

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 A* (Charles Clegg, JOEY GOLDMAN!, and George Corfield), *University of Virginia A* (Vasa Clarke, Jack Mehr, Lawrence Simon, and Eric Xu), and *University of Ottawa A* (Sam Challen, Ian Dewan, Shervin Ghiami, Chris Johnston, Vanessa Kraus, and Rodrigo Morante)

Tossups

1. D-C-C and BOP ["bop"] are commonly used to couple these compounds. Polystyrene resins are used as support in a synthesis using these compounds pioneered by Robert Merrifield. The dihedral angles of these compounds are shown on a Ramachandran plot. Reacting an aldehyde with cyanide, then hydrolyzing the product produces one of these compounds in the Strecker synthesis. At biological pH these compounds exist in a zwitterionic form. Examples of these compounds include tryptophan and glycine. These compounds contain an NH₂ as well as a carboxyl group. For 10 points, name these monomers that are linked together by peptide bonds in proteins.

ANSWER: **amino acids** [prompt on "peptides", "polypeptides" or "amides" until "Ramachandran" is read]

2. A character in this short story tells a story about a watermelon carved with the initials "E.A.T.". Later in this short story, that character reprimands a woman for trying to steal a child while at a filling station managed by Red Sammy Butts. One character in this story causes an accident when she remembers that she used to live in Tennessee, not Georgia. That accident in this short story occurs during a road trip that Bailey Boy and his family take to Florida. For 10 points, name this short story by Flannery O'Connor, which ends when the Grandmother is shot by the escaped criminal the Misfit.

ANSWER: "A **Good Man is Hard to Find**"

3. Members of this nation's parliament were implicated in an insider trading investigation involving a human resources company called Recruit. This country has refused to acknowledge the war crimes committed by its Unit 731. This nation's monarch told his citizens to prepare for "enduring the unendurable" in the Jewel Voice broadcast. It was forbidden from organizing an army by Article 9 of its constitution. This nation's leaders signed an unconditional surrender aboard the USS Missouri. For 10 points, name this country that surrendered under Emperor Hirohito after an atomic bomb was dropped on Hiroshima.

ANSWER: **Japan** [or **Nippon**; or **Nihon**]

4. This work's artist retroactively added a red, orange, and blue border and intended for it to be displayed in a white frame. A girl is running away from the viewer and into a copse in the right background of this work. A shade covers the figures towards the front of this painting. A young girl dressed in a white dress and hat stares directly at the viewer from this painting's center. A reclining man wearing a sleeveless orange shirt is smoking a pipe in this work's right foreground, across from a woman holding a parasol and a leashed monkey. For 10 points, name this pointillist work that is set along the Seine and was painted by Georges Seurat.

ANSWER: A **Sunday Afternoon on the Island of La Grande Jatte** [or A **Sunday Afternoon at La Grande Jatte** or Un **dimanche après-midi à l'Île de la Grande Jatte**]

5. Abnormalities in this organ can cause patients to experience “Tet spells” and become cyanotic. A syncytium [“sin-SIH-shee-um”] is formed from masses of cells that are separated by intercalated discs in this organ. Sotalol is one of the beta blockers that can be used to treat abnormal function of this organ. The foramen ovale fuses during this organ’s development. The QRS complex and the T-wave are caused by this organ’s depolarization and repolarization. This organ’s Purkinje fibres and bundles of His [“hiss”] carry electrical signals from the SA node. The vena cava carries deoxygenated blood to its right atrium. For 10 points, name this four-chambered organ that pumps blood.

ANSWER: the human **heart**

6. In one of this author’s novels, the title character introduces the god Abraxas to Emil Sinclair. The protagonist of a novel by this author succeeds to the position held by Thomas van der Trave, and that novel ends with the protagonist drowning in Castalia. That novel by this author opens with the Music Master recruiting the protagonist into the Waldzell school. The title character of another novel by this author of *Demian* becomes a merchant upon Kamala’s insistence, learns from the ferryman Vasudeva, and leaves home with Govinda to seek enlightenment. For 10 points name this German author of *The Glass Bead Game* and *Siddhartha*.

ANSWER: Hermann **Hesse**

7. The largest city in this state is the official home of the world’s largest Beatles festival, Abbey Road on the River. This state divides its cities into “first-class” and “home rule” classifications. Many valleys in the eastern part of this state are now home to “holler fills” due to a controversial mining procedure. Mountaintop removal is often used to access coal seams in this state, which also contains the longest cave system in the world, Mammoth Cave. The Wilderness Road took travelers through the Cumberland Gap from Virginia into this state. For 10 points, name this state which contains the cities of Lexington and Louisville.

ANSWER: **Kentucky**

8. A hero on his way to retrieve some of these animals gets so exhausted by the heat that he fires an arrow at Helios; unexpectedly, he is rewarded with a giant golden goblet. Eurytion and his two-headed dog Orthrus guard a large number of these animals owned by the three-headed giant Geryon and stolen by Heracles for his tenth labor. A tortoise shell is used to make the lyre as recompense for the theft of some of these animals by the infant Hermes. Hera sends both a stinging gadfly and a hundred-eyed watchman named Argus to torment one of these animals that is actually Zeus’s lover, the nymph Io. For 10 points, name these milk-producing animals.

ANSWER: **cow** [or **cattle**; do not accept “bull”]

9. A future monarch of this country refused the throne of Greece, believing Greece was too unstable to be a viable monarchy. That monarch abdicated after his return from exile led to the “Royal Question” and violent strikes in the south of this country. This country’s 1830 revolution was sparked by a performance of the opera *The Mute Girl of Portici*. During World War I, the German Schlieffen plan violated this country’s neutrality. The European Union is headed in the capital of this country, which joined two neighbors to form the Benelux union. For 10 points, name this northern European monarchy whose capital is Brussels.

ANSWER: **Belgium** [or **België**; or **Belgique**]

10. This artist created a silent film called "Work in Progress" after he designed a set for Erik Satie's *Socrate*. His largest sculpture is usually on display in the East wing of the National Gallery of Art. A work characterized by two elongated arcs is painted in a bright red sometimes named for this artist to offset it from a nearby dull Mies van der Rohe building. The name for this artist's most distinctive art form was proposed by Marcel Duchamp. This sculptor of *Flamingo* used nine black and one red-and-yellow sheets of metal in a work hung at the MoMA. For 10 points, name this sculptor of *Lobster Trap and Fish Tail* and other mobiles.

ANSWER: Alexander Calder

11. These ecosystems were the subject of Lindeman and Hutchinson's trophic dynamics models. One of these ecosystems was the source of the GJAF-1 bacterium that was thought to be able to subsist on arsenic. These ecosystems, which are classified as lentic as opposed to lotic, can contain low-diversity profundal zones. These systems eject carbon dioxide in limnic eruptions. In North America, one of these ecosystems is being invaded by zebra mussel. Bull sharks can survive in one of these bodies of water in Nicaragua. For 10 points, name these freshwater aquatic environments, which include "Great" ones named Michigan and Superior.

ANSWER: lakes [or ponds; accept Lake Mono]

12. The rational-emotive type of this practice was created by Albert Ellis. A form of this practice was originally referred to as "non-directive". That type of this practice was discussed in *On Becoming a Person* and relies on the principles of congruence and unconditional positive regard. This practice is often used alongside desensitization techniques when dealing with phobias, and its "client-centered" form was created by Carl Rogers. The most popular form of this practice today is known as "cognitive-behavioral." For 10 points, name this practice in which a psychologist attempts to alleviate a patient's mental illnesses.

ANSWER: therapy [or psychotherapy; accept client-centered therapy until "type"; do not accept or prompt on "psychoanalysis"]

13. A repeated line in this book tells of how children play on the seashore because "they know not how to cast nets." A section of this poetry collection predicts that "these verses will not lie in little well-printed books upon ladies' tables". This collection of poems opens with the line "Thou hast made me endless, such is thy pleasure", and includes a poem about a land "where the world has not been broken up into fragments" and "the mind is without fear". This poetry collection had an introduction written for it by W.B. Yeats. For 10 points, name this collection of poems written by Rabindranath Tagore.

ANSWER: Gitanjali [or Offering of Songs; or Song Offerings]

14. A person who held this political office was forced to cut short a visit to the ancient ruins in Syracuse in order to go home and visit the modern ruins of a city devastated by Cyclone Tracy. In 1942, the holder of this office addressed his country's middle class as a "forgotten people". A person who held this position went missing while swimming, leading to conspiracy theories that he was picked up by a Soviet submarine. After taking this office, John Howard apologized for the Stolen Generations to his country's Aboriginal population. For 10 points, name this position currently held by Malcolm Turnbull, who serves as head of government in Canberra.

ANSWER: Prime Minister of Australia [or PM of Australia; prompt on partial answer]

15. This was the highest position held by a man who recently pleaded guilty to hushing up charges that he had sexually abused a student at Yorkville high school. That man's predecessor in this position proposed that the US should establish a Lunar base during the 2012 presidential campaign. While seeking this position, a Californian admitted that the Benghazi Committee was organized to mar the reputation of Hillary Clinton. Holders of this position sometimes employ the Hastert Rule. Kevin McCarthy briefly sought to occupy this position after the resignation of John Boehner. For 10 points, name this position currently held by Paul Ryan.

ANSWER: **Speaker of the House** of Representatives [accept variations like "**house speaker**"; prompt on "congressman" or "representative" until "predecessor"]

16. A character created by this author prepares to fight Sir Olifaunt to get to the Elf Queen in a story that was left incomplete. Another of this author's characters wears a brooch inscribed with "amor vincit omnia" and recounts the murder of a Christian boy by Jews. Nicolaes convinces John that there is an impending flood in order to sleep with Alisoun in one story by this author. A work by this author opens at the Tabard Inn, where the narrator meets a group traveling to the relics of Thomas Becket. For 10 points, name the author who included stories from the Nun's Priest and the Wife of Bath in *The Canterbury Tales*.

ANSWER: Geoffrey **Chaucer**

17. This philosopher argued that man and nature are not a "dominion within a dominion", since man is governed by nature. This thinker described a "third kind" of knowledge that comes from intuition instead of experience or reason. He wrote that while philosophy seeks truth, faith seeks only obedience. This philosopher wrote a book including the sections "Of Human Freedom" and "Of Human Bondage". This thinker argued that Moses did not write the Torah in his *Tractatus Theologico-Politicus*. This man wrote a treatise "demonstrated in geometrical order". For 10 points, name this author of *Ethics* who was expelled by Amsterdam's Jewish community.

ANSWER: Baruch **Spinoza** [or Benedict de **Spinoza**]

18. This man introduced the gamma matrices, which serve as a space of spinors, for use in his namesake equation. This man showed that the existence of a magnetic monopole could explain the quantization of charge. He developed a notation for quantum states which represents them as bras and kets. This man and Fermi name a set of statistics for particles with non-integer spins. This man predicted the existence of antimatter. A function named for him represents an impulse. For 10 points, name this English physicist who sometimes names a function that is zero everywhere except the origin and that is called the delta function.

ANSWER: Paul **Dirac**

19. In a piano suite by this composer, a third movement in D-flat major and 9/8 time is followed by an F-sharp minor passepied. A legend of an apparition off of the coast of Ys ["ees"] inspired this composer's prelude "The Sunken Cathedral." He parodied Muzio Clementi's *Gradus ad Parnassum* in a piano suite that ends with "Golliwog's Cakewalk." This composer of *Children's Corner* included a "Play of the Waves" in a set of three "symphonic sketches" titled *La mer*. A chromatically descending flute solo begins his tone poem *Prelude to the Afternoon of a Faun*. For 10 points, name this French composer whose *Suite bergamasque* includes "Clair de Lune."

ANSWER: Claude **Debussy** [or Achille-Claude **Debussy**]

20. This politician invited James Baldwin to his apartment for a disastrous 1963 meeting on race relations. In one speech, he quoted Aeschylus and stood on the back of a flat-bed truck. This man travelled to South Africa to give the “Day of Affirmation” speech and helped prevent rioting in Indianapolis after Martin Luther King Jr.’s death. He led an investigation of Teamsters Union president Jimmy Hoffa. While taking a shortcut through the Ambassador Hotel this candidate for the 1968 Presidential nomination was killed by Sirhan Sirhan. For 10 points, name this politician who served as Attorney General for his older brother, John.

ANSWER: Robert F. Kennedy [or RFK; Robert Francis Kennedy; or Bobby Kennedy; prompt on just “Kennedy”]

Extra

Phosphate serves this role in a salt solution used to culture cells called P-B-S. One of these substances is produced by reacting ethylene oxide and glycine, and is named bicine [“BYE-seen”]. A set of twelve of these substances commonly used in biological research were described by Norman Good.

Bicarbonate serves this role in blood. The Henderson-Hasselbalch equation is useful for finding pH of these systems. These solutions have their largest capacity when their pH equals their pKa. One of these solutions can be made by mixing a weak acid with its conjugate base. For 10 points, name these solutions that resist changes to pH.

ANSWER: buffer solutions [or buffering agents]

This country’s Virunga National Park borders the Rwenzori Mountains and Lake Edward. This country’s Salonga National Park is home to the Iyaelima people, who are part of the Mongo group. The province of Katanga is a mining center in this country, which has the highest number of Lingala speakers and is home to bonobos. This is the geographically largest country to border Lake Tanganyika. The capital of this country is located on the western bank of a river across from Brazzaville. For 10 points, name this African Francophone country formerly known as Zaire, whose capital is Kinshasa.

ANSWER: Democratic Republic of the Congo [or DRC; or Congo-Kinshasa; prompt on “Congo”; do NOT accept “Republic of Congo”]

Bonuses

1. The antiretroviral AZT ["A-Z-T"] is used to combat this agent, which binds the CCR-5 co-receptor to inhibit CD4-Positive cells. For 10 points each:
[10] Name this lentivirus. Kaposi's sarcoma often occurs in patients who have been infected by this agent.
ANSWER: HIV [or human immunodeficiency virus]
[10] CD4-Positive cells are a subtype of the "helper" version of these lymphocytes. These cells get their name because they mature in the thymus.
ANSWER: T cells [or helper T cells]
[10] The genome of HIV and other retroviruses all contain *gag*, *pol*, and a gene that codes for this structure that surrounds the capsid. HIV's receptor glycoprotein GP120 is embedded in this structure.
ANSWER: viral envelope [accept *env*]
2. St. Paul is one of the few people to have become more interesting *after* he became a Christian. For 10 points each, answer the following about his life as Saul.
[10] In Philippians, Paul states that he was a member of this largest ancient Jewish sect. They believed in Fate and an afterlife, but, in the gospels, Jesus repeatedly gives them a rollicking for their perceived hypocrisy.
ANSWER: Pharisees
[10] According to Acts, Paul was taught by this Pharisaic pedagogue. In the Mishnah, he is revered as one of the greatest Jewish teachers.
ANSWER: Gamaliel [or Gamliel]
[10] While he was persecuting Christians, Paul had a conversion experience when he saw Jesus while riding towards this city. This city is the capital of modern-day Syria.
ANSWER: Damascus [or Dimashq]
3. This composer set John Donne's sonnet "Batter my heart, three person'd God" in an aria for the baritone J. Robert Oppenheimer. For 10 points each:
[10] Name this composer whose opera *Doctor Atomic* is about the Manhattan Project.
ANSWER: John Adams [or John Coolidge Adams; do not accept "John Luther Adams"]
[10] This minimalist composer's *Einstein on the Beach* intersperses five "knee plays" between a medley of abstract scenes such as "Train," "Trial," "Bed," and "Spaceship."
ANSWER: Philip Glass [or Philip Morris Glass]
[10] Adams and Glass are minimalist composers from this country. A president of this country is the title character of Adams's opera *Nixon in China*.
ANSWER: United States of America [or America; or U.S.A.]

4. This poet wrote about watching a “dapple-dawn-drawn Falcon” in his poem “The Windhover.” For 10 points each:

[10] Name this Victorian Era poet whose Jesuit background is evident in many poems, such as “God’s Grandeur” and “Pied Beauty,” which gives God glory for “dappled things.”

ANSWER: Gerard Manley Hopkins

[10] Gerard Manley Hopkins wrote a poem about this event happening to *the Deutschland*, which was carrying five Franciscan Nuns who were forced to leave Germany.

ANSWER: shipwreck [or wreck; accept “The Wreck of the Deutschland”; accept anything indicating sinking boats]

[10] Hopkins developed this metrical system in which feet can comprise a variable number of syllables from one to four, stress being on the first. In this system spondees predominate rather than iambs.

ANSWER: Sprung rhythm

5. Answer the following about the Peloponnesian Wars, for 10 points each.

[10] The Peloponnesian Wars were fought between Sparta, its allies, and this democratic city state, which had maintained dominance before the war. Its military leaders included Themistocles and Pericles.

ANSWER: Athens

[10] In 416 BCE, Athens brutally conquered this neutral island, which had refused to join its league against the Spartans. Its residents debate the Athenians in a section of Thucydides’s *History of the Peloponnesian War*.

ANSWER: Melos [or Milos]

[10] After Melos’ defeat, Athens led a disastrous campaign against which island and its city of Syracuse? Thucydides attributed much of the failure to their not appreciating quite how big the island actually was.

ANSWER: Sicily [or Sicilia; or Sikelia]

6. This philosopher’s works are indexed using Stephanus numbers, which are named for a Renaissance Swiss printer of his writings. For 10 points each:

[10] Name this philosopher whose early works are called “aporetic” for ending in *aporia*, or an impasse.

ANSWER: Plato [or Platon]

[10] Plato wrote many dialogues featuring this teacher of his, who names a questioning method of teaching.

ANSWER: Socrates

[10] In this Platonic dialogue, Socrates quotes Diotima as “the one who taught me the art of love”. The speakers in this dialogue discuss the nature of love while at a party held by Agathon.

ANSWER: Symposium

7. These compounds can be formed more quickly in the presence of 1,2-dibromoethane. For 10 points each:

[10] Name these carbon nucleophiles that are stored in THF or ether so they don’t dimerize.

ANSWER: Grignard reagents

[10] Grignard reagents are organometallic reagents with an atom of this alkaline earth metal.

ANSWER: magnesium [or Mg]

[10] 1,2-dibromoethane helps form Grignard reagents faster by breaking up the passivation layer formed when magnesium reacts with this atmospheric gas. Reactions are performed in inert atmospheres as to not react with this gas.

ANSWER: oxygen gas [accept dioxygen or O₂]

8. The blind Seven Seas represents the poet Homer in this work. For 10 points each:
 [10] This long poem by Derek Walcott tells of a struggle between the fishermen Achille ["uh-SHEEL"] and Hector. In it, Hector dies in a car crash while trying to avoid a piglet in the road.
 ANSWER: **Omeros**
 [10] *Omeros* is based on this ancient Greek epic that opens *in medias res* shortly after Chryses is taken as a prize by Agamemnon. This epic describes the events of the Trojan War.
 ANSWER: *The Iliad* [or *Iliada*; or *Ilias*]
 [10] This other Caribbean author wrote the novel *A Small Place* about her home country, Antigua. She also described the journey of an *au pair* ["oh pair"] to the United States in her novel *Lucy*.
 ANSWER: Jamaica **Kincaid**
9. This list of objects was created after its developer got tired of finding its constituents instead of comets in the night sky. For 10 points each:
 [10] Name this collection of celestial objects compiled with the help of Pierre Mechain. Intrepid astronomers partake in "Marathons" in which they search for every one of its 110 entries in one night.
 ANSWER: **Messier** objects [or **Messier** catalog]
 [10] The 22nd item in the Messier catalog is a cluster named after this constellation. Another item named after this constellation is a radio source in the center of the Milky Way that may contain a supermassive black hole.
 ANSWER: **Sagittarius** [or the **archer**]
 [10] This most massive galaxy in the Local Group is the 31st entry in the Messier catalog. Located approximately 2.5 million light-years from Earth, it is expected to collide with the Milky Way in 4 billion years.
 ANSWER: **Andromeda** Galaxy
10. A film about this company has the tagline "You don't get to 500 million friends without making a few enemies." For 10 points each:
 [10] Name this company whose founding was controversially fictionalized in *The Social Network*, which depicted its CEO Mark Zuckerberg as a borderline autistic jerk.
 ANSWER: **Facebook**
 [10] This actor was Oscar-nominated for his portrayal of Mark Zuckerberg in *The Social Network*. He recently played a stoner sleeper-agent in *American Ultra*.
 ANSWER: Jesse **Eisenberg** [or Jesse Adam **Eisenberg**]
 [10] In an excellent scene from *The Social Network*, Trent Reznor and Atticus Ross' electronic version of this classical music piece plays over the Winklevoss twins' rowing regatta.
 ANSWER: **"In the Hall of the Mountain King"**
11. This composer and his student William Byrd collaborated on a book of motets called the *Cantiones sacrae*. For 10 points each:
 [10] Name this composer of *Spem in alium*. Another of his themes was turned into a fantasia by Ralph Vaughan Williams.
 ANSWER: Thomas **Tallis**
 [10] Byrd and Tallis were Renaissance composers from this country, where they both wrote music for monarchs such as Henry VIII and Elizabeth I.
 ANSWER: **England** [do not accept "Great Britain"; do not accept "United Kingdom"]
 [10] Thomas Morley was the leading English composer of these through-composed polyphonic settings of poetry, of which Claudio Monteverdi wrote nine books' worth.
 ANSWER: **madrigal**

12. This equation states that the change in velocity is equal to effective exhaust velocity times the natural log of the initial mass over the final mass. For 10 points each:
- [10] Name this equation which describes the motion of a certain type of vehicle.
ANSWER: Tsiolkovsky **rocket equation** [accept ideal **rocket equation**]
- [10] The rocket equation can be derived using the conservation of this quantity, and considering its change in the rocket and its fuel.
ANSWER: linear **momentum** [do NOT accept “angular momentum”]
- [10] The rocket equation can be used to calculate the fuel needed for a Hohmann transfer, which transfers between two circular paths of this type. These paths include the gravity induced paths a planet takes around a star.
ANSWER: **orbits**
13. Answer the following about the early 19th century’s hippest economic platform, the American System, for 10 points each.
- [10] The American System was the central platform of this politician’s three failed presidency bids. This Kentuckian was nicknamed the “Great Compromiser” for drafting the Compromise of 1850.
ANSWER: Henry **Clay**, Sr.
- [10] This institution was created in line with the American System’s goal of creating a strong dollar. It was obliterated by Andrew Jackson while it was run by Nicholas Biddle.
ANSWER: **Second Bank of US** [or “**Second Bank of the United States**”; prompt on “Bank of the United States”; do not accept or prompt on “First Bank of the United States” or “Bank of America”]
- [10] The American System called for investment in American infrastructure, leading to the completion of projects like the Erie Canal and this railroad. It was the first chartered railroad in American history.
ANSWER: **Baltimore and Ohio** Railroad [or **B&O** Railroad]
14. In an essay set during this event, the narrator scares a man named Jimbo by telling him that a Black Panther-instigated race riot will break out during it. For 10 points each:
- [10] Name this event attended by a drug-addled writer and illustrator team in a 1970 gonzo journalism piece. The title of an essay calls this event “Decadent and Depraved.”
ANSWER: the 1970 **Kentucky Derby** [or “The **Kentucky Derby** is Decadent and Depraved”]
- [10] “The Kentucky Derby is Decadent and Depraved,” which was a foundational work of New Journalism, was written by this author of *Fear and Loathing in Las Vegas*.
ANSWER: Hunter S. **Thompson** [or Hunter Stockton **Thompson**]
- [10] This other New Journalist described Ken Kesey’s LSD-fueled antics in *The Electric Kool-Aid Acid Test*. Bond trader Sherman McCoy accidentally hits Henry Lamb with his car in his *The Bonfire of the Vanities*.
ANSWER: Tom **Wolfe** [or Thomas Kennerly **Wolfe**, Jr.]
15. NOTE TO MODERATOR: DO NOT REVEAL ALTERNATE ANSWERS TO THE FIRST BONUS PART
- The modern game of Ulama evolved from this sport. For 10 points each:
- [10] Name this game played by men in loincloths by bouncing rubber balls off their hips. It was played on courts at sites like Iximche [“ee-SHEEM-chay”] and Copan.
ANSWER: Mesoamerican **ballgame** [or Mayan **ballgame**; **pitz**; or **ollamalitzli**]
- [10] The Mesoamerican ballgame was played by this civilization in cities like Palenque and Chichen Itza. Their Long Count calendar was used to (incorrectly) predict that the world would end in 2012.
ANSWER: **Maya** civilization [or **Mayan** civilization]
- [10] Some of the best-preserved ball courts are at this Mayan site in modern-day Guatemala. It contains the Lost World complex and the Temple of the Great Jaguar.
ANSWER: **Tikal**

16. Answer the following about fire in Hindu mythology, for 10 points each.
- [10] This two-headed Vedic god of fire uses his seven tongues to consume sacrificial ghee.
ANSWER: Agni
- [10] Shiva uses his third eye to incinerate this Hindu god of love, who lends his name to a sutra about human sexuality.
ANSWER: Kama
- [10] This god is sometimes called a son of Agni, but more commonly he is a son of Shiva and Parvati. This god loses a race around the world to his brother Ganesha.
ANSWER: Kartikeya [or Skanda]
17. Piero della Francesca showed this man bearing a flag with a red cross as he climbs out of a tomb in paintings of this figure's *Resurrection*. For 10 points each:
- [10] Name this religious figure who is dramatically foreshortened with his stigmatized feet thrust at the viewer in a certain artist's *Lamentation* of him.
ANSWER: Jesus Christ [accept either]
- [10] This artist painted that foreshortened *Lamentation of Christ*. He also employed the technique of *di sotto in sù* for the ceiling of the Camera degli Sposi in the Ducal Palace of Mantua.
ANSWER: Andrea Mantegna ["man-TEN-ya"]
- [10] Three paintings by Mantegna depicts this martyr from Avila tied to a column and with tens of arrows sticking through his body as two men.
ANSWER: St. Sebastian
18. The elderly servant Fiers is abandoned in a locked building at the end of this play. For 10 points each:
- [10] Name this play in which Lopakhin buys Madame Ranevskaya's estate and starts chopping the title grove.
ANSWER: *The* Cherry Orchard [or Vishnevyyi sad]
- [10] This Russian author reworked his play *The Wood Demon* into his play *Uncle Vanya*. He also wrote *The Cherry Orchard*.
ANSWER: Anton Chekhov
- [10] Dr. Rabin gets locked into the title institution, whose other patients include Ivan Gromov, in this Chekhov story.
ANSWER: "Ward No. 6" [or "Ward 6" or "Palata No. 6"]
19. This man wrote about "Stephen D", a medical student who took a "shedload" of cocaine, amphetamines, and PCP and woke up with a heightened sense of smell. For 10 points each:
- [10] Name this man who was actually Stephen D. This celebrated British neurologist and author of *The Man Who Mistook His Wife for a Hat* passed away in 2015.
ANSWER: Oliver Sacks
- [10] In *The Disembodied Lady*, Sacks wrote about a woman who lacked this sense that allows one to know the relative positions of joints and body parts in 3D space.
ANSWER: proprioception
- [10] In *The Lost Mariner*, Sacks details a case of Korsakoff's syndrome, an encephalopathy caused by a lack of thiamine. Thiamine, like riboflavin and niacin, is one of these vitamins.
ANSWER: B vitamin [accept B1 or B2 or B3]

20. This city grew around a lake that was once called "Salt Lake" due to the bring springs that flowed near it. For 10 points each:

[10] Name this county seat of Onondaga County. It hosts the annual Great New York State Fair.

ANSWER: **Syracuse**

[10] Syracuse is located in a region of New York named for these lakes. Much of Syracuse's snow is due to the lake effect from Lake Ontario and these lakes.

ANSWER: **Finger** Lakes

[10] Another city in the Finger Lakes region is this gorge-filled city home to Cornell University.

ANSWER: **Ithaca**

Extra

Harold Macmillan's "wind of change" speech foresaw the end of this empire, and during the 19th century, it was often said that the Sun never set on this empire. For 10 points each:

[10] Name this empire that sued for peace in the 1783 Treaty of Paris and lost colonies like Hong Kong and India during the 20th century.

ANSWER: **British** Empire [or **UK**; or **United Kingdom**]

[10] *Two answers required.* The Constitutional Act of 1791 divided Canada into these two constituent bodies. They were so named for their relative locations along the St. Lawrence River.

ANSWER: **Upper** Canada and **Lower** Canada [both answers required; order does not matter]

[10] Macmillan's "wind of change" speech was delivered to the parliament of this country, then led by Hendrik Verwoerd. Verwoerd tightened the rule of this country's white Afrikaner minority.

ANSWER: **South Africa** [or Republic of **South Africa**; or Union of **South Africa**]