

# DRAGOON 2013

## Round 4

Questions by the University of Illinois at Urbana-Champaign

### Tossups

1. **In the offseason after this incident, one participant signed with Dallas during training camp and immediately retired, having spent 11 years with his former team. A similar incident to this non-baseball event resulted in Brandon Philips tagging out Jonathan Villar. It happened after a completion to Clyde Gates, and after, a Joe McKnight miscue led to a touchdown for the team who kicked off. This play resulted in a touchdown for defensive back (\*) Steven Gregory, and during this play Brandon Moore tried to block Vince Wilfork. This play was retired from SportsCenter's Not Top 10 in September 2013 after topping it for 40 straight weeks. For 10 points, name this play that happened on Thanksgiving Day 2012, where an offensive guard's backside collided with New York Jets Quarterback Mark Sanchez.**

ANSWER: the **Butt fumble** [accept anything like the "**Mark Sanchez fumble** against the Patriots" before "Mark Sanchez" and prompt afterward]

2. **A history of these people was the masterwork of John of Biclaro. These people suffered a disastrous loss at the Battle of Guadalete. The Jews were persecuted by kings of these people like Reccared and Recceswinth, the latter of whom codified these people's laws in the *Liber Judiciorum*. These people established a kingdom with capital at (\*) Toulouse, and one king of these people died during a battle which he won alongside Flavius Aetius. These people fought the Huns at Chalons along with Rome, but sacked Rome in 410 under the leadership of Alaric, and defeated Valens at Adrianople. For 10 points, name this Germanic tribe which ruled the Iberian peninsula after the fall of Rome and split off from the Ostrogoths.**

ANSWER: **Visigoths** [prompt on just "Goths"]

3. **Vasari relates that on many days, the artist of this work would often stand on the scaffolding without picking his brush only to study its tone. Preliminary sketches for this work were often done in red chalk, which are still preserved in its artist's notebooks. As a man recoils in this painting, he upsets the balances of a salt cellar that are next to some pewter (\*) dishes. Found in the refectory of the Santa Maria delle Grazie in Milan, this painting depicts a group of figures during the exact moment they ask "Lord is it I?", unlike the moment after as seen in earlier versions. However, the only one not asking that question has his face in the dark and is Judas. For 10 points, name this painting by Da Vinci which depicts the 12 apostles and Jesus during the title meal.**

ANSWER: *The **Last Supper*** [or *Il **Cenacolo*** or *L'**Ultima Cena***]

4. **This character is described as having eyes that are "burning blue and ominous," but later they give off "a glare of red." At one point, he repeatedly exclaims: "Thou hast escaped me! Thou hast escaped me!", and he was previously held captive by natives for over a year. In Chapter 9 of the novel in which he appears, he is asked to determine the cause of the local (\*) minister's melancholy. His last act is to write a will for his seven-year-old step-daughter. This doctor is called "The Leech," which foreshadows his own death after the death of his primary victim Arthur Dimmsdale. For 10 points, name this estranged husband of Hester Prynne, the main antagonist of Nathaniel Hawthorne's *The Scarlet Letter*.**

ANSWER: **Roger Chillingworth** [accept either name]

5. One form of this quantity is equal to  $\bar{h}$  squared divided by two times Boltzmann's constant times the molecule's moment of inertia—that form simplifies the expression for the rotational partition function. It's not the number of particles, but this quantity is a natural variable for both the Gibbs and Helmholtz free energies. This quantity is located in the denominator of the integrand in the (\*) Clausius inequality. This quantity is the thermodynamic conjugate of entropy. Equipartition states the kinetic energy of a monatomic ideal gas is  $\frac{3}{2}$  times Boltzmann's constant times this quantity. Gibbs free energy is equal to enthalpy minus entropy times this quantity. For 10 points, name this quantity found in the denominator of the combined gas law, which is often measured in Kelvin.

ANSWER: temperature [accept “rotational temperature”]

6. The *Book of the Two Ways* describes how the souls of the dead would go to the “Mansion” of *this*. A heart-eating god of this domain appears in the Cannibal Hymn to help the king slay his enemies. An ancient, obscure god with this domain is named Iah. In one tale, an object associated with it was offered to Osiris, who ate it to come (\*) back to life. That object, which was restored after being torn out in a fight, was represented by the left Wadjet eye. This item appears on the headdress of Khonsu, and this entity was the loser of a bet that extended the year to 365 days. For 10 points, name this object which appears on the headdress of Thoth and his Ibis bill as a crescent shape.

ANSWER: Moon [prompt on the left eye of Horus]

7. Elliott Carter's double concerto is scored for two chamber orchestras, piano and this instrument, and the role for that instrument was premiered by Ralph Kirkpatrick. “Les baricades misterieuses” was composed for this instrument, and the composer of that work wrote 4 books of solo works for this instrument which are themselves divided into 27 “orders”; those books are by (\*) Francois Couperin. Baldassare Galuppi learned to play it from organist Antonio Lotti and composed numerous concerti for it. Poulenc's *Concert champêtre* was composed for Wanda Landowska, a 20th century master of it. Like the *muselar* and virginal, this instrument produces sound by plucking strings with picks attached to keys. For 10 points, name this keyboard instrument popular in the Baroque era.

ANSWER: harpsichord

8. In this novel's final chapter a man realizes that a compass's orientation must have flipped. Earlier, its characters discover the initials of A.S., a medieval Nordic alchemist. After a group of characters nearly die of dehydration, they find a river that they name Hansbach. This book opens with a group of characters decoding a Runic message in an edition of Snorri's works. The main character of this work observes a beach coast that is lined with (\*) petrified trees and enormous mushrooms and later see an ichthyosaurus fight a plesiosaurus. This work's main actions begins after Professor Otto Lidenbrock descends into an Icelandic Volcano; later he re-emerges at Mt. Stromboli. For 10 points, name this novel by Jules Verne which chronicles a subterranean journey.

ANSWER: Journey to the Center of the Earth [or Voyage au centre de la Terre or A Journey to the Centre of the Earth and A Journey to the Interior of the Earth]

9. 9. Bronze age artifacts from this place include a bronze “horned god” statue from the settlement of Enkomi. The castles of Kantera, Buffavento, and St. Hilarion were built here to repel Arab Raiders. An 1878 convention put the British in charge of this place, but it nominally remained under Ottoman control until the UK annexed it in 1914. The rebel governor Isaac (\*) Komnenos declared himself emperor of this place. After being deposed as King of Jerusalem, Guy of Lusignan bought the kingship of this place from Richard the Lionhearted. A 1974 coup installed Nikos Sampson as dictator here. The revolutionary movement EOKA was founded here with the aim of bringing about “enosis,” or unification, with Greece. For 10 points, name this Mediterranean Island which is still split between Greek and Turkish claimants.

ANSWER: Cyprus

10. **Puromycin and Tetracyclines occupy the site where these molecules would normally bind to inhibit a certain process. Ester linkages are formed between these molecules and a certain type of molecule bound with AMP in a process called charging. The aforementioned charging process is catalyzed by aaRS, and these molecules contain a molecule of pseudouridine on their T<sup>Ψ</sup>C arms. In prokaryotes, one of these molecules bound to fMet is bound to (\*) IF-2 to form an initiation complex. Elongation factors guide these cloverleaf shaped molecules to the A-site, and then these molecules are translocated to the P and E sites of the ribosome before exiting. For 10 points identify these amino acid carrying molecules used in translation whose anticodons bind to mRNA.**

ANSWER: tRNA [Accept transfer RNA]

11. **A unanimous opinion on a court case that helped enable this matter likened a business method to the “fabled offer of milk to the stork and the fox.” The Court struck down one institution’s “tailored use” to obtain “critical mass” via this practice, ruling in favor of Barbara Grutter. This policy was legitimized by the “adverse impact” theory sparked by the (\*) *Griggs vs. Duke Power* case. It was given its name by a JFK executive order that established the precursor to the EEOC, a commission chaired by Clarence Thomas. It established plus factors and point systems at the University of Michigan under Lee Bollinger. For 10 points, name this practice that prohibited Allan Bakke from attending UC Davis prior to the court striking down racial quotas.**

ANSWER: affirmative action

12. **A character in this play declares to his companions that their life “finds tongues in trees, books in the running brooks, sermons in stones, and good in everything.” After deciding to go hunting, that character mourns the fate of the deer who are being slaughtered despite being native to their region. In this play, Oliver’s hatred for his younger brother only grows when the younger brother ends up defeating the champion (\*) Charles in a wrestling match. That younger brother writes a series of love poems to the central character and hangs them on trees. The fool Touchstone and Audrey are one of the four couples to get married at the end of this play set in the Forest of Arden. For 10 points, name this Shakespeare play which features characters like Orlando and the disguised Rosalind.**

ANSWER: As You Like It

13. **Ondrej Rydval argued that rational behavior in this scenario is best framed using the principle of loss avoidance. This situation is theoretically equivalent to the problems of draining a meadow and crossing a river that are presented in Hume’s *A Treatise of Human Nature*. Brian Skryms argued that it appropriately models social contract theory in a book about it and the evolution of social structure. This scenario was first introduced in the book (\*) *Discourse on Inequality* and features a risk-dominant equilibrium and a payoff-dominant equilibrium which are non-identical, thus making it have two Nash equilibria. For 10 points, name this coordination game first described by Rousseau, in which a player can choose to go after a hare alone or try to collaborate to pursue the namesake beast.**

ANSWER: stag hunt

14. **On Venus, the largest one of these structures is found in Alta Regio and is named after the goddess Ma’at. On Mars, some of these structures can be found in the Elysium Province, but the largest one of these structures on Mars is surrounded by a four kilometer tall escarpment. These structures typically emit an aphanatic liquid in the fashion of a (\*) “fountain.” These structures are formed from seamounts that may accumulate enough material to become a type of island; typically they are built up from layers of basaltic lava. Olympus Mons is one of these mountains. For 10 points, name these broad structures exemplified by Mauna Loa, which are named for a warrior’s defensive weapon.**

ANSWER: shield volcanoes [Prompt on volcanoes and mountains.]

15. A group of filmmakers from this country theorized that the “cinema-eye” was more reliable than the human eye. It was the birthplace of a man who produced the incomplete *Que viva Mexico*. One of its filmmakers produced a movie which fluidly shows a day in the life of the cameraman called *Man with a Movie Camera*. A director from here created a film in which Kris Kelvin goes to a (\*) space station surrounding an oceanic planet. Many filmmakers from this country theorized repeatedly about a model of spatial orientations called “montage,” including one that produced a movie featuring an iconic scene in which civilians are massacred on the Odessa Steps. For 10 points, name this country home to Dziga Vertov and Sergei Eisenstein, the latter of whom produced *Battleship Potemkin*.

ANSWER: U.S.S.R or Soviet Union [or Russia]

16. In one book, this thinker claimed that philosophy is always too late to make a difference, using the example of the Owl of Minerva only flying at dusk. One of his lecture series describes the three parts of the Destiny of Reason to answer the question “What is the Ultimate Design of the World?” That work argues that there is no distinction between studying philosophy and the history of philosophy. A system of morality developed by him incorporates (\*) non-interference, morality and the ethical life as three distinct spheres that intersect with one another. He wrote a work whose narrative moves through progressively higher levels of consciousness before finally arriving at “absolute knowledge.” For 10 points, name this author of *Philosophy of Right* and *The Phenomenology of Spirit*.

ANSWER: Georg Wilhelm Friedrich Hegel

17. In a plasma, the component of the drift velocity given this name is proportional to the time derivative of the electric field. The opposite of the divergence of another quantity of this name is equal to the bound charge density. That quantity given this name is defined as the electric dipole moment per unit volume. The angle at which one form of this property occurs can be altered by the presence of a magnetic field in the (\*) Faraday effect. The intensity drop caused by devices which alter this property is given by Malus’s Law. This property can be altered by quarter wave plates, which exhibit birefringence. For 10 points, name this property of a wave which describes the direction in which its electric field oscillates, which comes in elliptical, linear, and circular types.

ANSWER: polarization [accept more specific answers like “polarization drift” or “polarization density”]

18. One religion from this country espouses the four pillars of suicide, abortion, cannibalism of the deceased, and sodomy. Another faith from this country postulates the existence of a “time track” which records an individual’s experiences and distributes the information among the analytical mind and the reactive mind, the latter of which is responsible for negative thoughts. Another sect from this country holds annual (\*) “Circuit Assemblies,” and publishes the illustrated magazine *Awake!* This home of Church of Euthanasia is also home to a sect founded by Charles Taze Russell as well as one that claims that the world is plagued by thetans released by Lord Xenu. For 10 points, name this home country of Jehovah’s Witnesses and the Church of Scientology.

ANSWER: United States of America

19. This politician appealed to the environmental movement by demanding that the sky over the Ruhr region turn blue again. He lends his name to a report which designated latitude 30 degrees north as the dividing line between the prosperous northern and poorer southern parts of the globe. During one diplomatic trip, this man made the shocking gesture of (\*) kneeling before a memorial to the Warsaw Ghetto Uprising, and he was criticized by some for agreeing to put an eastern border at the Oder-Neisse Line. Helmut Schmidt succeeded this man after it was revealed that his aide Gunter Guillaume was a Stasi spy. For 10 points, name this Nobel Peace Prize-winning Chancellor of West Germany who sought to improve relations with the East through “Ostpolitik.”

ANSWER: Willy Brandt [or Herbert Ernst Karl Frahm]

20. This novel's narrator was based on the ambitious soldier Giovanni Drogo, a character from Dino Buzzati's *The Tartar Steppe*. Its unnamed narrator attempts to decode mysterious messages on wooden slips to learn about the title figures, though he finds that there is no way to interpret them. In its third chapter, the protagonist takes an unnamed girl - whose body he has been ritually washing, through a desert to reunite her with her people. Upon return, he finds that the warrant officer Mandel from the (\*) Third Bureau has appeared to torture him. This novel opens with the narrator analyzing Colonel Joll's sunglasses, who brutalizes civilians to gather intelligence about a supposed impending attack. For 10 points, name this short novel about an unnamed magistrate guarding an empire's fringe, a work of J.M. Coetzee.

ANSWER: *Waiting for the Barbarians*

21. One quantity named for this scientist is defined as the distance between the electron and the electron hole in an exciton. He's the first namesake of a formalism which sets the action equal to an integer multiple of Planck's constant. The energy shift in the Zeeman effect is equal to the product of the magnetic field, the z-component of the angular momentum, the g-factor, and another quantity named for this man. Another quantity named for this man is the (\*) most probable distance between the proton and the electron in the ground state of a hydrogen atom. Those quantities are his namesake magneton and radius. For 10 points, name this Danish scientist who postulated that electrons move around the nucleus in quantized orbits in his namesake atomic model.

ANSWER: Niels Henrik David Bohr

## Bonuses

1. This idea is introduced in a letter which provides some of its author's reflections upon *King Lear* and Benjamin West's *Death on a Pale Horse*. For 10 points each:

[10] Identify this sensibility found in objective poets like Shakespeare, but not in Coleridge, which is the ability to remain aesthetically objective with the uncertainties surrounding the "Penetralium of Mystery."

ANSWER: negative capability

[10] This writer used the phrase "negative capability" in one of his letters. His own poems include "The Eve of St. Agnes" and "Ode on a Grecian Urn."

ANSWER: John Keats

[10] In a letter to John Reynolds, Keats compared human life to the "Mansion of Many Apartments" while describing this poet's work, which includes "A Slumber Did my Spirit Seal" and "She Dwelt among the Untrodden Ways."

ANSWER: William Wordsworth

2. Aristotle's solution to the problem of these entities states that they only exist when instantiated. For 10 points each:

[10] Name these qualities of things and ideas, which are shared by many objects in the world. It is distinguished from the opposite term "particular."

ANSWER: universal

[10] This movement of medieval philosophy rejects universals and abstract objects and states that only particulars and predicates actually exist. It was espoused by William of Ockham and his teacher Roscellinus.

ANSWER: nominalism

[10] This philosopher argued that universals are Ideal forms. His epistemic ideas can be found in *Theaetetus* and *The Republic*.

ANSWER: Plato

3. The Americans abandoned the St. Lawrence Campaign of the War of 1812 after William Mulcaster defeated this general at Crysler's Farm. For 10 points each:

[10] Name this governor of the Louisiana territory. He attempted to create an independent nation with Aaron Burr.

ANSWER: James Wilkinson

[10] Washington suspected Wilkinson's involvement with the Spanish, so he named this man general of the Legion of the United States. He defeated Little Turtle and Blue Jacket at Fallen Timbers.

ANSWER: "Mad" Anthony Wayne

[10] Wilkinson fought for this state's admission to the Union, where he founded the city of Frankfort. Its favorite sons of the 19<sup>th</sup> century were Jo Daviess and Henry Clay.

ANSWER: Kentucky

4. This piece is based on a poem by Richard Dehmel about a woman who tells her lover that she is carrying another man's child. For 10 points each:

[10] Name this string sextet, its composer's Opus 4.

ANSWER: Transfigured Night [or Verklärte Nacht]

[10] *Transfigured Night* is a work in the late romantic style by this Austrian composer of *Pierrot Lunaire*, who later broke traditional harmony completely by developing twelve-tone composition.

ANSWER: Arnold Schoenberg

[10] Schoenberg also composed this 'monodrama' for soprano and orchestra, in which the singer plays a woman who discovers her lover's dead body in the night.

ANSWER: Erwartung or Expectation

5. The divergence of close trajectories in this type of motion is characterized by the Lyapunov exponent. For 10 points each:

[10] Name this type of motion characterized by nonlinearity and sensitivity to initial conditions. The double pendulum and the butterfly effect are examples of this type of motion.

ANSWER: **chaos** [or word forms such as “**chaotic** motion”]

[10] The various possible trajectories of a chaotic system are often plotted in this type of abstract space, where the coordinates represent the needed variables to specify the state of the system.

ANSWER: **phase** space

[10] The logistic map, an example of a chaotic system, exhibits this behavior in such a manner that new orbit of the system has double the period of the old orbit. This behavior is a splitting of one trajectory in a system into two new trajectories as one of the parameters is increased.

ANSWER: **bifurcation**

6. In 1974, Congress amended FECA, setting limits on the activity of these organizations. For 10 points each:

[10] Name these organizations that generate funds to sponsor political campaigns, whose “Super” types cannot directly fund a candidate.

ANSWER: **Political Action Committees** [or **PACs**]

[10] Donors can give unlimited amounts of this type of monetary contribution to a party, for it will not directly support the candidate.

ANSWER: **soft money**

[10] This type of organization can spend unlimited funds on election activities except broadcast ads 30 days prior to primaries and 60 days prior to elections. The section of the IRS code that deems them tax-exempt names these groups.

ANSWER: **527** organizations

7. The leader of this campaign was forced to march back home through a muddy and unusually cold winter. For 10 points each:

[10] Identify this 1812 military campaign in which the French Emperor captured Moscow but lost most of it to fire.

ANSWER: **Napoleon’s invasion of Russia** [accept equivalents]

[10] Although Napoleon managed to take control of the field at this bloodiest battle of the Russian campaign, he was unable to finish off the Russian army, and the Russian general Kutuzov successfully retreated.

ANSWER: Battle of **Borodino**

[10] Although Kutuzov got away, this other Russian general was killed at Borodino. During the battle, he ordered the construction of a series of namesake *fleches*, or earthwork defenses.

ANSWER: Pyotr **Bagration**

8. As a baby, this character was so large that he nearly killed his mother during childbirth. His father was the white-haired Zal. For 10 points each:

[10] Name this hero who serves Kay Kavus. Later in life, he kills a man wearing an onyx owned by Tahmina, who turns out to be his son.

ANSWER: **Rostam**

[10] Zal was able to save Rostam’s mother by learning how to do *this* from a giant bird.

ANSWER: perform a **C-section** or **Caesarian section**

[10] The story of Rostam and Sohrab appears in this Farsi epic by Ferdowsi, which provides a mythical history of Persia.

ANSWER: **Shahnameh** [Accept **Book of Kings**]

9. Designed by James Summerton, these molecules are a commonly used tool to facilitate gene knockdown. For 10 points each:

[10] Name these synthetic antisense oligomers which bind to a target site on RNA, then use their phosphorodiamidate linkages to block cellular processes from acting on the target site.

ANSWER: **morpholinos**

[10] Morpholinos are commonly used to study development in this organism, which is a convenient choice since its embryos are transparent. This aquatic organism's scientific name is *Danio rerio*.

ANSWER: **zebrafish** [accept **zebra danio**]

[10] This more well-known model organism has mutants with white eyes which were famously studied by Thomas Hunt Morgan. It's commonly known as the fruit fly.

ANSWER: **Drosophila** melanogaster [or **D. melanogaster**]

10. Ottone and Ottavia are exiled near the end of this opera, allowing for the title character to marry Nerone. For 10 points each:

[10] Identify this opera set in Ancient Rome and first produced in 1642.

ANSWER: *The Coronation of Poppea* [or *L'Incoronazione di Poppea*]

[10] *The Coronation of Poppea* was the last opera by this early Baroque composer, who also wrote a popular series of madrigals and whose *Orfeo* is the oldest opera still in the standard repertoire.

ANSWER: Claudio **Monteverdi**

[10] Early opera grew out of the work of this association of humanists and thinkers in Florence. They sought to recreate the musical style of ancient Greece, eventually giving rise to Jacopo Peri's *Daphne*.

ANSWER: the Florentine **Camerata**

11. The four schools of judicial thought and law in this branch are the Hanifite, Malikite, Shafi'ite, and Hanbalite. For 10 points each:

[10] Name this largest branch of Islam which, unlike Sh'ia, recognizes Abu Bakr, Umar, and Uthman as the first of the caliphs.

ANSWER: **Sunnite**

[10] This ultra-orthodox branch of Sunni Islam is the dominant one in Saudi Arabia. It is sometimes considered a branch of Salafism, which advocates imitation of the ways of Muhammad and the original Muslims.

ANSWER: **Wahabi**

[10] This branch of Isma'ili Islam believes that Isma'il ibn Ja'far was the last imam and that his son will reign supreme as the Mahdi.

ANSWER: **Seveners**

12. One of the most celebrated results of this field is the Whitney Embedding Theorem, which states that any object with  $n$  dimensions can be embedded in a space with  $2n + 1$  dimensions. For 10 points each:

[10] Name this discipline of mathematics whose branches include geometry. It is loosely defined as the study of spaces, and objects studied in this discipline include Klein bottles and Möbius strips.

ANSWER: **topology**

[10] A set theory definition of topology defines a set of points  $X$  and a subset of  $X$  with this property. Those subsets of  $X$  with this property must also retain it under finite intersection and arbitrary union.

ANSWER: **openness**

[10] A topological space has this property if for any infinite sequence of points within the set, it will converge to a point within the set. Any product of topological spaces will have it if its individual components also possess it according to Tychonoff's theorem.

ANSWER: **compactness**





13. Answer the following about the history of printed books, for 10 points each:

[10] Everyone loves this inventor of the movable type printing press, who printed a namesake version of the bible from his workshop in Mainz.

ANSWER: Johannes **Gutenberg**

[10] The printing press made its way to Asia when Jesuits introduced it to this Portuguese colony in India.

ANSWER: **Goa**

[10] The first printed book in English was printed by William Caxton in this city on the river Zwin in the Low Countries. Today, it is the capital of West Flanders.

ANSWER: **Bruges**

14. During the course of this play, the ailing Nonno works on his last poem. For 10 points each:

[10] Name this play, which is set at Maxine Falk's hotel in Mexico, to which the defrocked minister T. Lawrence Shannon leads a group of tourists, including his sixteen-year-old love interest Charlotte.

ANSWER: **Night of the Iguana**

[10] In this other play by Tennessee Williams, Amanda Wingfield compels her son Tom to bring gentlemen callers to her daughter Laura, who keeps a collection of toy animals for company.

ANSWER: **The Glass Menagerie**

[10] In this play, a reworking of Williams's earlier *Battle of Angels*, a drifter named Val begins an affair with Lady, the middle-aged owner of a dry goods store.

ANSWER: **Orpheus Descending**

15. One member of this school studied the behavior of chimpanzees at Tenerife in the Canary Islands and published his findings as *The Mentality of Apes*. For 10 points each:

[10] Identify this school of psychology founded by Max Wertheimer, Wolfgang Kohler, and Kurt Koffka, whose name comes from the German for 'pattern' and which emphasizes experiences as more than the sum of the parts.

ANSWER: **Gestalt** psychology

[10] Wertheimer investigated this optical illusion in which a sequence of images, such as two points of light, are perceived as if they were one object in continuous movement.

ANSWER: **phi phenomenon**

[10] This principle of Gestalt psychology holds that underlying brain processes have structural similarities to actual experience, that is, brain activity forms a 'map' of the actual experience.

ANSWER: **isomorphism**

16. For 10 points each, name these nymphs.

[10] Alpheus pursued this nymph, who spurned his advances and eventually transformed into a fountain in Sicily. She is interrogated by Demeter since she saw who abducted her daughter.

ANSWER: **Arethusa**

[10] Arethusa was one of these 50 nymphs, daughters of a namesake god of the ocean. They also include Thetis, the mother of Achilles.

ANSWER: **Nereids**

[10] Some sources state that this enchanting woman was also a nymph. A spellbound Odysseus spent many a year before the action of *The Odyssey* begins on her island of Ogygia.

ANSWER: **Calypso**

17. This leader called for his army to massacre most *peninsulares* in his 'Decree of War to the Death.' For 10 points each:

[10] Name this Venezuelan general, commonly called the "Liberator" of South America.

ANSWER: Simon **Bolívar**

[10] After the second Venezuelan republic fell, Bolivar fled to this British colony in the Caribbean. He wrote a letter named for this island outlining his view of the future Latin America. This island was also home to the pirate stronghold of Port Royal.

ANSWER: **Jamaica**

[10] Bolivar finally achieved lasting success at this August 1819 battle, where together with Francisco Santander he liberated Colombia from the Spanish.

ANSWER: Battle of **Bovacá**

18. These three rules can be used to predict the term symbol for the ground state of an atom. For 10 points each:  
[10] Name this set of 3 rules, the first of which is sometimes called the rule of maximum multiplicity. The second of these rules states that if the multiplicities are equal, the configuration with the largest orbital angular momentum has the lowest energy.

ANSWER: **Hund's** rules

[10] The multiplicity is equal to two times the total atomic value for this plus one. Individual electrons can have values of plus or minus ½ for this form of angular momentum.

ANSWER: **spin** [prompt on "intrinsic angular momentum"]

[10] If the electrons in an orbital can have their coordinates with respect to the inversion center flipped while not changing the sign of the wavefunction, the orbital is referred to as this. Molecular term symbols that can be described by this German word are denoted with a subscript g.

ANSWER: **gerade**

19. After being rejected by the Amsterdam Town Hall, the artist of this painting cut it down to a quarter of its original size to make it sellable. For 10 points each:

[10] Name this massive painting depicting an episode from the Batavian rebellion, showing a bunch of people gathered around a table for a sword oath led by its one-eyed leader.

ANSWER: *The **Conspiracy of Claudius Civilis***

[10] *The Conspiracy of Claudius Civilis* is a work of this Dutch artist who also showed the company of Frans Banning Cocq in *The Night Watch*.

ANSWER: **Rembrandt** van Rijn

[10] The Metropolitan currently has this painting of Rembrandt's which shows a Greek philosopher meditating on the achievements of one of his predecessors. It is the subject of Joseph Heller's *Picture This*.

ANSWER: ***Aristotle Contemplating a Bust of Homer***

20. The father of the protagonist of this novel is executed after being mistaken for a Zealot. For 10 points each:

[10] Name this religiously themed novel which interpolates a skeptical narrative into the life of the title figure, who spends forty days in a boat with God and the Devil on the Sea of Galilee.

ANSWER: *The **Gospel According to Jesus Christ*** [or *O **Evangelho Segundo Jesus Cristo***]

[10] In this other novel by the same author, all of the main characters are only referred to by descriptions, such as the "girl with dark glasses." In this novel, the Doctor's wife is the only one not struck with the title condition.

ANSWER: ***Blindness*** or ***Ensaio sobre a cegueira***

[10] Both *Blindness* and *The Gospel According to Jesus Christ* were written by this Portuguese author, who is known for his postmodern descriptions of bizarre situations, such as Iberia breaking off from Europe in *The Stone Raft*.

ANSWER: Jose **Saramago**