

ACF Fall 2015

Edited by Richard Yu, Gaurav Kandlikar, Eddie Kim, Dylan Minarik, Ryan Rosenberg, Andrew Wang, and Nathan Weiser.

Packet by *University of Oxford B* (Daoud Jackson, Chris Stern and Phil Bone), and *University of Georgia C* (Jason Fern and Claire Garland)

Tossups

1. This author is mockingly compared to a hippopotamus using its entire strength to move a pea in H.G. Wells' book-length satire *Boon*. A courier named Eugenio appears in a novel by this author in which the narrator tries to impress the title character by taking her to the Chateau de Chillon. The title character contracts "Roman Fever" after visiting the Colosseum with Giovanelli in a novella narrated by Frederick Winterbourne and written by this author. In another of this author's novels, an unnamed governess tries to protect Flora and Miles from the ghosts of Miss Jessel and Peter Quint. For 10 points, name this author of *Daisy Miller* and *The Turn of the Screw*.

ANSWER: Henry James

2. A painting by this artist shows a fair-skinned Bacchus getting drunk with dark-skinned figures wearing contemporary clothing. Francis Bacon created several distorted versions of a painting by this artist that shows a man wearing a red cape and red hat sitting on a red chair in a red room. Cupid holds a mirror that reflects his mother's sensual figure in this artist's *Rokeby Venus*. The left third of a painting by this artist is dominated by an easel behind which the artist stands, and the right foreground of that painting shows a dwarf and dog beside the Infanta Margarita. For 10 points, name this Spanish artist who made a portrait of Pope Innocent X and painted *Las Meninas*.

ANSWER: Diego Rodríguez de Silva Velázquez

3. Leontief found that the United States' exports were produced with a lower ratio of capital to this commodity than its imports. As the Beveridge curve moves toward the origin, the market for this commodity becomes more efficient. Its supply curve may bend backwards at high prices. Unlike the subjective theory of value, Ricardo's theory of value suggested that the value of a good is proportional to the amount of this commodity required to produce it. This commodity is one of the primary factors of production, along with land and capital. For 10 points, name this commodity, whose price is also called the wage.

ANSWER: labor

4. This country's city of Helwan was created as an industrial center. This country's Qattara Depression contains the lowest point in Africa. A holiday on April 25th marks the return of a landmass to this country, whose highest point is Mount Catherine. Its capital contains the Khan el-Khalili market, and this country's local name for itself is Misr. In 1956, this country removed a statue of Ferdinand de Lesseps in its city of Port Said ["poor sa-eed"], which is situated on the Mediterranean Sea. Israel forms the eastern border of its Sinai Peninsula. This country is home to the northern parts of Lake Nasser. For 10 points, name this country that contains the Nile delta and whose capital is Cairo.

ANSWER: Arab Republic of Egypt

5. Like the grand potential, two of this thermodynamic quantity's natural variables are intensive quantities. This quantity can be obtained by performing two Legendre ["luh-JOHN-druh"] transforms on internal energy. For an electrochemical cell, the change in this quantity is equal to "minus the number of electrons transferred, times cell potential, times Faraday's constant". It applies to processes which occur at constant temperature and pressure, unlike a quantity named for Helmholtz. This quantity is equal to "enthalpy minus temperature times entropy", and it is negative for spontaneous processes. For 10 points, name this quantity that measures the amount of useable work available in a system.

ANSWER: Gibbs free energy

6. One of this general's campaigns is the subject of a Henry Clay Work composed marching song that begins with the lyrics "bring the good old bugle, boys, we'll sing another song." This general ordered land to be confiscated and resettled by slaves with his Special Field Order 15. This general is believed to be the source of the expression "war is hell." During one campaign, destroyed railroad ties were nicknamed this general's "neckties." He presented the city of Savannah as a Christmas gift to President Abraham Lincoln after razing his way from Atlanta to the Atlantic. For 10 points, name this Union Civil War general who led a namesake "March to the Sea."

ANSWER: William Tecumseh Sherman

7. This character dreams of meeting Merlin when he falls asleep for half an hour. Dorothea tricks this character into believing she is Princess Micomicona in a plan hatched by Cardenio. After dining with goatherds, this character attends the funeral of the Girostomo ["he-ROSE-tomo"], where Marcela delivers a speech. A barber and a priest burn the books belonging to this character, whose life was supposedly documented by Cide Hamete Benengeli. This character pledges his love for Dulcinea del Toboso and embarks on a quest with his horse Rocinante and his squire Sancho Panza. For 10 points, name this native of La Mancha who tilts at windmills in a book by Miguel Cervantes.

ANSWER: Don Quixote [or Alonso Quijano; or Alonso Quesada; or Alonso Quijada]

8. After he is refused hospitality, this hero angrily transforms Atlas into an enormous mountain. During his travels in Ethiopia, this hero slays the sea monster Cetus and takes the daughter of Cepheus as his wife. He is not Heracles, but this hero ascertains the location of the Hesperides by stealing the single eye shared by the Graeae. This hero is conceived when a shower of gold rains on his mother Danae. Equipped with Hades's cap of invisibility and Hermes's winged sandals, this husband of Andromeda keeps his vision firmly on the reflection of the Aegis as he kills the only mortal Gorgon. For 10 points, name this slayer of Medusa.

ANSWER: Perseus

9. With Poincaré, this scientist names a set of polyhedra obtained by stellating the do-decahedron and i-cosa-hedron. This man is the namesake of a conjecture which states that approximately 74.04 percent is the maximum possible density of sphere packing arrangements. His *Mysterium Cosmographicum* proposed that the solar system could be modelled as a series of nested platonic solids. The conservation of angular momentum can be used to derive his law of areas. This scientist analyzed Tycho Brahe's data to determine that planetary orbits are elliptical. For 10 points, name this scientist who developed three laws of planetary motion.

ANSWER: Johannes Kepler

10. This author created a character who is told that stories “all talk of woman’s fickleness”, leading her to quip that “Men have had every advantage of us in telling their own story”. During a trip to Lyme Regis in a novel by this author, Louisa Musgrove has a concussion. This author wrote a novel in which William Collins praises Rosings Park, the estate of Lady Catherine de Bourgh. In a novel by this writer, Lady Russell convinces Anne Elliott not to marry Frederick Wentworth. Another novel by this author ends with the engagement of Fitzwilliam Darcy and Elizabeth Bennet. For 10 points, name this author of *Persuasion* and *Pride and Prejudice*.

ANSWER: Jane Austen

11. These events are traditionally preceded by the giving of a mohar, and modern versions of an item made for these events generally include a Lieberman clause to prevent these events from ending in an Agunah. The results of these events can be reversed by the issuing of a “get”. Seven blessings are said during these events, which are preceded by an erusin period and the signing of a ketubah. These events usually take place underneath a canopy called a chuppah and always end with a man crushing a wine glass with his foot. For 10 points, name these events during which, according to Ashkenazi tradition, a veil covers the face of the bride.

ANSWER: Jewish weddings [or Jewish marriage; or erusin until it is read; or nissuin; or kiddushin]

12. This piece's *Allegretto pomposo* fifth movement calls for a piano to accompany a solo double bass rendition of the "Dance of the Sylphs" from *The Damnation of Faust*. In a section of this piece, two pianists imitate beginning students playing scales poorly. This piece begins with an "Introduction and Royal March" for strings and two pianos. In the penultimate movement of this piece, two pianos accompany a solo cello melody that depicts the title bird gliding over water; in the preceding "Fossils" movement, themes from the composer's *Danse macabre* are quoted. For 10 points, name this Camille Saint-Saens piece whose title creatures include lions and elephants.

ANSWER: Carnival of the Animals [or *Le carnaval des animaux*]

13. The theory of seafloor spreading was connected to changes in this entity by the Vine-Matthews-Morley hypothesis. Those changes involving this entity were first identified by Motonori Matuyama, and the homing pigeon is thought to get its navigation skills from its ability to sense this thing. This entity was impacted during the Laschamp event. It names a region of the atmosphere in which solar wind particles are deflected. The dynamo theory predicts that this thing is generated by the motion of liquid metals in the core. This thing occasionally undergoes complete reversals. For 10 points, name this field whose non-geographic poles are pointed to by a compass.

ANSWER: Earth’s magnetic field [or word forms; accept geomagnetic field; prompt on “magnetic field”; prompt on “magnetosphere”]

14. This author criticized the “vagueness” of a lecture about his country’s beauty in his own Nobel lecture discussing his country’s “ambiguousness”. In a novel by this man, the protagonist humiliates himself at a punching machine game, and is then beaten by a gang of boys. This author wrote a novel whose original-language title references a peasant uprising in 1860, which Takashi uses to stir a riot against “the Emperor”, a Korean supermarket owner. In a novel by this man, Bird fantasizes about traveling to Africa to escape his brain hernia-afflicted son, inspired by the birth of Hikari, this author’s own son. For 10 points, name this Japanese author of *The Silent Cry* and *A Personal Matter*.

ANSWER: Kenzaburo Oe

15. This leader imprisoned his long-time rival J.B. Danquah. Joseph Ankrah's National Liberation Council deposed this man while he was meeting with Zhou Enlai on a state visit to North Vietnam. This leader founded the Convention People's Party. His political philosophy was influenced by W.E.B Dubois, who died in this leader's country. This leader powered his nation's aluminum smelters by building the Akosombo Dam on the Volta River. This prominent advocate of Pan-Africanism presided over his country's discarding of its colonial name, the Gold Coast. For 10 points, name this first president of an independent Ghana.

ANSWER: Kwame Nkrumah

16. A leader of this nation was depicted by his supporters as a black pair of eyes against a solid red backdrop. Protests against this nation's government broke out after the murder of Miss Universe participant Monica Spear. A leader of this nation was the subject of King Juan Carlos' comment "why don't you shut up?" This country's previous leader launched the *Barrio Adentro* health care program. An opposition party here is called Popular Will. The United Socialist Party in this nation is fond of affixing the adjective "Bolivarian" to its policies and is currently led by Nicolas Maduro. For 10 points, name this South American nation once led by Hugo Chavez.

ANSWER: Venezuela [or Bolivarian Republic of Venezuela]

17. The rate of growth of this parameter is equal to the first eigenvalue of the Leslie matrix. This parameter is predicted to oscillate in a set of dynamics that requires estimation of conversion efficiency and attack rate. The "effective" version of this parameter is smaller than the absolute form due to nonrandom mating. Genetic drift is strongest at small values for this parameter, which is required to be infinitely large for Hardy-Weinberg dynamics. In logistic growth, the long-term maximum for this parameter is the carrying capacity. For 10 points, name this parameter that describes how many individuals are in a population.

ANSWER: population size [accept effective population size; accept size after "population"; prompt on "N"]

18. When a contest rejected this philosopher's essay "On the Basis of Morality", he published it as one of *The Two Fundamental Problems of Ethics* together with his "On the Freedom of the Will". In a doctoral thesis, this thinker described classes of subjects whose distinction from an object gives rise to knowledge. This author of *On the Fourfold Root of the Principle of Sufficient Reason* included a "Criticism of the Kantian Philosophy" in a book arguing that humans perceive their bodies both objectively and subjectively through the two title concepts. For 10 points, name this German author of *The World as Will and Representation*.

ANSWER: Arthur Schopenhauer

19. A work by this artist consists of twelve hourglass-shaped seats arranged around a circular table. A diminutive triumphal arch by this sculptor is titled *Gate of the Kiss* and stands near his *Table of Silence*. A bronze sculpture by this artist shows a disembodied head laying on its side and is titled *Sleeping Muse*. Three sculptures by this artist line a mile long walkway in a World War I memorial in his home town of Targu Jiu, which includes a tall sculpture made of stacked rhomboid units. A series of works in marble and bronze by this artist represents the essence of flight. For 10 points, name this Romanian sculptor of *Endless Column* and *Bird in Space*.

ANSWER: Constantin Brancusi ["brun-KOOSH"]

20. A member of this party won an election by campaigning under the slogan "Let us Face the Future." A document that Tony Benn published for this party was derided as "The longest suicide note in history." While the country was crippled by strikes, a leader from this party was panned for saying "Crisis? What Crisis?" during a press conference and was photographed swimming off of Guadeloupe. A member of this party, Aneurin Bevan, established the National Health Service. Prime Ministers from this party include James Callaghan and Clement Attlee. For 10 points, name this center-left British party that is currently the opposition to the Conservatives.

ANSWER: British **Labour** Party

Extra

During this event, forces under the "Fighting Bishop" Henry le Despenser won at the Battle of North Waltham. One of its casualties was the Archbishop of Canterbury, Simon Sudbury. Participants in this event were inspired by the sermons of the "hedge priest" John Ball. The leader of this event may have used the pseudonym Jack Straw and had successfully seized the Tower of London, but was killed and had his head put on a pike by supporters of King Richard II. This rebellion was precipitated by the passing of a poll tax and the black plague. For 10 points, name this English revolt of poor farmers often named after its leader, Wat Tyler.

ANSWER: **Peasant's** Revolt [accept **Wat Tyler's** Rebellion before mentioned]

Bonuses

1. The causative agent of this disease initially enters the liver before it matures and enters the blood. For 10 points each:

[10] Name this disease caused by the protozoan genus *Plasmodium*, whose vector is the *Anopheles* mosquito.

ANSWER: malaria

[10] This compound was used in the first Western treatments for malaria. This substance is found in the bark of the cinchona ["sin-KONA"] tree and causes the extremely bitter taste of tonic water.

ANSWER: quinine

[10] The species of *Plasmodium* that commonly infect humans include *P. ovale* and *P. vivax* as well as this species, which causes the deadliest form of malaria.

ANSWER: *Plasmodium* falciparum

2. This poem laments that eleven generations have passed since the time of a woman who died of grief at her son's departure on his quest to become a knight. For 10 points each:

[10] Name this German epic poem about the son of Herzeloide and Gahmuret, who kills a red-armored knight for King Arthur. Wolfram von Eschenbach based this poem on an uncompleted work by Chretien de Troyes ["KREH-tee-uhn de TWAH"].

ANSWER: Parzival [or Percival]

[10] Parzival quests for this item, which a princess carries to him on a platter at the castle of Anfortas, the Wounded King. Robert de Boron wrote that Joseph of Arimathea used this object to catch the blood of Christ.

ANSWER: the Grail [or the Gral; or the Holy Grail; prompt on "Holy Chalice"]

[10] In another medieval German epic poem, the *Nibelungenlied*, this hero is murdered by Hagen, who had convinced Kriemhild to mark his one vulnerable point, where a leaf had fallen when he bathed in dragon's blood.

ANSWER: Siegfried [or Sigurd]

3. Answer the following about an Afro-European syncretic religion, for 10 points each.

[10] This religion, which originated in Cuba, combines elements of both Roman Catholicism and Yoruba faith. Its traditions have been passed down orally and controversially include animal sacrifice.

ANSWER: Santería

[10] Catholic saints in Santería are connected with these spiritual figures of the Yoruba faith. Practitioners of Santería believe that different ones of these figures, which are manifestations of God, rule over different people.

ANSWER: orishas

[10] The Yoruba people originate principally from this country, as well as parts of Benin and Togo. The largest city in this present-day country is Lagos.

ANSWER: Nigeria

4. This instrument introduces the opening theme of Edvard Grieg's "Morning Mood." For 10 points each:
[10] Name this reedless woodwind instrument, the full-size version of the piccolo.
ANSWER: flute
[10] Four flutes respond to the solo trumpet's query in *The Unanswered Question*, a piece by this American composer of *Three Places in New England*.
ANSWER: Charles Ives [or Charles Edward Ives]
[10] This Danish composer's two-movement flute concerto ends with a cheerful march. His *Inextinguishable Symphony* calls for a "battle" between two sets of timpani placed at opposite ends of the orchestra.
ANSWER: Carl Nielsen [or Carl August Nielsen]
5. Deep inelastic scattering experiments showed that hadrons were composed of these particles. For 10 points each:
[10] Name these fundamental particles. Their top and bottom flavors compose the proton and the neutron. They are bound together by gluons.
ANSWER: quarks
[10] This flavor of quark was named due to the fact that the Lambda baryon had an unusually long lifetime. It is found in the same generation as the charm quark.
ANSWER: strange quark
[10] Both quarks and gluons have this property, which has three values for quarks and eight for gluons. Particles with this property cannot be isolated since they are subject to confinement.
ANSWER: color charge [do not accept or prompt on "charge"]
6. This language's alphabet includes a letter that extends a preceding sound, and that is depicted as the letter "g" with a breve. For 10 points each:
[10] Name this Middle Eastern language that has been written using Latin script since a 1928 reform.
ANSWER: Turkish [or Turkce]
[10] Turkish harmonizes these sounds according to groupings that class them into front and back varieties. These sounds are produced with an open vocal tract and come in "long" and "short" varieties in English.
ANSWER: vowels
[10] Turkish uses this system of word formation extensively. This system adds prefixes or suffixes to stems to form longer words rather than overlaying them.
ANSWER: agglutination [or word forms like agglutinative]
7. This war ended with the capture of Toulouse in April 1814. For 10 points each:
[10] Name this war. Napoleon described it as an "ulcer" due to his difficulty dealing with the large-scale guerrilla tactics of his opponents, a coalition of Britain, Spain, and Portugal.
ANSWER: Peninsular War
[10] This man commanded the British forces during the Peninsular War. Later, along with Gebhard von Blücher, he ended Napoleon's Hundred Days with a victory at Waterloo.
ANSWER: Arthur Wellesley [or Duke of Wellington; or Viscount of Wellington]
[10] The Peninsular War successfully overthrew this King of Spain. This brother of Napoleon had earlier ruled as king of Naples before being replaced by Joachim Murat.
ANSWER: Joseph Bonaparte [or José I]

8. Identify the following birds that seem to recur a lot in art, for 10 points each.
[10] This bird titles a Carel Fabritius painting in which it is chained to a feeder. This bird also titles a Raphael Madonna in which John the Baptist passes one to the wee baby Jesus.
ANSWER: goldfinch [do not prompt or accept "finch"; accept putterje and cardellino because those are the titles in the original languages]
[10] These birds can be seen swimming in front the land in Arnold Böcklin's *Isle of Life*. One of these birds sidles up close to Leda in many depictions of that mythological scene.
ANSWER: swans
[10] It is often claimed that Van Gogh's soul-crushing painting of a *Wheatfield with* these birds was the last that he ever made.
ANSWER: crows [or Wheatfield with Crows; or Korenveld met kraaien]
9. This philosopher described "rigid designators" that designate the same object in all possible worlds in which the objects exists. For 10 points each:
[10] Identify this philosopher who developed that notion in the lectures comprising his book *Naming and Necessity*.
ANSWER: Saul Kripke [or Saul Aaron Kripke]
[10] Kripke made many contributions to the modal form of this field of philosophy and math. Negation is the only unary ["YOU-nary"] connective in most forms of this field that employs truth tables to compute values of functions.
ANSWER: logic
[10] These expressions are an example of rigid designators. In an essay concerning these expressions J.S. Mill argued that the semantic value of one of these expressions is precisely what it refers to.
ANSWER: names
10. They made up the majority of the 442nd Infantry Regiment, the most decorated regiment in American military history. For 10 points each:
[10] Give this common term for second generation Japanese-Americans who often enlisted in the army despite being interned by the US government. Their parents were referred to as *issei*.
ANSWER: nisei
[10] The internment of the *nisei* and other Japanese-Americans was supported by dubious allegations that they had aided in the December 7, 1941 Japanese surprise attack on this Hawaiian naval base.
ANSWER: Pearl Harbor
[10] This nisei sued the United States, arguing that Japanese internment was unconstitutional. He gives his name to the 1944 Supreme Court case that found that the measure was indeed constitutional.
ANSWER: Fred Korematsu [or Korematsu v. United States]

11. This event ends with a woman sobbing through the words “we’re free” as flute music plays. For 10 points each:

[10] Name this poorly-attended event that occurs at the end of a 1949 play. Only Happy remains optimistic during it, saying “I’m going to beat this racket!”

ANSWER: Willy Loman’s funeral [or Willy Loman’s funeral; or the funeral at the end of Death of a Salesman; or the last scene of Death of a Salesman; or “Requiem”]

[10] As the title would suggest, Willy Loman dies in this playwright’s *Death of a Salesman*. He allegorized the McCarthy-era witch hunts in *The Crucible*.

ANSWER: Arthur Miller [or Arthur Asher Miller]

[10] This son of Willy Loman and brother of Happy Loman sets much of the plot of *Death of a Salesman* in motion by returning home from his travels. He was a promising athlete until he caught his father having an affair.

ANSWER: Biff Loman [prompt on just “Loman”]

12. The Male Chorus and the Female Chorus describe the impending fall of the Roman Kingdom at the start of this composer’s opera *The Rape of Lucretia*. For 10 points each:

[10] Name this composer whose *Four Sea Interludes* are popular extracts from his opera about a fisherman who drowns himself after the deaths of two of his apprentices.

ANSWER: Benjamin Britten [or Edward Benjamin Britten]

[10] This composer’s opera *Dido and Aeneas* ends with the title Carthaginian princess singing “When I am laid in earth” before committing suicide.

ANSWER: Henry Purcell

[10] Britten’s *Peter Grimes* and Purcell’s *Dido and Aeneas* were both operas written in this language used by the librettist-composer duo W.S. Gilbert and Arthur Sullivan.

ANSWER: English [or British English]

13. Larry Darrell learns about Advaita philosophy while visiting this country in *The Razor’s Edge*. For 10 points each:

[10] Name this modern country which is the setting of James Farrell’s *The Siege of Krishnapur*.

Contemporary authors from this country include Aravind Adiga and Vikram Seth.

ANSWER: Republic of India [or Bharat ganarajya]

[10] *The Razor’s Edge* was written by this author. He wrote about the relationship between the prostitute Mildred and the club-footed Philip Carey in *Of Human Bondage*.

ANSWER: W. Somerset Maugham [pronounced “MAWM”] [or William Somerset Maugham]

[10] Maugham fictionalized Paul Gauguin’s life in this novel, in which Charles Strickland leaves his wife to become a Parisian artist.

ANSWER: *The* Moon and Sixpence

14. The Born-Haber cycle can be used to calculate this quantity. For 10 points each:

[10] Name this quantity which is the amount of energy needed to convert an ionic solid into gaseous ions.

ANSWER: lattice energy

[10] Calculating the lattice energy from the Born-Haber cycle involves the use of this law which states that the enthalpy changes of a reaction’s steps should be equivalent to its total enthalpy change.

ANSWER: Hess’s law

[10] These values are useful for calculating the lattice energy. They are calculated by considering the position of neighboring ions in a lattice and adding up the coulombic interactions that occur with respect to an ion.

ANSWER: Madelung constants

15. One of these occurrences happened after the Salarian Gate was opened. For 10 points each:
[10] Name these events, two of which were caused by the Alaric-led Visigoths in 410 and the Vandals in 455.
ANSWER: **Sacks** of **Rome** [accept clear knowledge equivalents]
[10] This other frequent enemy of Rome was known as “the scourge of God.” He terrorized Roman lands and even forced Valentinian III to abandon Rome until he was defeated at the Battle of Chalons.
ANSWER: **Attila** the Hun
[10] This man is regarded as the first King of Italy, a rank he achieved after overthrowing the boy emperor Romulus Augustulus. This ruler would later be deposed by Theodoric, who killed him personally at a banquet.
ANSWER: **Odoacer** [or Flavius **Odovacer**]
16. Several of this man’s ideas are collected in *The Laws of Thought*. For 10 points each:
[10] Name this English mathematician. His namesake “algebra” involves variables that can be either true or false, and it includes functions like AND, OR, and NOT.
ANSWER: George **Boole** [or **Boolean** algebra]
[10] Boolean expressions can be simplified using these laws named after another 19th century mathematician. They state that the negation of a disjunction is a conjunction of negations, and vice versa.
ANSWER: **De Morgan’s** Laws
[10] Boolean “true” and “false” are often represented as a 1 and a 0 inside of a computer. This number system, which uses only ones and zeroes, is used in almost all computer systems.
ANSWER: **binary** [or **base 2**]
17. An urban renewal project in this city aims to convert a port district into the HafenCity, which includes its historic “warehouse city” or *Speicherstadt*. For 10 points each:
[10] Name this second most populous city of Germany. It makes up its own German state, with Schleswig-Holstein and Lower Saxony as its two neighbors.
ANSWER: **Hamburg** [or Free and Hanseatic City of **Hamburg**]
[10] A planned concert hall in the HafenCity is named for this river, on whose waterfront it will lie. This river flows from the Krkonose [“ker-KO-no-shay”] mountains into the North Sea.
ANSWER: **Elbe** River [or **Labe** River]
[10] The Krkonose mountains are at Poland’s border with this country, which owns a part of Hamburg docklands thanks to the Treaty of Versailles. This modern-day country’s historical regions include Moravia and Bohemia.
ANSWER: **Czech** Republic [or **Česka** republika]
18. If a hydropathy plot shows twenty hydrophobic amino acids in a row, one of these structures likely exists. For 10 points each:
[10] Name this kind of protein secondary structure. These structures are stabilized by hydrogen bonds between every four amino acid residues.
ANSWER: **alpha helix** [prompt on “helix”]
[10] Along with glycine, this amino acid is typically not found in alpha helices due to the fact that its side chain binds to its amine group to form a five membered ring.
ANSWER: **proline** [accept **pro** or **P**]
[10] Alpha helices are often found in the parts of proteins which span these phospholipid-composed structures. One of these structures composed of a lipid bilayer surrounds all cells.
ANSWER: biological **membrane** [accept cell **membrane**]

19. This divine being stands between the Earth and the sky and pushes them farther apart as he grows taller.
For 10 points each:

[10] Name this horned giant who creates the world over a period of 18,000 years.

ANSWER: Pangu

[10] Pangu is a creator god in the mythology of this modern-day country, whose legendary Jade Emperor has his roots in Taoism.

ANSWER: China [or Zhongguo]

[10] After consuming an elixir of immortality, the Chinese goddess Chang'e ["chong-uh"] is taken to this location, where she is accompanied by a jade rabbit.

ANSWER: the moon

20. This man's lieutenants included Henri Christophe and Jean-Jacques Dessalines ["dess-uh-LEAN"]. For 10 points each:

[10] Name this former slave who led the 1791 Haitian Revolution.

ANSWER: Toussaint Louverture [or Francois-Dominique Toussaint]

[10] Haiti achieved independence from this European nation. It briefly reconquered Haiti during the regime of Napoleon Bonaparte.

ANSWER: France [or French Republic; or République française]

[10] Napoleon dispatched this man, his brother-in-law, to recapture Haiti. This man died of yellow fever along with most of his army.

ANSWER: Charles Leclerc [or Charles Victoire Emmanuel Leclerc]

Extra

This playwright depicted the clash between the traditionalist Oba Danlola and the President of Isma. For 10 points each:

[10] Name this playwright of *Kongi's Harvest* and a play in which Lakunle and Baroka compete for Sidi's affection, *The Lion and the Jewel*. He was the first African author to win a Nobel Prize in Literature.

ANSWER: Wole Soyinka [or Akinwande Oluwole Babatunde Soyinka]

[10] In this other Soyinka play, Elesin's ritual suicide is stopped by colonial authorities, so his son Olunde commits suicide instead.

ANSWER: Death and the King's Horseman

[10] Soyinka wrote a play subtitled *A Communion Rite* that is an adaptation of this ancient Greek tragedian's play, *The Bacchae*.

ANSWER: Euripides