this post was Joseph Auslander, who was succeeded by Allen Tate. For 10 points each:

[10] Name this post, currently held by Natasha Trethaway. Its British analogue has been held by Alfred Tennyson and is currently held by Carol Ann Duffy.

ANSWER: United States **Poet Laureate** [or the even more pretentious **Poet Laureate** Consultant to the Library of Congress]

[10] This author of *In the Mecca* was appointed Poet Laureate in 1985. One of her poems describes a group of figures that “Jazz June” and “die soon.”

ANSWER: Gwendolyn **Brooks**

[10] This former U.S. Poet Laureate wrote “Horoscopes for the Dead” as well as *The Art of Drowning*. This author of “The Lanyard” and “Forgetfulness” guest hosted “The Writer’s Almanac” in 2013.

ANSWER: Billy **Collins**

2. For 10 points each, answer the following about these prayers and blessings from the Jewish Liturgy.

[10] This prayer is the Jewish profession of monotheism. The first verse asserts “Hear, O, Israel, the Lord is our God, the Lord is One”, while the second verse is usually prayed silently.

ANSWER: **Shema** Yisrael

[10] Psalms 113-118 form the text of the *Hallel* prayer, which is recited during many Jewish holidays, including this one, the “Festival of Booths” that begins five days after Yom Kippur.

ANSWER: **Sukkot** [or **Succot** or **Sukkos**]

[10] This other holiday takes place on the day after Sukkot, and while time is still spent in the Sukkah, blessings are more limited. In Israel, it coincides with Simchat Torah. Outside Israel, only the second day coincides.

ANSWER: **Shemeni Atzeret**

3. The Gum Catalog is a listing of 84 of these astronomical structures. For 10 points each:

[10] Taking their name from the Latin word for “cloud,” name these often beautiful formations of ionized gas. The “Crab” one is located in the constellation Taurus.

ANSWER: **nebula** [Accept **nebulae** or **nebulae**]

[10] These types of nebulae are filled with so much ionized gas that their density causes stellar extinction, making them appear as a black mass. The Coalsack Nebula is one.

ANSWER: **Dark** Nebulae

[10] Found within the Eagle Nebula, this awe-inspiring astronomical structure is the remnant of a supernova that occurred thousands of years ago. It is the most notable example of an elephant-trunk structure.

ANSWER: **Pillars of Creation**

4. This album contains a rearranged version of “Watermelon Man” that uses the sound of blowing into a beer bottle to imitate the sound of the Ba’aka hindewhu. For 10 points each:

[10] Name this jazz-funk fusion album whose other 3 tracks are “Sly,” “Vein Melter,” and “Chameleon.”

ANSWER: **Head Hunters**

[10] *Head Hunters* features this jazz pianist also famous for producing the 1965 Blue Note album *Maiden Voyage*.

ANSWER: Herbert Jeffrey “Herbie” **Hancock**

[10] Hancock played the piano in the second of this man’s namesake quintets, which also featured Tony Williams, Ron Carter, and Wayne Shorter. This artist revolutionized modal jazz in the album *Kind of Blue*.

ANSWER: Miles **Davis**

5. As part of his *ilm al-umran*, or “Science of Culture,” this man proposed that history was largely driven by the conflict between nomads and townspeople. For 10 points each:

[10] Name this Arab Muslim historian best known for his groundbreaking philosophy of history recorded in his *Muqaddimah*, or “Introduction.”

ANSWER: Ibn **Khaldun** [or **Abd al-Rahman**]

[10] After completing the *Muqaddimah* in Algeria, Khaldun became a judge in this city. This city is now the capital of a country formerly run by Mohammed Morsi.

ANSWER: **Cairo**

[10] This English historian claimed that Ibn Khaldun had no equal anywhere else in the history of the world. He analyzed the rise and fall of civilizations in his massive twelve-volume *A Study of History*.

ANSWER: Arnold J. **Toynbee**

6. David Gale proved the existence of them using the Kakutani fixed point theorem. For 10 points each:

[10] Name these states that exist in non-cooperating games, in which no player can benefit by changing their strategy alone.

ANSWER: **Nash equilibrium**

[10] A strategy set in which a set of actions is each assigned a probability is termed this kind of strategy. They are useful in iterated scenarios in which a player chooses to make their strategy non-deterministic.

ANSWER: **mixed** strategy

[10] This theorem, which applies to two-person zero-sum games, states that one should seek to make the greatest possible loss as small as possible in order to maximize the expected payout. It was proven by von Neumann.

ANSWER: **minimax** theorem

7. In the prologue to this work, two Communal villagers argue over which of them should take ownership of a valley now that World War II is over. For 10 points each:

[10] Identify this play, mostly consisting of a play-within-a-play in which the judge Azdak designs a test to determine whether the servant Grusha can keep her adopted child.

ANSWER: *The* **Caucasian Chalk Circle** [or *Der* **Kaukasische Kreidekreis**]

[10] *The Caucasian Chalk Circle* was written by this German playwright and exemplifies his concept of “epic theater.” He collaborated with Kurt Weill on *Rise and Fall of the City of Mahagonny* and *The Threepenny Opera*.

ANSWER: Bertolt **Brecht**

[10] This Brecht play, an allegory for Hitler’s takeover of Germany, tells the story of a Chicago mobster who tries to control the cauliflower racket.

ANSWER: *The* **Resistible Rise of Arturo Ui** [or *Der* **aufhaltsame Aufstieg des Arturo Ui**]

8. Cardinal Giulio Alberoni persuaded this king to fight for some of his lost territory by starting the War of the Quadruple Alliance. For 10 points each:

[10] Name this Spanish king from the House of Bourbon who succeeded Charles II, kicking off the War of the Spanish Succession.

ANSWER: **Philip V**

[10] Under the terms of this treaty - or rather, this series of treaties - which ended the war, Philip was recognized as King of Spain but was compelled to renounce all claims to the throne of France.

ANSWER: Treaty of **Utrecht**

[10] After decisive victories at Blenheim and Oudenard, Eugene of Savoy and The Duke of Marlborough scored a Pyrrhic victory at this bloodiest battle of the War of the Spanish Succession, where they captured the fortress of Mons in northern France.

ANSWER: Battle of **Malplaquet**

9. This quantity is equal to the derivative of the internal energy with respect to temperature. For 10 points each:

[10] Name this quantity, which measures the amount of heat required to raise the temperature of a substance by 1 degree Kelvin.

ANSWER: **heat capacity** at constant volume [accept “molar” or “specific” **heat capacity**, accept **specific heat**]

[10] A monatomic ideal gas has a heat capacity of three-halves times R, since a monatomic ideal gas has three of these associated with translations. These entities can also be associated with rotations or vibrations, and they represent the different ways in which a particle can move.

ANSWER: **degrees of freedom**

[10] In this technique, which is useful for studying phase transitions, a sample and a reference are placed in a heater and a heat capacity vs temperature curve is generated. It’s similar to DTA.

ANSWER: **Differential Scanning Calorimetry** [prompt on “calorimetry”]

10. He prosecuted the bootlegger Waxey Gordon. For 10 points each:

[10] Name this man who, with his running mate John Bricker, lost the election of 1944.

ANSWER: Thomas **Dewey**

[10] In 1948, the *Chicago Tribune* newspaper proclaimed that Dewey defeated this Missouri politician.

ANSWER: Harry **Truman**

[10] This Bronx bootlegger was killed by fellow mobsters after calling for the death of Thomas Dewey. This German converted to Catholicism to placate Lucky Luciano.

ANSWER: Dutch **Schultz** [or Arthur **Flegenheimer**]

11. For a given population, the difference in the maximum value for this quantity and the average value of this quantity divided by the maximum value for this quantity gives the genetic load. For 10 points each:

[10] Name this quantity sometimes symbolized w, which describes the relative ability of an individual to survive and reproduce, thereby keeping its genes in the gene pool.

ANSWER: **fitness**

[10] The rate of increase in a population’s mean fitness caused by natural selection is equal to the additive genetic variance in fitness according to this English scientist’s fundamental theorem. He’s also known for developing ANOVA.

ANSWER: Ronald Aylmer **Fisher**

[10] Fisher names a stochastic model used to determine allele frequencies with this American scientist, who is perhaps more well-known for formulating the concept of genetic drift.

ANSWER: Sewall Green **Wright**

12. For 10 points each, answer some questions about Victorian literary criticism.

[10] This literary critic first used the term “Philistine” to describe those who lack culture in his book *Culture and Anarchy*. As a poet, he wrote “Dover Beach.”

ANSWER: Matthew **Arnold**

[10] This other literary critic defended “art for art’s sake” in his modern Platonic dialogue “The Decay of Lying.” His thoughts on the “suffering of the artist” are described in his letter to Lord Douglass, “De Profundis.”

ANSWER: Oscar **Wilde**

[10] In this work of criticism, Wilde argued that the nineteenth century’s dislike for Romanticism is akin to the rage of Caliban not being able to see himself in a looking glass. It asserts “the artist is the creator of beautiful things” and that there is no such thing as an immoral book, before concluding “all art is quite useless.”

ANSWER: the **preface** to the Picture of **Dorian Gray** [Accept “introduction” or what else in lieu of preface.]

13. Helenus foretold that in order to bring down Troy, the Greeks would need the arrows of Heracles, to steal the Palladium, and to bring this man to Troy. For 10 points each:

[10] Name this son of Achilles who was born during Achilles’ time crossdressing in Scyros

ANSWER : **Neoptolemus** [Accept **Pyrrhus**]

[10] During the Trojan war, Neoptolemus was promised the hand of this daughter of Menelaus and Helen, who eventually runs away after blaming Andromache for her inability to get pregnant.

ANSWER: **Hermione**

[10] Hermione was originally betrothed to this man, her cousin, who with his sister Elektra had killed Clytemnestra.

ANSWER: **Orestes**

14. Answer these things about the history of silk in Europe, for 10 points each.

[10] In France, this city became the core of the silk industry after it was granted a monopoly on production. Silk workers launched the “Canut revolts” in this city in the 19th century.

ANSWER: Lyon

[10] That monopoly was granted by this French king, an ally of Suleiman the Magnificent who lost to Charles V at the Battle of Pavia.

ANSWER: Francis I

[10] England’s silk industry got a jump start when large numbers of French Huguenots emigrated there following the Edict of Fontainebleau, which repealed this earlier statute of religious tolerance promulgated by Henry IV.

ANSWER: Edict of Nantes

15. A recent book by this man hints that there may be some teleological force shaping the universe, but still rejects theistic explanations. For 10 points each:

[10] Name this philosopher at NYU who wrote *Mind and Cosmos*, in which he attacked Darwinian reductionism and materialist views of the mind.

ANSWER: Thomas Nagel

[10] Nagel’s article “What is it Like to be a Bat?” begins by stating that this quality makes the “mind-body problem really intractable.” This state of mind may be simply defined as awareness of one’s existence.

ANSWER: consciousness

[10] This other atheist philosopher examined the implications of evolution in *Darwin’s Dangerous Idea* and proposed the multiple drafts model of consciousness in his book *Consciousness Explained*.

ANSWER: Daniel Dennett

16. The period instrument ensemble Il Giardino Armonico has received acclaim for their recordings of this man’s double and triple concertos on their album *Il Proteo*. For 10 points each:

[10] Name this Italian baroque composer of *The Four Seasons*.

ANSWER: Antonio Vivaldi

[10] Vivaldi also wrote several concertos for this woodwind instrument, for which Mozart wrote one concerto in B-flat. In Dukas’ *The Sorcerer’s Apprentice*, this instrument introduces the scherzo theme of the walking brooms.

ANSWER: bassoon

[10] Vivaldi’s most popular choral composition is arguably a setting of this part of the Ordinary of the Latin Mass, which follows the Kyrie in the Catholic liturgy.

ANSWER: Gloria in excelsis Deo

17. As the climax of this novel, Ti Noel transforms into a bird, a horse, and other animals before becoming a lonely goose, then ultimately perishing. For 10 points each:

[10] Name this novel consisting of tightly intertwined vignettes, such as that about Mackandal’s role as the “Lord of Poison,” as well as Henri Christophe’s construction of the Citadel.

ANSWER: *The Kingdom of this World*

[10] *The Kingdom of This World* is the major achievement of this Belgian-born writer. A man tries to evade police by jumping into a performance of Beethoven’s pastoral symphony in his novel *The Chase*.

ANSWER: Alejo Carpentier

[10] Alejo Carpentier’s preface to *The Kingdom of this World* describes how his fiction may incorporate mysterious and supernatural events into their books, articulating this concept that would become key in 20th century Latin American literature.

ANSWER: magical realism [Need both words, accept word forms.]

18. This scientist's namesake equation for electrostatics states that the Laplacian of the voltage is equal to minus the charge density divided by the permittivity of free space. For 10 points each:

[10] Name this scientist who names a quantity equal to minus the ratio of the strain perpendicular to the load to the strain parallel to the load.

ANSWER: Siméon Denis **Poisson**

[10] This quantity, sometimes symbolized G , is equal to the elastic modulus divided by two times the quantity one plus the Poisson ratio. This quantity describes a material's response to forces acting parallel to the surface of the material.

ANSWER: **shear modulus**

[10] Within the elastic limit, this law which linearly relates axial stress to axial strain holds. For springs, this law is commonly stated as F equals minus kx , where F is the force, k the spring constant, and x the displacement.

ANSWER: **Hooke**'s Law

19. This region was once covered by the giant Lake Makgadikgadi, which has left some of the largest salt pans in the world behind. For 10 points each:

[10] Name this semi-desert region of southern Africa, an inland plain which encompasses most of Botswana and the eastern third of Namibia.

ANSWER: the **Kalahari**

[10] This river flows southeast from Angola through the Caprivi Strip and into to the Kalahari, where it empties into a vast inland delta, creating a large, biodiverse swamp in the middle of the desert.

ANSWER: **Okavango** river [or **Kubango** river]

[10] Botswana is the central homeland of the so-called "Bushmen," who refer to themselves by this name. Unlike the related Khoe people, these people are traditionally foragers.

ANSWER: **San**

20. For 10 points each, name these Renaissance portraitists.

[10] This artist of the high Renaissance painted portraits of Baldassare Castiglione, as well as one of *Donna Velata*. He also painted *The School of Athens*.

ANSWER: **Raphael Sanzio** [Accept either.]

[10] This other artist from Urbino painted a double portrait of Battista Sforza and Federigo da Montefeltro. The Battle of Nineveh is shown in the final painting of his *Legend of the True Cross* cycle.

ANSWER: **Piero** della Francesca

[10] This artist's other works include *The Funeral of St. Francis* as well as a version of *The Last Supper* with two archways. His painting *Old Man with a Child* tenderly depicts a man with a bulging nose.

ANSWER: Domenico **Ghirlandaio**