# **DRAGOON 2013**

# Round 10

Questions by the University of Illinois at Urbana-Champaign

## **Tossups**

1. In one novel by this author, Kitty accompanies her husband Walter Fane to a remote area where a cholera epidemic has been killing the Chinese people. Noël Coward dubbed this author "the lizard of Oz." This author satirized Hugh Walpole as the literary hack Alroy Kear in his novel in which Alroy tries to write a biography of (\*) Edward Driffield. This author of *The Painted Veil* included his recurring character of William Ashenden in his book *Cakes and Ale*. In an autobiographical work, the club-footed protagonist falls in love with the waitress Mildred Rodgers. For 10 points, name this author who wrote about himself as Philip Carey in *Of Human Bondage*.

ANSWER: William Somerset Maugham

2. Most models of this substance outside of the Milky Way Galaxy are based on studies of the Okroy Cloud. This kind of substance is modeled by the second component of the stress-energy tensor in the Gödel solution to Einstein's Field Equations. This material can be found in Bok Globules and is responsible for stellar extinction. Radiation pressure forces it to spiral into the sun via the (\*) Poynting-Robertson effect. NASA uses a set-up with aerogels to capture this substance, which is forced into a circular orbit around planetary bodies via a shepherding mechanism. Ionized gas and this substance comprise the interstellar medium. For 10 points, name these small particles that comprise most ring systems.

ANSWER: space <u>dust</u> [or intergalactic <u>dust</u> or interstellar <u>dust</u> or Godel <u>dust</u> or whatever]

3. According to the *Argonautica*, one of these entities begins nearby a cave which blasts ice on all things nearby it, only for the sun to melt it. Because the rocks surrounding another of these features are incredibly dangerous, an eagle assists Psyche in collecting material from one. The goddess Nike was a child of Pallas and a personification of one of *these* - that one of them was the first to side with Zeus in the titanomachy. Lesser known examples of these include (\*) Cocytus and the fiery Phlegethon, and Themis visited one to make her son immortal. One that exemplifies pain is Acheron, and one that induces forgetfulness is Lethe. For 10 points, name these geographical features, the most notable of which is Styx.

ANSWER: rivers of the Underworld [In place of Underworld, take Hades, Tartarus, or Dis. Prompt on "rivers"]

4. One leader of this dynasty built the palace of Chehel Sotoun, and the traveller Jean Chardin published an account of the coronation of another leader of this dynasty. This dynasty traced its origins to a mystic order based in the town of Ardabil, which was led by such men as Joynad and Haydar. The Portuguese captured the island of Hormuz from this dynasty. The (\*) English travelers Robert and Anthony Shirley trained this dynasty's army according to English methods. The Ottoman Sultan Selim the Grim defeated this dynasty at the Battle of Chaldiran, where they were led by Shah Ismail I. Reaching its apex under Abbas I, for 10 points, name this Shi'ite dynasty which ruled Persia from the 16th to the 18th centuries.

ANSWER: Safavid Empire or dynasty

5. This medium is used extensively in the artwork *To Piet Mondrian, Who Lacked Green,* which was created by Dan Flavin, an artist who specializes in using it. In collaboration with the MAS, John Bennett and Gustavo Bonevardi created a memorial that displays 88 columns of it. Two slabs of silky smooth concrete that are cut at a 15 degree angle comprise an (\*) Osaka chapel named for this entity, which was designed by Tadao Ando. The construction of clerestories and *oculi* were medieval ways of incorporating it into buildings. On September 11 of every year since 2001, two lines of it are shot into the sky as a memorial to those who died. For 10 points, name this substance that is usually incorporated into buildings by windows.

ANSWER: <u>light</u> [Accept any type of light, such as "green <u>light</u>" "sun<u>light</u>" or "natural <u>light</u>," etc.]

6. One tome by this thinker ends with a series of attacks against occultism, stating that it is the metaphysics of the knuckleheads. This author dedicated that book, which takes its title from a treatise by Aristotle, to "the Melancholy Silence." An essay in his volume *Prisms* contains his aphorism "To write poetry after Auschwitz is barbaric." This musicologist studied under Alban Berg in his youth and advised Thomas Mann during the writing of *Doktor Faustus*. His philosophical works include some (\*) "reflections on damaged life," *Minima Moralia*, as well a collaborative treatise that argued public taste is shaped by the culture industry. For 10 points, name this man who collaborated with Max Horkheimer on *The Dialectic of Enlightenment*, a leading member of the Frankfurt School.

ANSWER: Theodor Adorno

7. James Sadler began his first balloon flight in this city, and William Laud wrote a set of statutes for one organization here. Thomas Fairfax took control of Headington Hill to bring an end to a siege of this city. This city was the location of a debate where one participant asked the other whether it was through his grandmother or grandfather that he claimed (\*) descent from an ape. This city was Charles I's base during the English Civil War. The Huxley-Wilberforce debate on evolution took place in this city, which is also the namesake of a series of reforms forced by Simon de Montfort and his fellow barons on King Henry III. For 10 points, name this city which lent its name to some "Provisions" in 1268 and is home to a university founded about two centuries before Cambridge.

ANSWER: Oxford

8. One character in this play becomes a preacher after he dreams of three hobos from Bethlehem giving him a candle and a blue robe. Shortly before the action begins, a 340-pound man died after he fell into a well. Its backstory involves the craftsman Charles and four hobos being burned alive in a boxcar, and their spirits are thought to be the Ghosts of Yellow Dog. This play's characters include Reverend (\*) Avery, as well as Lymon, who drives a truck full of watermelons to the house of Doaker Charles in the exposition. Set in the 1930's, it follows Ma Rainey's Black Bottom in its author's cycle of ten plays. This play contrasts the practical Boy Willie with his sister, the sentimental Berniece, who wishes to keep the title musical instrument. For 10 points, name this play by August Wilson.

ANSWER: The Piano Lesson

9. A defective enzyme in this structure is the cause of I-cell disease. Transport from this structure is regulated by GGA1, which binds to ADP ribosylation factor 1, while transport to this structure is inhibited by brefeldin A. In sperm, this structure develops into another structure which uses hyaluronidase and acrosin to facilitate sperm-egg binding. This precursor to the acrosome is the site where addition of (\*) N-acetylglucosamine to serine and threonine residues and other forms of O-linked glycosylation takes place. This organelle receives COP2 coated vesicles at its cis face, and it consists of a series of stacks termed cisternae. For 10 points, name this organelle which packages and distributes proteins incoming from the endoplasmic reticulum and is named for its Italian discoverer.

ANSWER: Golgi apparatus [or body, or bodies, or complex, as long as they say Golgi award them points]

10. Pieter Claesz produced a still life of one of these objects next to a quill, and one can be seen above Fortuna's wheel in a mosaic at Pompeii. The blood of Christ washes one of these at Mt. Golgotha in a Fra Angelico painting. The right hand side of Guercino's Et In Arcadia Ego is dominated by one. An artwork that consists of one is named for a phrase the artist's mother said and features (\*) 8,601 diamonds embedded on it. Damien Hirst's For the Love of God is a platinum one. Both the Penitent Magdalena and St. Jerome were often shown with one, and it can be used to represent the vanitas theme. Jean de Dinteville and Georges de Selve appear in a painting that has an anamorphic one. For 10 points, name this body part that appears distortedly in The Ambassadors, which reflects one's mortality.

ANSWER: skulls

(Note to moderator: please emphasize the italicized words in the first line)

11. In one movie starring this actor, the villain states "Who gives a shit what you believe? In thirty seconds you'll be dead, and I'll blow this place up and be home in time for Corn Flakes." He battled against Captain Freedom in a movie which features his character trying to survive a game show hosted by Damon Kilian. In an adaptation of Philip K. Dick's "We Can Remember It For You Wholesale," this actor plays a man who heroically infuses all of (\*) Mars with breathable oxygen after he regains some of his memory. One of this actor's most recent movies sees him play a sheriff in Arizona that defends his sleepy town from drug lord Gabriel Cortez. For 10 points, name this star of Running Man and Total Recall, who starred in Terminator 2.

12. This character fills two iron chests with sand to deceive a pair of Jews into thinking that they are chests of treasure. W.S. Merwin translated the fragmentary work in which he appears by using the text *Chronicle of Twenty Kings* to interpolate the *lacunae* describing his exploits. This character's children are married to two cowards that give them a severe beating after which they are tied to trees and left for dead. Those daughters married the counts of (\*) Carrion, who are scared away by a lion that this man grabs by the mane. He delivers a speech at the Court of Toledo where he asks for his honor back from the king. He earns his nickname by reconquering Valencia from the Moors. For 10 points, name this Spanish soldier, the namesake of a Castilian epic poem.

ANSWER: El Cid or The Cid [or Rodrigo Diaz de Vivar]

ANSWER: Arnold Schwarzenegger

13. This action is the defining practice of the Soshigateli sect of Russian Old Believers. The twenty-third chapter of the Lotus Sutra recounts that the Medicine King did this after swallowing various items for twelve hundred years. Gayatri Spivak's "Can the Subaltern Speak?" closes by stating that the British misunderstood this practice. The (\*) Falun Gong have repeatedly denied that five of their practitioners did this in Tianamen Square in 2001. A wave of this practice was launched by Buddhist monks in South Vietnam, starting with Thich Quang Duc. Indian women would sometimes do this after their husband's death, a practice known as Sati. For 10 points, identify this common form of religious suicide.

ANSWER: self-<u>immolation</u> or <u>setting oneself on fire</u> [accept <u>sati</u> before mention or <u>throwing oneself on a pyre</u>, prompt on "burning" or "getting burned", do not accept "going to hell" at any point]

14. The body that investigated these events was created by Robert Kenney, the President of the National Lawyers Guild, who convened with Carey McWilliams -- that body was the McGucken Committee. The injury of Joe Dacy Coleman prompted the rise of them, wherein off duty police officers called the Vengeance Squad sought to "clean up Main Street." Public outcry surrounding the people central to these incidents heightened after the (\*) Sleepy Lagoon murder, where the 38th Street gang was accused of killing Jose Diaz. For 10 points, name these 1943 skirmishes between Los Angeles men of uniform and Pachucos, or Latino gangsters who wore long coats and baggy pants.

ANSWER: **Zoot Suit** Riots

15. The coupling between radial dispersion and velocity fluctuations in this technique can be described by the Giddings equation. Good resolution for all peaks in this technique can be achieved using temperature programming or gradient elution. Eddy diffusion, longitudinal diffusion, and mass transfer between phases are the three main contributors to (\*) band broadening in this technique, according to the van Deemter equation. Alumina and silica gel are common phases used in this technique, which distinguishes between components based on retention time. For 10 points, name this technique in which a mobile phase is passed through a column packed with a stationary phase, which is used to separate mixtures.

ANSWER: column **chromatography** [accept the following more specific answers: liquid **chromatography**, high-performance liquid **chromatography**, gas **chromatography**. If they give ANY abbreviation with the letter C in it, prompt them]

- 16. At the finale of one of this composer's works, the chorus warns "Gird on thy sword, thou man of might!" Another of piece his was arranged by Arnold Schoenberg as the *Concerto for String Quartet and Orchestra*, and another piece in that collection has a *larghetto* musette as its centerpiece. He's not Corelli, but 12 concerti grossi make up his opus (\*) 6. This composer of the funeral anthem "The Ways of Zion do Mourn" included the song "Their Land brought forth frogs" in *Israel in Egypt*, and also wrote a piece in which Simon sings "Arm, arm ye brave" and the chorus sings "See, the conqu'ring hero comes." For 10 points, name this composer of *Judas Maccabaeus* who pioneered the English oratorio and included the "Hallelujah" Chorus in his *Messiah*. ANSWER: George Frideric Handel
- 17. This leader secured a contract for his country to build Rolls-Royce Spey engines for the BAC One-Eleven, but when that fell through he was forced to pay the debt in strawberries. The opposition denounced this man in the Letter of the Six. This leader attempted to strengthen malnourished children through blood transfusions, which resulted in an (\*) AIDS epidemic. This leader laid the foundations for a personality cult in his July Theses speech, and outlawed all abortions and contraceptives in Decree 770. This leader became General Secretary following the death of his mentor Gheorghe Gheorghiu-Dej. He was tried by a kangaroo court and executed on Christmas Day, 1989 along with his wife Elena. For 10 points, name this longtime Communist leader of Romania.

ANSWER: Nicolae Ceausescu [chow-shes-koo]

18. 18. One of this author's characters transforms gold into smoke, water into fabric, and multiplies fishes as passengers board a pirate ship. Another person created by this author saves himself from an emperor's elephant by claiming descent from Nina Argalia and "Lady Black Eyes." He created the writer of "assassination poems," a guy who served the Grandee of Jahilia, (\*) Baal. A dream sequence described by this author features Ayesha leading a group of men into the Arabian Sea, where they drown. Another of his characters murders Sisodia and Allie Cone. This author of *The Enchantress of Florence* wrote about a man who dreams about Mahound after falling out of an exploding airplane with Saladin Chamcha. For 10 points, name this author of *The Satanic Verses* and *Midnight's Children*.

ANSWER: Salman Rushdie

- 19. A structural approach to these entities was developed by Uriel Weinreich, who suggested that they should be analyzed with respect to an overall system. The *koine* type of them arises naturally between two populations that interact. A questionnaire given at S. Klein's, Macy's and Saks Fifth Avenue was used to illustrate how these entities indicate prestige. Another study by William Labov concludes that the (\*) "r" hypercorrection phenomenon is an example of an urban one. Most definitions of these entities make use of a notion of mutual intelligibility. One aspect of sociolinguistics concerns how they confer social status or indicate ethnicity. For 10 points, name these variations within a language, examples of which include ebonics and Southern English. ANSWER: dialect [prompt on "languages"]
- 20. The main formalism for incorporating electric charge in this theory treats it as arising from an interaction with the Kalb-Ramond Field. A unified form of it with gravity is conjectured to be equivalent to quantum field theory via the Maldacena correspondence. The concept of T-Duality was proposed to explain how different physical configurations in this theory can result in the same macroscopic behavior. Edward (\*) Witten delivered a lecture that suggested its five major branches could be unified into M theory. At the heart of this theory are branes with a dimension parameter of 1 which have been used to predict the entropy of a black hole when subjected to an immense tensile force. For 10 points, name this unifying theory that models physical particles as a one-dimensional object.

ANSWER: superstring theory

21. The development of one type of cells in these structures depends on the GM-CSF-dependent activation of the transcription factor PU.1. A mutation in the SFTPB gene causes these structures' namesake proteinosis. Proper function of these structures depends on a substance composed of the proteins SP-A through SP-D as well as dipalmitoylphosphatidylcholine and other (\*) phospholipids. That substance is synthesized in the lamellar bodies of their type II cells, is produced at insufficiently low amounts in IRDS, and stabilizes these structures by reducing their surface tension. These structures are destroyed in emphysema. For 10 points, name these structures which facilitate gas exchange with the blood, small air sacs located in the lungs.

ANSWER: pulmonary alveoli [the singular is alveolus]

### **Bonuses**

1. Answer the following about religion in ancient Rome. For 10 points each:

[10] Not to be confused with Saturnalia, this festival took place in mid-February and featured the sacrifice of a goat and a dog, after which the priests would run through town and slap people with the skin of the goat.

ANSWER: Lupercalia

[10] This man was the chief religious officer of the state. He took over cultic responsibilities originally held by the king, and his title later became an unofficial title of the Catholic Pope.

**ANSWER:** pontifex maximus

[10] This other Roman festival was held on May 9, 11, and 13 and was designed to pacify the vengeful ghosts of the dead. The pater familias would throw beans to keep the ghosts at bay.

ANSWER: Lemuria or Lemuralia

2. For 10 points each, name these poets who wrote lines about lilacs.

[10] This poet asked "what shall I hang on the chamber walls?" in his poem "When Lilacs Last in the Door-yard Bloom'd," which mourns the death of Lincoln.

ANSWER: Walt Whitman

[10] This poet wrote about how lilacs "emerge just as sweet" as the author's heart in "Threnody." Her poem "Resumé" proposes various methods of suicide before concluding "You might as well live."

ANSWER: Dorothy Parker

[10] This poet asked "O caliper, do you scratch your buttocks" in his "Last Look at Lilacs." Another of his poems discusses the "thin men of Haddam" and can be found in his collection *Harmonium*.

ANSWER: Wallace Stevens

3. Answer the following about pericyclic reactions for 10 points each:

[10] Thermally allowed pericyclic reactions must proceed through this type of transition state, characterized by the presence of 4n + 2 pi electrons. The simplest hydrocarbon possessing this property is benzene.

ANSWER: aromaticity [accept word forms such as "aromatic"]

[10] In a thermally allowed pericyclic reaction, the orbitals move in this fashion in order to achieve positive overlap. Orbitals moving in this fashion will twist in opposite directions: one clockwise, the other counterclockwise.

ANSWER: disrotatory [Do not accept "disrotory."]

[10] One type of pericyclic reaction are the [3,3] sigmatropic reactions of this type, examples of which are named for Cope and Claisen. Reactions of this type always see an alteration of the carbon skeleton.

ANSWER: rearrangement

4. Max Reger wrote a piece with the same title as this one as part of a series that also includes "The Fiddling Hermit." For 10 points each:

[10] Identify this piece inspired by a painting by Arnold Bocklin, whose opening bars are in 5/8 time and evoke the oars of Charon.

ANSWER: The Isle of the Dead

[10] The Isle of the Dead is a work of this Russian composer of four notoriously difficult piano concertos and Rhapsody on a Theme of Paganini.

ANSWER: Sergei Rachmaninoff

[10] Rachmaninoff himself conducted an early recording of *The Isle of the Dead* with the Philadelphia Orchestra, which was later led by this conductor from 1938 to 1980.

ANSWER: Eugene **Ormandy** 

- 5. Answer the following about the unification of Germany, for 10 points each:
- [10] The unification process was led by this Prussian chancellor, who engineered the Franco-Prussian war and claimed that the great questions of the time would be decided by "blood and iron."

ANSWER: Otto von Bismarck

[10] Bismarck set off the Franco-Prussian war by secretly altering this telegram to make it look as though King Wilhelm had treated the French Ambassador rudely.

ANSWER: Ems Dispatch or Telegram

[10] After unification, these student societies experienced a resurgence. Previously, they had been fervent supporters of unification but were forced underground by the Carlsbad Decrees. The first one was founded at Jena in 1815.

ANSWER: **Burschenschaften** or **Youth Associations** 

6. (NOTE to moderator: DO NOT say the word "BOLTZMANN" in the answerline of the first part) This function is defined as the integral over all velocities of the distribution function times the natural log of the distribution function. For 10 points each:

[10] Name this function, whose time derivative is necessarily 0 at equilibrium and negative in the case of non-equilibrium.

ANSWER: Boltzmann's **H**-function

[10] The H-function was related to the entropy to derive the 2<sup>nd</sup> law of thermodynamics from statistical mechanics by this physicist. This Austrian physicist's namesake constant is the proportionality constant between entropy and the natural log of the number of microstates and is equal to 1.38 times 10 to the minus 23 Joules per Kelvin.

ANSWER: Ludwig Boltzmann

[10] According to the 2<sup>nd</sup> law of thermodynamics, a process with this property will have no change in entropy, while processes which lack this property cause entropy generation. An example of a process with this property is the infinitesimal removal of a weight resting on top of a piston compressing a gas.

ANSWER: reversible

- 7. In this novel, the protagonist's lover Marie abandons him for Zupfner and reverts back to the Catholic ways of her childhood. For 10 points each:
- [10] Name this novel in which Hans Schnier holes himself up inside his Bonn apartment and makes many fruitless phone calls for help.

ANSWER: The Clown [or Ansichten eines Clowns]

[10] This other novel by the author of *The Clown* is set on a single day and chronicles three generations of the Faehmel family of architects and their work at St. Anthony's Abbey from before World War II to beyond.

ANSWER: Billiards at Half-Past Nine [or Billard um halbzehn]

[10] The Clown and Billiards at Half-Past Nine were both written by this German novelist.

ANSWER: Heinrich Böll

- 8. George Miller proposed a magic number of 5,7, or 9 as the maximum number of things a human can hold in the working type of this capacity. For 10 points each:
- [10] Name this mental ability of recall, which has "short-term" and "long-term" components.

ANSWER: memory

[10] The capacity for memory is often divided into three stages. The latter two are storage and retrieval; this stage is the first and consists of turning the material to be remembered into information parseable by the information center.

ANSWER: encoding

[10] This German psychologist and philosopher proposed that one may retain more through repeated rehearsal or "over-learning." His namesake retention curve was developed by studying the memorization of nonsense syllables.

ANSWER: Herman Ebbinghaus

- 9. A short period of Japanese history named for two of these was at the end of the Sengoku period. For 10 points each:
- [10] Azuchi and Momoyama were examples of these structures owned by Oda Nobunaga and Toyotomi Hideyoshi. A siege on one of these buildings in Osaka lead to the death of Toyotomi Hideyori.

ANSWER: Castles [Accept Shiro]

[10] The Siege of Osaka was lead by this man, who started a namesake shogunate after winning the Battle of Sekigahara.

ANSWER: <u>Tokugawa</u> Ieyasu [Accept <u>Tokugawa</u> Shogunate]

[10] At the battle of Sekigahara, Tokugawa's son failed to seize this family's castle of Ueda despite having significantly more soldiers. Members of this family include the tactician Masayuki, and his son Yukimura, who was a general for Toyotomi during the siege of Osaka.

ANSWER: Sanada

- 10. This painting is a criticism of the French policy of giving power to those without merit, as it depicts an incident near Mauretania that was caused by the incompetent Vicomte de Chaumareys. For 10 points each:
- [10] Name this painting, whose realistic detail was accomplished by the artist's study of a bunch of severed limbs, heads and corpses he acquired from a morgue.

ANSWER: The <u>Raft of the Medusa</u> [or <u>Le Radeau de la Méduse</u>]

[10] The Raft of the Medusa is the masterwork of this French artist.

ANSWER: Theodore Gericault

[10] This other work by Gericault is often paired with *The Wounded Cuirassier*. It depicts a soldier in blue riding a white horse as he holds a curved sword.

ANSWER: The Charging Chasseur

- 11. This man put down the revolt of Quintus Sertorius, and also took the credit for putting an end to Spartacus's rebellion from Marcus Crassus. For 10 points each:
- [10] Name this military general and a member of the First Triumvirate alongside Julius Caesar and Marcus Crassus. ANSWER: **Pompey** the Great [or Gnaeus **Pompeius** Magnus]
- [10] Pompey fled to Egypt and got his head chopped off by Ptolemy XIII after a decisive victory for Caesar at this site. Pompey wanted to delay and starve out Caesar's forces but was pressured to engage by the Senators present in his camp.

ANSWER: Battle of **Pharsalus** 

[10] The Battle of Pharsalus was preceded by this other conflict. Despite being indecisive, Pompey is generally credited as the victor because Caesar withdrew his forces.

ANSWER: Battle of Dyrrhachium

- 12. This philosopher advocated the virtues of drinking tar-water in his book *Siris*. For 10 points each:
- [10] Name this Irish philosopher who believed that the world consisted only of ideas, an idea expounded in his book *Three Dialogues Between Hylas and Philonous*.

ANSWER: George Berkeley

[10] Berkeley's book *Alciphron* attacks this philosophical story by Bernard Mandeville, which describes how the title creatures create a benefit for the public through each of their own private vices.

ANSWER: The Fable of the Bees

[10] George Berkeley's *The Analyst* is an attack on this discipline and its method of fluxions. Berkeley coined the term "ghosts of departed quantities" to refer to certain values that this discipline takes for granted.

ANSWER: differential or infinitesimal calculus [Do not accept "mathematics."]

- 13. The rebellious protagonist of this story sees a mysterious man in a convertible who says "Gonna get you, baby." For 10 points each:
- [10] Name this short story in which 15-year-old Connie is visited by Arnold Friend, who demands that she go for a ride with him.

#### ANSWER: "Where Are You Going, Where Have You Been?"

[10] "Where Are You Going, Where Have You Been?" was written by this American author of *Bellefleur* and *We Were the Mulvaneys*. She wrote about a curse afflicting the upper classes of Princeton in her recent novel *The Accursed*.

ANSWER: Joyce Carol Oates

- [10] *The Accursed* is considered part of Oates' 'saga' of this genre. This genre of fiction is characterized by horror and anti-heroes, and is exemplified by Matthew Lewis's *The Monk* and Horace Walpole's *The Castle of Otranto*. ANSWER: **gothic** fiction
- 14. For 10 points each, answer some questions about the moon.
- [10] During this phase of the moon, more than 50% of the surface is visible. Both its waning and waxing types come in between half moons and full moons.

ANSWER: gibbous moon

[10] According to the Giant Impact Hypothesis, the Moon was formed when a planetary body that has been given this name collided with Earth. It was probably around the size of Mars.

ANSWER: Theia

[10] The moon's magnetic field is unipolar, which suggests that this mechanism of a rotating and convecting fluid is not present on the moon. A theory proposed by Elsasser states that the Earth possesses one.

ANSWER: dynamo

- 15. In 2013, this company was kicked off the Dow Jones Industrial Average and replaced by Visa. For 10 points each:
- [10] Name this tech company which sells the Pavilion and ENVY computer lines and the Deskjet printer lines. Oh yeah, and it's also named for two guys.

ANSWER: Hewlett-Packard

[10] HP has woefully underperformed during the tenure of this current President and CEO, who transferred to HP after heading eBay. She ran against Jerry Brown in California's 2010 gubernatorial election.

ANSWER: Meg Whitman

[10] This year, HP lost its throne as the leading merchant of personal computers. That title is now held by this Chinese company.

ANSWER: Lenovo

- 16. At the top of this building is a frieze which features a periodic bullseye motif. For 10 points each:
- [10] Identify this red 10-story building in St. Louis, often considered a prototype of the modern skyscraper.

ANSWER: Wainwright Building

[10] The Wainwright Building was primarily designed by Dankmar Adler and this American architect, who claimed "form follows function."

ANSWER: Louis Sullivan

[10] Sullivan's work was foreshadowed by Henry Hobson Richardson, who spearheaded a revival of this style in the US, exemplified by Trinity Church in Boston.

ANSWER: romanesque

17. This character is the son of Deichtine and the sun god Lugh. For 10 points each:

[10] Name this hero from the Ulster Cycle, who wielded the spear Gae Bolg and got a new name after killing a fierce dog.

ANSWER: Cu Chulainn [or Setanta]

[10] Cu Chulainn fought off the armies of Queen Medb at this mythical battle over a prized bull, though he was forced to slay his foster brother Ferdiad during it.

ANSWER: the cattle raid of Cooley [or Tain Bo Cualinge]

[10] Cu Chulainn and Ferdiad both studied under this warrior woman, who taught Cu Chulainn to use the deadly Gae Bolg.

ANSWER: Scathach

18. Answer the following about the lighter side of the Grant administration. For 10 points each:

[10] Grant was president during this era of American history that refers to the reintegration of the post-war South.

ANSWER: Reconstruction

[10] Grant's Secretary of State, Hamilton Fish, created a commission to resolve the payment of damages incurred by Great Britain, for they permitted this Confederate vessel to be built overseas.

ANSWER: CSS Alabama [accept Alabama Claims]

[10] Grant sent Frederick Douglass to the Dominican Republic as a part of an expedition to gauge interest in annexation. Unknown to him, Douglass was this politician's choice for vice president during the election of 1872.

ANSWER: Victoria Woodhull

19. This style of play includes *The Country Wife* by William Wycherley. For 10 points each:

[10] Name this style of late 17<sup>th</sup> century English theatre, which is characterized by burlesque. It is named for the time period after which Charles II ascended to the throne.

ANSWER: Restoration Comedy

[10] In his famed diaries, this Englishman described attending many Restoration dramas. Those diaries also provide an account of the "wonderful" year 1666.

ANSWER: Samuel Pepys

[10] One of the more notable writers of Restoration drama was George Etheredge, who created this memorable title character in *The Man of Mode*. He is a fashionable man that is the subject of Bellinda's, Loveit's and Towney's incessant gossip.

ANSWER: Sir **Fopling Flutter** [Prompt on partial names.]

20. This kind of tissue is classified by its shape and number of layers, and types include simple cuboidal, which is found in glands, and simple squamous. For 10 points each:

[10] Name this type of tissue which is found lining most structures of the human body.

ANSWER: epithelial tissue [Accept epithelium]

[10] Cadherins mediate adhesion of adjacent epithelial cells in these junctional complexes, which internally attach to intermediate filaments in the cell.

ANSWER: desmosomes

[10] Endothelial tissue, which is sometimes considered a specialized form of epithelium, forms many of the vessels of the human body, such as these vessels, which unlike a similar tissue, have thick walls and no valves. The largest one in the body is the aorta.

ANSWER: arteries