DRAGOON 2013

Round 12

Questions by the University of Illinois at Urbana-Champaign

Tossups

1. Thomas Johnson was the first scholar to compile the variorum edition of this writer's works. One work by this author concludes "I dropped down and down and hit a world at every plunge and finished knowing;" a different work ends "I've heard it in the chillest land, and on the strangest Sea, yet never in Extremity, it asked a crumb of me." The lines (*) "'Hope' is the thing with feathers" and "I felt a funeral in my brain" begin two separate works of this poet, who created a speaker that "first surmised the horses' heads were toward eternity" after she "passed school, where children strove at recess." That poem by her describes a "carriage [that] held just ourselves and Immortality." For 10 points, name this author of "Because I Could Not Stop for Death," a poet from Amherst.

ANSWER: Emily **Dickinson**

2. In one prayer from this faith, the speaker proclaims "I bow down to those who have reached omniscience in the flesh." This faith's cosmology postulates the existence of beings with only the sense of touch called *nigodas*. In 1974, this faith adopted an official emblem which contains three dots near the top and an additional dot inside a curve, representing an (*) enlightened soul. The largest schism within this faith partially sprang from a dispute over whether it was possible for a woman to achieve salvation. Lay members of this faith follow twelve vows, divided into the Anuvratas, Gunavratas, and Siksavratas, while monks within this faith are divided into the "white-clad" and "sky-clad" sects. For 10 points, name this Indian faith based on the teachings of the Tirthankaras.

ANSWER: Jainism

- 3. A type of this process induced by forest fires basically works by expanding a thin layer of material to induce spalling. One type of this process produces fractures called "joints." That example of this process, which produces exfoliation domes and onion layers, is called sheeting. The differential type of it occurs when structures made from items found in different parts of the (*) Bowen's reaction series are used. On the crust, hematite is typically produced when *this* happens to hornblende. Physical types of this process includes frost wedging, and chemical types include carbonic acid dissolving minerals. For 10 points, name this generic geological process, which fragments or decomposes rocks, and which is often confused with erosion.

 ANSWER: chemical or physical weather ing [prompt on "sheeting" before mention.]
- 4. The second movement of one of these works consists of variations on *La gentille et jeune Lisette*. Another of these compositions forces the violinists to retune their G strings during the last movement, and the complete critical edition of these orchestral works was edited by H.C. Robbins Landon. One of these compositions is known as (*) "The Philosopher" for the serious mood in the first movement. Many of these orchestral pieces were composed for Prince Nikolaus Esterhazy, including one in F sharp minor that has each of its performers blow a candle out as they exit the stage, called the "Farewell." Another of these pieces is nicknamed for the sudden *fortissimo* chord in the second movement. For 10 points, name these works for orchestra, of which 104 are numbered and the 94th of which is called "Surprise."

ANSWER: symphonies of Joseph Haydn [accept equivalents]

5. One speech given in this city was called the Third Anniversary Discourse and proposed the existence of a common ancestor for Greek and Latin. This city traces its origins back to a trading post founded by Job Charnock, but this city's high court has ruled that he was not the true founder. Sir William Jones founded the Asiatic Society in this city with the support of (*) Warren Hastings. John Z. Holwell gave an account of how the last European defenders of this city were captured by the *nawab* Siraj al-Dawlah and forced into an overcrowded jail in this city's Fort William. For 10 points, name this first capital of British India, which was home to a namesake 'Black Hole' and is now the capital of West Bengal.

ANSWER: Calcutta [or Kolkata]

- 6. Starting November 2012, this network began broadcasting the documentary series *Oliver Stone's Untold History of the United States*. One reality show on this network follows the escapades of five male escorts in Las Vegas. Don Cheadle stars as Marty Caan on one show on this network, while another follows the life of the (*) David Duchovny-played sex addict Hank Moody. Its most successful show features a Miami Metro PD blood spatter analyst who moonlights as a serial killer whose victims include Miguel Prado, the Trinity Killer, and the Ice Truck Killer. For 10 points, name this network home to series like *House of Lies, Californication*, and *Dexter*. ANSWER: Showtime
- 7. The protagonist of this novel often recalls an old lover saying: "I waited for him that morning. We rode our horses across the river." While taken as a prisoner of war, the protagonist escapes into an abandoned mine only to meet his captors again at the exit. As a child, the protagonist made candles with the mulatto Lunero; as an adult he buys out Don Gamaliel Bernal and takes a series of lovers including (*) Laura, Lilia, and Regina. Dedicated to the sociologist C. Wright Mills, it cycles from third person to first person to second person, though the first-person sections are mostly set in a hospital where the title character converses with his wife Catalina and daughter Teresa, who want to know the location of his will. For 10 points, name this novel about the last days of a Mexican tycoon, written by Carlos Fuentes.

ANSWER: The Death of Artemio Cruz [or La Muerte de Artemio Cruz]

- 8. This work, which was first translated into English by Viscount Haldane, compares the enslavement of the mind to the "wheel of Ixion." Its section on aesthetics proposes a ladder in which the disciplines of landscape architecture and architecture are on the bottom, and poetry and music are on the top. The third section of this treatise considers aesthetic contemplation as a way of easing the (*) pain of humanity. This work's first appendix discusses the author's rejection of Kant's ding an sich. This book, which grew out of its author's dissertation On the Fourfold Root of the Principle of Sufficient Reason, proposes that self-denial and asceticism are ways of accepting the world's suffering. For 10 points, name this treatise on reality by Arthur Schopenhauer. ANSWER: The World as Will and Idea [or The World as Will and Representation] or Die Welt als Wille und Vorstellung
- 9. The Nurr1 gene is important for the development of cells that primarily produce this molecule. Cabergoline and bromocriptine activate this molecule's receptors, while haloperidol is an inverse agonist to those receptors. This molecule is transported to the nucleus accumbens from the ventral tegmental area by the mesolimbic pathway. This molecule is produced by the hydroxylation then subsequent decarboxylation of (*) tyrosine. This catecholamine inhibits the secretion of prolactin, and it is primarily produced in a section of the basal ganglia known as the substantia nigra. For 10 points, name this primary neurotransmitter involved in the reward pathway, which is under-produced in Parkinson's disease.

ANSWER: dopamine

10. At one battle in this conflict, a corps was routed at Dembeguina Pass despite having nine L3 tanks. The government of the losing side relocated to Gore, and the leader of that government later warned that "It is us today. It will be you tomorrow" in a plea for outside help. This conflict was sparked by the Wal Wal Incident and briefly turned tide during the Christmas Offensive. The (*) Hoare-Laval pact was proposed to end this conflict, which was the subject of an 'Appeal' to the League of Nations. Mustard gas was deployed by Pietro Badoglio in this conflict, which was initiated as revenge for an earlier loss at the Battle of Adowa against Menelik II. For 10 points, identify this conflict in which a country led by Benito Mussolini overthrew Hailie Selassie and annexed an African country.

ANSWER: the <u>Italian invasion of Ethiopia</u> [accept equivalents or <u>Second Italo-Ethiopian War</u> or <u>Second Italo-Abyssinian War</u>]

11. At one point in this work, a woman learns from a eunuch that she was suckled by a tigress as an infant. Book 4, in which Hydraotes is inspired to commit an act of treachery by Satan and his devils, inspired Milton's pandemonium in *Paradise Lost*. In this work, Sophronia falsely confesses to having stolen a statue of the Virgin and is ordered to be executed by Aladine. It climaxes with a woman receiving a baptism from (*) Tancred just before dying. Until the advent of modernism, it was the second most popular Renaissance epic after *The Faerie Queene*. After the sorceress Armida seduces Rinaldo, he follows her to a magic island, thus abandoning the siege of the title city. For 10 points, name this Italian epic poem which fictionalizes the First Crusade, written by Torquato Tasso.

ANSWER: <u>Jerusalem Delivered</u> [or La <u>Gerusalemme liberata</u>]

12. Joseph Keilberth's acclaimed 1954 recording of this opera featured Astrid Varnay in a supporting role alongside Wolfgang Windgassen. The heroine falls into a dream-like state while confiding to the King in its aria "Einsam in trüben Tage." High violins, oboes, and flutes introduce the slow A-major prelude to its first act, whose melody re-appears in the narration (*) "In Fernem Land" later on. The oft-excerpted Prelude to Act III of this opera precedes a wedding scene where Telramund is killed. At the end of this opera, Gottfried is returned to his human form, but the title character is forced to sail away because his wife Elsa breaks her vow by asking him his name. For 10 points, name this opera about a Knight of the Swan by Richard Wagner, perhaps most famous for its "Bridal Chorus."

ANSWER: Lohengrin

13. In his opinion on a case from this state, Justice Powell cited a lack of evidence that suggested asymmetric punishment for African-American murderers in *McLeskey vs. Kemp*. This state's attempt to extend capital punishment to rapists was thwarted in *Coker*. A 1972 case from here ruled the death penalty cruel and unusual, an opinion that was overturned by a case in this state. Tom C. Clark wrote the majority opinion of a court case that began in this state, writing that Congress could prohibit (*) racial discrimination in certain public places under the commerce clause. The *Furman* and *Gregg* cases occurred in this state, where New Echota postmaster Samuel Worcester opposed Indian Removal. For 10 points, name this state, of origin of the *Heart of Atlanta Motel* case.

ANSWER: Georgia

14. In tokamaks, a phenomenon named for this statement has a lower power density at high temperatures and will thus be used in complement with neutral beam injection and cyclotron resonance to perform heating in ITER. One version of this statement contains a term proportional to the cross product of the current density with the magnetic field. That term is known as the Hall current. Another version of this equation states that the (*) current density is equal to the product of the conductivity and the electric field. Combining this statement with another equation for the power yields Joule's Law. For AC circuits, one quantity in this statement is replaced with the impedance. For 10 points, name this law which states that the voltage is equal to the product of current and resistance.

ANSWER: Ohm's Law [accept "generalized Ohm's law"]

- 15. A history of these entities is discussed in *Mind Children* and other books by Hans Moravec. An article by Marvin Minsky asks if they will inherit the earth. The first theoretical description of one was given in a book by Julien La Mettrie, who described their composition. An article in *Energy* compares a statue made by a woodcarver to these entities and suggests that the presence of movement in them increases (*) uneasiness more so than death. That article by Masahiro Mori compares these agents to a *bunraku* puppet in relation to human affinity. The fear of them is the Frankenstein complex, and their resemblance to humanity inspired the uncanny valley hypothesis. For 10 points, name these machines which are subject to three laws postulated by Isaac Asimov. ANSWER: <u>robot</u>s [or <u>androids</u>, prompt on "A.I" or "Artificial life," if they mention "<u>man made of machines</u>" or other such equivalents, accept it.]
- 16. One artist from this movement depicted the patriarch of the Greek Church committing the title act of fraud in his *The Miracle of the Holy Fire*. A different painting from this movement shows a crown of red wool over the title animal's head, which bears the burden of Jews. In addition to *The Scapegoat*, another painting from this movement features a woman staring out of a window while rising from the (*) lap of her lover, who sits at the piano. This movement produced the painting *The Awakening Conscience*, and it featured an artist who used Elizabeth Siddal as a model for the painting *Ophelia*. Another of its artists inscribed lines from "The Blessed Damozel" into a painting of the same name. For 10 points, name this group of artists which included William Hunt and Dante Rossetti.

ANSWER: **Pre-Raphaelite** Brotherhood [or **PRB**]

17. One character in this work gives up his sole Eccles cake, which turns out to be stale. Near its end, one character blows into a whistle, but it fails to produce any noise; that character then talks into a tube with an offstage character that tells him his collection of food on a plate was mostly rotten. Its characters discuss the football teams of Villa and the Spurs, which hints that the setting of this (*) one-act play is Birmingham. It begins with a discussion about an old man who crawled under a lorry and died; the conversation later centers on the phrase "light the kettle." This play ends with one of its main characters about to kill the other after receiving instructions from the title conveyance. For 10 points, name this absurdist play about hitmen Ben and Gus, which was written by Harold Pinter.

ANSWER: The Dumb Waiter

18. The efficiency of this process can be quantified with either overall, point, or Murphree efficiency. One method of performing calculations for this process first requires determination of the slope of the q-line for the feed. The next steps in that method are to split the operating line into enriching and stripping sections, to draw alternating horizontal and vertical lines between the operating and equilibrium lines, and finally to count off the number of horizontal lines drawn. That method determines the number of (*) theoretical trays required for this process and is named for McCabe and Thiele. Mixtures that do not change composition when this process is performed are termed azeotropes. For 10 points, name this process which separates components of a solution based on their boiling points.

ANSWER: <u>distillation</u> [accept "stage <u>distillation</u>," "continuous <u>distillation</u>," "fractional <u>distillation</u>," "batch <u>distillation</u>," and other types of distillation]

19. Two answers required. A group of noblemen tried to end one war between these two countries via the Anjala Conspiracy. One of these countries was served by a general who died at the Turkish-controlled fortress of Bendery shortly after defecting to the other. These countries signed the Treaty of Stolbovo to bring an end to the Ingrian War, and battled each other again in the (*) War of the Hats. Ivan Mazepa fought for both of these countries, one of which ceded large swaths of territory to the other in the Treaty of Nystad after losing the Battle of Poltava. For 10 points, name these two countries which battled over Finland a lot and whose leaders Charles XII and Peter the Great fought each other in the Great Northern War.

ANSWER: Russia and Sweden

20. At this locale's capital are four fountains that spray milk, wine, fragrant oil and water mixed with flowers. For this kingdom, Hephaestus created a pair of fire-breathing bulls made out of gold. Its queen is Eidyia, who mothered its loyal princess Chalciope. On the way to this kingdom, a hero defeats King (*) Amycus of the Bebryces. A visitor to this kingdom sows the teeth of dragons and escapes its navy when its princess cuts up Absyrtus into pieces. For 10 points, name this kingdom whose royalty includes Medea, and to which Jason travelled to get the Golden Fleece.

ANSWER: Colchis

21. Male commoners among one people from this country wore a sleeveless tunic called the "onka," while the royalty wore a red woolen fringe around the forehead. One culture from this country sculpted the Raimondi Stela, and Bernabe Cobo wrote a history of the founding of this country's capital city. During the late 19th century, this country made huge profits by selling guano gathered from its (*) Chincha islands. This home of the Chavin culture and the Lord of Sipán was also home to an empire with a name meaning "The Four Regions." That empire used knots of colored rope to encode information, and another culture from this country made giant geoglyphs depicting animals such as the pelican and the monkey. For 10 points, name this country home to the Nazca and the Inca.

ANSWER: Peru

Bonuses

- 1. For two gas molecules A and B, this quantity is proportional to the square root of temperature times the concentration of A times the concentration of B times the cross section. For 10 points each:
- [10] Name this quantity sometimes symbolized Z, which when multiplied by the steric factor gives the Arrhenius pre-exponential factor

ANSWER: collision frequency

[10] Collision theory may be used to calculate this quantity, whose temperature dependence is given by the Arrhenius equation.

ANSWER: reaction rate constant

[10] The Eyring equation is an approach to calculating the rate of reaction that uses this theory rather than collision theory. This theory is named after the configuration which is located at the local maximum on a reaction coordinate diagram.

ANSWER: **transition state** theory [or **activated complex** theory]

- 2. This author wrote of an army officer who befriends a panther and names her Mignon in the story "A Passion in the Desert." For 10 points each:
- [10] Name this French author who wrote about the law student Eugene de Rastignac and a self-sacrificing father in *Le Pere Goriot*, a novel from his sequence *The Human Comedy*.

ANSWER: Honore de **Balzac**

[10] Balzac turned towards fantasy in this novel, in which Raphael comes across the title magical object which grants any wish, but drains its user's life-force as a price.

ANSWER: The Wild Ass's Skin [or La Peau de chagrin]

[10] This geographically-inspired term refers to panoramic novel sequences, like *The Human Comedy*, that describe a grand cast of characters over an extended period of time. Other examples include Romain Rolland's *Jean-Christophe*.

ANSWER: roman-fleuve

- 3. Though it did implement income requirements on eligible voters, this item deprived most Asians the right to vote. For 10 points each:
- [10] Name this document, which King Kalakaua was forced to sign. It removed the Hawaiian Monarchy from power.

ANSWER: **<u>Bayonet Constitution</u>** [or **<u>1887 Constitution</u>** of the Kingdom of **<u>Hawaii</u>**; prompt "Constitution of Hawaii or "Hawaiian Constitution"]

[10] A military force called this city's "rifles" helped overthrow king Kalakaua. This Oahu city is just east of Pearl Harbor.

ANSWER: Honolulu

[10] Lorrin Thurston and John Stevens conspired with this businessman to overthrow Queen Liliuokalani. He was the only president of the Republic of Hawaii.

ANSWER: Sanford **Dole**

- 4. It depicts a woman in a green V-neck shirt looking at a cup and teapot at a white table. For 10 points each:
- [10] Name this 1929 painting which depicts two women in a restaurant.

ANSWER: Chop Suev

[10] Chop Suey was painted by this artist of Early Sunday Morning, Automat, and Nighthawks.

ANSWER: Edward Hopper

[10] Hopper made three paintings of this location, set at morning, afternoon, and evening. In the 'evening' painting of this location, an old couple's dog stands alert as if having heard a mysterious sound.

ANSWER: Cape Cod

5. His writings include Conventional Deterrence and Liddell Hart and the Weight of History. For 10 points each:

[10] Name this professor at the University of Chicago, who examined the reasons behind hegemony in his book *The Tragedy of Great Power Politics*.

ANSWER: John Mearsheimer

[10] Mearsheimer is a proponent of the offensive branch of this school of IR, which argues that the world's superpowers are maximizers of powers. This school stands in contrast to liberalism and axiomatically holds that superpowers are driven by self-interest.

ANSWER: realism

[10] A section of *The Tragedy of Great Power Politics* argues that superpowers do not wish to exist in this state, in which every power has the capability to completely annihilate the other.

ANSWER: mutually assured destruction [or mad]

6. This document proclaimed that social distinctions may only be constructed for the common good. For 10 points each:

[10] Identify this document with seventeen articles passed by the French National Assembly in 1789, which crystallized the views on human liberty of many enlightenment philosophers.

ANSWER: <u>Declaration of the Rights of Man</u> and of the Citizen [or <u>Declaration of Human and Civil Rights</u> or <u>Declaration de droits de l'homme</u> et du citoyen]

[10] A few years later, the French Revolution got out of hand when the Committee of Public Safety executed Louis XVI and this wife of his. She apocryphally said of the peasants "Let them eat cake!"

ANSWER: Marie Antoinette of Austria [or Maria Antonia Josepha]

[10] The Reign of Terror was aggravated by the publications of this radical journalist who published *Le Pere Duchesne* and became a figurehead for the sansculottes.

ANSWER: Jacques-Rene Hebert

7. A dog states "Mistress, I dug upon your grave to bury a bone, in case I should be hungry near this spot when passing on my daily trot" in his "Ah, Are you Digging On My Grave?" For 10 points each:

[10] Name this poet, who included that poem in his collection *Satires of Circumstance*. He also wrote "The Convergence of the Twain" and "The Darkling Thrush."

ANSWER: Thomas Hardy

[10] This Hardy poem, an examination of Darwinian evolution, imagines a "vengeful god" calling "from up the sky" and stating "Thou suffering thing, know that thy sorrow is my ecstasy!"

ANSWER: "Hap"

[10] According to one anecdote, both Hardy and this other poet contented themselves with obscurity when a woman failed to recognize either of their names. This poet's works include "If" and "Gunga Din."

ANSWER: Rudyard Kipling

8. Two events connected by this type of interval cannot share a causal link. For 10 points each:

[10] Name this type of interval in special relativity, which must always be positive.

ANSWER: spacelike

[10] The interval between two events selected from the path of the motion of one of these particles in a vacuum must be zero. It is the gauge boson for electromagnetism, and it is also the quantum of light.

ANSWER: photons

[10] Electromagnetic interactions are explained by the exchange of a virtual photon according to this theory. The 1965 Nobel Prize in Physics was awarded to Schwinger, Tomonaga, and Feynman for their development of this theory.

ANSWER: **quantum electrodynamics** or **QED** [do NOT prompt on partial answers]

- 9. One story states that after this god created the first set of humans from stones, he didn't like how big and stupid they were so he destroyed them with a flood and made better humans. For 10 points each:
- [10] Name this creator god of Incan myth, who was the father of Inti and Mama Quilla.

ANSWER: Viracocha [Prompt on Kon-Tiki]

[10] Inti was the deity of this celestial body. Viracocha created time by telling him to move around the sky, and the Inti Raymi is held when this entity is closest to the Earth.

ANSWER: the Sun

[10] This woman is sometimes said to be the daughter of Viracocha, although she is often said to be the daughter of Inti and Mama Quilla, much like her husband Manco Capac. She taught the Incans how to weave.

ANSWER: Mama Ocllo

- 10. This film was based on the Cornell Woolrich story "It Had to Be Murder." For 10 points each:
- [10] Name this Alfred Hitchcock film about Jeff Jeffries, a wheel-chair bound photographer, whose neighborhood observations lead him to suspect that Lars Thorwald murdered his wife.

ANSWER: Rear Window

[10] Based on the story of Leopold and Loeb, Brandon Shaw and Phillip Morgan conspire to commit the perfect murder in this Hitchcock film.

ANSWER: Rope

[10] One of the innovations in *Rope* was its use of long shots separated by these kinds of shots, in which the camera is mounted on a machine that follows the action during recording.

ANSWER: dolly shot or tracking shot

11. Conchita Citron is considered the greatest female star of this sport, which is similar to the Jalikattu practiced in Tamil Nadu. For 10 points each:

[10] Identify this hazardous sport, which is practiced by toreros in Spain.

ANSWER: bullfighting

[10] During the first act of a bull fight, one of these horsemen typically pierces the bull in the shoulder with a lance, thus weakening the neck muscle and allowing the *matador* to slay the bull later on.

ANSWER: picador

[10] After Catalonia voted to ban bullfighting outright, this socialist former Prime Minister transferred control of the sport to the Ministry of Culture which hopes to preserve it. He was once heckled by Hugo Chavez, prompting King Juan Carlos to ask Chavez "Why don't you shut up?"

ANSWER: Jose Luis Rodriguez Zapatero

- 12. This writer presented an account of the tension in discussing Ronald Reagan's mansion in the essay "Many Mansions." For 10 points each:
- [10] Name this author from California, some of whose essays can be found in *The White Album*.

ANSWER: Joan **Didion**

[10] This writer wrote about Hollywood and other aspects of Los Angeles life in his novels featuring Henry Chinasky, such as *Factotum* and *Ham on Rye*.

ANSWER: Charles Bukowski

[10] Although born in Chicago, this author set many of his novels in California, including *McTeague* and *The Octopus*, the latter of which chronicles the struggle between wheat farmers and the railroads/

ANSWER: Frank Norris

- 13. In his final encyclical *Pacem in Terris*, this pope claimed that peace could only be obtained by observance of the divinely established order, which modern research had elucidated. For 10 points,
- [10] Name this pope who succeeded Pius XII and declared that he wished to "throw open the windows of the church."

ANSWER: John XXIII

[10] John XXIII called for this church council but did not live to see its completion. This council simplified the liturgy and allowed limited use of the vernacular tongue in the Mass, in addition to traditional Latin.

ANSWER: Second Vatican Council [or Vatican II]

[10] After Vatican II, the Mass of Paul VI replaced this earlier mass, which dates from the Council of Trent and is still practiced by some as an extraordinary form of the mass.

ANSWER: Tridentine Mass

- 14. For the differential equation "dy over dx equals f of x times g of y," this method would entail multiplying both sides by dx and dividing both by sides by "g of y" then integrating. For 10 points each:
- [10] Name this rather simple method of solving differential equations, which is sometimes named after Fourier.

ANSWER: separation of variables

[10] According to the Cauchy-Lipschitz theorem, for some differential equation defined over a space that is Lipschitz continuous, there will exist a solution to the differential equation that will have this property.

ANSWER: uniqueness

[10] The method of characteristics is a way of solving this type of partial differential equation, which for an order n PDE, has n-1 well-defined initial value conditions. The function "f of x equals e to the x minus e to the minus x, all over 2" is named *this* kind of sine function.

ANSWER: hyperbolic

- 15. This man ordered the murder of all Danes in England, leading to the St. Brice's Day massacre. For 10 points each:
- [10] Name this Anglo-Saxon king and first husband of Emma of Normandy, who got his epithet from taking bad advice from his *Witan*.

ANSWER: Aethelred II or Aethelred the Unready [or Aethelred unraed]

[10] Aethelred's son Edmund Ironside reigned for only a few months in 1016 before this Danish King took over England. This son of Svevn Forkbeard soon married Aethelred's widow Emma.

ANSWER: Cnut the Great [do not accept "Harthacnut"]

[10] Cnut also overthrew St. Olaf of Norway; however, the Norwegian crown would soon pass to this illegitimate son of Olaf, who also became king of Denmark before dying at age 23.

ANSWER: Magnus the Good [or Magnus Olafson]

- 16. Together with William Byrd, this man was granted a monopoly on printed music by Queen Elizabeth. For 10 points each:
- [10] Name this Renaissance-era composer of the 40-part motet *Spem in Alium*. One of his themes was used for a fantasia centuries later by a countryman.

ANSWER: Thomas Tallis

[10] This English Renaissance composer is most renowned for his lute songs, such as "Flow, my tears," also called the "Lachrymae Pavane."

ANSWER: John **Dowland**

[10] This American minimalist composer turned towards Renaissance scales in an early piano piece called "Phrygian Gates," though now he is more famous for his operas *The Death of Klinghoffer* and *Nixon in China*.

ANSWER: John Adams

- 17. One story by this author describes a headless monster with a female body whose eyes are on his nipples. For 10 points each:
- [10] Name this author who wrote "Forging the Swords," one of his stories from *Old Tales Retold*. He also wrote the collection *A Call to Arms*.

ANSWER: Lu Xun [or Lu Hsun]

[10] Lu Xun's stories includes one about the true story of this man, who is unable to draw a perfect circle or recite any lines from a Chinese opera before he is executed.

ANSWER: Ah Q

[10] Lu Xun was inspired by this other classic of Chinese literature, to produce some of his stories. This novel opens with Liu Bei, Guan Yu, and Zhang Fei swearing the Oath of the Peach Garden and is named for a turbulent time period.

ANSWER: Romance of the Three Kingdoms [or Sanguo Yanyi]

- 18. In "Modern Moral Philosophy," G.E.M Anscombe argued that we cannot arrive at meaningful conclusions in this field until we have a much better understanding of psychology. For 10 points each:
- [10] Identify this field of philosophy concerned with the nature of right and wrong. Aristotle discussed ways to achieve *eudaimonia* in a work of philosophy concerned with this field that is titled after his son Nicomachus.

ANSWER: virtue ethics

[10] In "Modern Moral Philosophy," Anscombe introduced this term for the view that the "rightness" or "wrongness" of actions is determined by their effect, thus making it the opposite of deontological ethics.

ANSWER: consequentialism [Accept word forms.]

[10] A major thought experiment in modern virtue ethics is this one proposed by Philippa Foot. It asks whether you should allow a runaway vehicle to kill five people, or pull a lever to make it switch tracks and only kill one.

ANSWER: trolley problem

- 19. Homer praises the skill of these people in making glass, much of which came from the city of Sidon. For 10 points each:
- [10] Name this Semitic civilization based in present-day Lebanon, which expanded into a vast trading network throughout the Mediterranean and which used an alphabet that is the ancestor of the Greek and Latin alphabets.

ANSWER: Phoenecians

[10] Like the Hittites, the Phoenicians were attacked by this collection of maritime raiders, who are often blamed for the Bronze Age collapse in many parts of the Mediterranean. This mysterious civilization also invaded Egypt as described in the Great Karnak Inscription.

ANSWER: the **Sea People**s

[10] The Phoenecians got their name from the color of their cloaks, which were made using this expensive dye, named after one of their main ports.

ANSWER: Tyrian purple

20. MODERATOR NOTE: Do not reveal the alternate answer for the second part.

This process involves the formation of a lariat structure, and is facilitated by a structure formed with snRNPs [snurps]. For 10 points each:

[10] Identify this process which sees the removal of introns and the joining of exons from an mRNA transcript.

ANSWER: mRNA splicing [accept word forms such as splice]

[10] A similar process occurs in pre-rRNA, which is preceded by the transcript being modified in various ways by these molecules, an example of which is the C/D box variety, which performs methylation.

ANSWER: **snoRNA**s [Accept **small nucleolar RNA**s]

[10] Those modifications to the rRNA transcript occur in this structure, which forms around the NOR, a region containing the genes for rRNA. Those genes are transcribed in the fibrillar center of this structure.

ANSWER: nucleolus