Early Fall Tournament 2016 - "Auntie Vivian's daughter can answer these questions, why can't you?" Editors: Will Alston, Andrew Wang, and Richard Yu Writers: Eddie Kim, Jason Cheng, Jason Zhou, Parikshit Chauhan, and Ryan Humphrey With assistance from Ike Jose, Auroni Gupta, and Billy Busse

Packet 7

TOSSUPS

- 1. High intake of this compound can result in increased levels of microsomal cytochrome P450 enzymes. An enzyme that acts on this compound is believed to have developed from a glutathionedependent enzyme which acts on formaldehyde. A method for testing for this substance relies on its ability to reduce dichromate to chromium(III). This compound is oxidized by an enzyme containing both a structural (*) zinc atom and an active site zinc. An arginine-to-histidine mutation in the enzyme that metabolizes this compound causes it to be metabolized to toxic acetaldehyde faster than the acetaldehyde can be converted to harmless acetic acid. While muscle cells produce lactic acid, yeast and bacteria form this compound from fermentation. For 10 points name this compound found in beer. ANSWER: ethanol [or ethyl alcohol] <Bio, AW>
- 2. This city's idealization by historians was evaluated in a François Ollier book about [this city's] "Mirage." This city dealt with a manpower shortage by allowing mothakes and perioikoi to join its army. Aristotle attributes this city's decline to the fact that it allowed women to own property. This city was defeated in one battle by an enemy that created a fifty-man deep left flank, a use of the oblique order by its foe (*) Epaminondas. This city was governed by a council of twenty-eight elders called the gerousia and was ruled by two kings from the Agiad and Eurypontid dynasties. This city used a secret police called the krypteia to suppress its serf class, the helots. For 10 points, name this city in Laconia given laws by Lycurgus, a frequent rival of Athens.

ANSWER: Sparta [or Lacedaemon] < Brit/ClassHist, JZ>

- 3. While accompanied by 400 slaves, this man refuses a gift of several herds despite the giver insisting that seeing this man again is like seeing the face of God. This man takes two wives of Hittite descent named Bashemath and Judith. While this man is absent, his mother takes his clothes and gives them to a son who fears that his blind father will feel smooth skin. This man's wrath prompts another man to flee to work for uncle Laban. The distinguishing characteristics of this (*) hunter and "man of the field" include his red hair and hairy chest. In exchange for a bowl of lentil soup, this progenitor of the Edomites sells his birthright to his younger brother, who later has a dream of a ladder leading to heaven. For 10 points, name this elder son of Isaac, the brother of the Israelite patriarch Jacob. ANSWER: Esau < Rel, WA>
- 4. This fictional character writes a preface comparing himself to his "cousin" William Dampier, and complaining about being forced to praise Queen Anne over his real master. This character describes projects like turning human feces back into food that are undertaken by "projectors" at the academy of Lagado. This man becomes embroiled in the conflict between the Big and (*) Little-Endians. This surgeon is sold to a queen who puts him into a travelling box. This man loves a race of intelligent horses, and despises a race of savage human-like creatures called Yahoos. After being marooned, he is saved by the flying island of Laputa. This man fights a war with Blefuscu to help the six-inch tall Lilliputians. For 10 points, name this character who narrates his travels in a novel by Jonathan Swift. ANSWER: Lemuel Gulliver [accept Gulliver's Travels] <BritLit, RY>

5. An opera set in this country begins with the narrator apologizing for its lack of any recitatives. A composer from this country wrote an opera in which a sorceress summons a deceitful spirit disguised as Mercury. Johann Christoph Pepusch composed the music for a ballad opera from this country that was adapted into Kurt Weill's *The Threepenny Opera*. A composer who *worked* in this country wrote the aria (*) "Ombra mai fu." In an opera from this country, the soprano lead asks for "Thy hand, Belinda" and cries "Remember me, but ah! forget my fate" in the aria "When I am laid in Earth." That character's namesake "Lament" occurs after a prince of Troy sails from Carthage. For 10 points, name this country in which *Dido and Aeneas* was written by Henry Purcell.

ANSWER: <u>England</u> [or the <u>U.K.</u>; the <u>United Kingdom</u> of Great <u>Britain</u> and Northern Ireland; accept any underlined portion] <OArts, EK>

6. In government and binding theory, these words are contrasted with R-expressions and grouped with anaphors. In Arabic, it's increasingly rare to use dual-form examples of these words, like *huma* and *antuma*. The use of different examples of these words in different social situations is referred to as the "T-V distinction." Standard examples of these words in Japanese, such as *ore* [OR-eh], (*) *atashi*, and *watashi*, differ in usage by gender. It is common to "drop" these words in Korean, Japanese, and Romance languages, which all maintain a distinction between polite varieties of these words, like *vous* [voo] and *usted*, from casual ones, such as *tu*. For 10 points, name these words that take the place of nouns, whose "personal" examples include "you" and "I."

ANSWER: pronouns [prompt on nouns; prompt on subjects] <SocSci, WA>

7. George Sheldrick created the ShelX programs for use in this technique; those programs include algorithms for direct methods and charge flipping. Analysis of structure factors can predict the systematic absences in this technique that result from geometries containing screw axes or glide planes. Peaks in this technique correspond to planes defined by the vectors h, k and l. Common sources of (*) radiation for this technique include K-alpha emissions from copper or molybdenum tubes. This technique works because the incident radiation has wavelengths similar to atomic spacings, which serve as a grating. This technique, whose peaks must satisfy Bragg's law, was used by Rosalind Franklin to deduce the structure of DNA. For 10 points, name this technique which uses electrons, neutrons, or high-energy radiation to study the structure of solids.

ANSWER: **crystallography** [accept X-ray **crystallography**; accept **X-ray diffraction**; accept **XRD**; accept **electron diffraction** or **neutron diffraction**] < Chem, AW>

8. A poem in this collection describes how the speaker's words "grow thin/ as the tracks of the gulls" and that the speaker makes those words into "an endless necklace." The speaker of a poem in this collection marks an "atlas... with crosses of fire" and describes living "between two motionless gondoliers." Another poem in this collection addresses a "magnificent and fecund and magnetic slave" of time. The speaker of a poem in this collection calls its addressee a (*) "pit of debris" and repeats "It is the hour of departure" and "in you everything sank!" This collection's second-to-last poem has a speaker who remarks "The night wind revolves in the sky and sings" after saying "Tonight I can write the saddest lines." For 10 points, name this romantic poetry collection by Pablo Neruda.

ANSWER: <u>Twenty Love Poems and a Song of Despair</u> [or <u>Veinte poemas de amor y una canción desesperada</u>] <OLit, RY>

- 9. This leader's forces sacked Volterra during a revolt over payment from their alum mine. He was saved from an assassination attempt by the writer Poliziano, after which he stayed with Ferdinand I of Naples. This leader invited a man who would be admired by the *piagnoni* [PEE-ah-NYO-nee] into his city and hanged Francesco Salviati for an attack implicitly endorsed by Pope Sixtus IV. His father, nicknamed the "Gouty," and his son, nicknamed the "Unfortunate," were both named (*) Piero. This patron of Pico della Mirandola had a brother named Giuliano who was killed in the Pazzi Conspiracy, in which he himself was wounded. He invited Savonarola to his city and was a patron of many artists, including Michelangelo. For 10 points, name this Florentine grandson of Cosimo de Medici.

 ANSWER: Lorenzo de' Medici [or Lorenzo the Magnificent; prompt on partial answers] <EuroHist, JZ>
- 10. Konstantin Savitsky added the animals to a painting of a "Morning in" this kind of location by Ivan Shishkin. It's not a palace, but Camille Corot painted one of these locations "at Fontainebleau" and placed one at the left and another one just behind the title structure of his *Bridge At Narni*. A black-skinned woman playing a clarinet-like instrument stares at the viewer in a painting set in one of these locations titled (*) *The Dream*. A spooky abbey was painted by Caspar David Friedrich amidst one of these locations, which dominate the background and left side of John Constable's *The Hay Wain*. Most paintings by Henri Rousseau, such as *The Snake Charmer*, are set in this kind of location. For 10 points, Edouard Manet's *Luncheon on the Grass* is set in a clearing in what kind of location? ANSWER: forests [accept rainforest or tropical forest or jungle or oakwood or any kind of forest, really] <Painting, WA>
- 11. A writer in this play learns that admirers think him "as great a mystery as the Man in the Iron Mask" while reading a magazine aloud, making another jealous because no accolades of him were mentioned. A woman in this play gets over unrequited love by marrying a teacher who whines about his inadequate pay. Characters in this play often quote Hamlet, like an actress who shows off by reading Gertrude's part, and who reminisces about performing another character's experimental symbolist play before her (*) failed career. This play became popular in 1898 after the Moscow Art Theater produced it under Konstantin Stanislavsky. Masha and Medvedenko marry in this play, whose love triangle centers on Nina and the writer Trigorin. For 10 points, Treplev [TREP-lyoff] shoots the title bird at the end of what Anton Chekhov play?

ANSWER: *The Seagull* [or *Chayka*] <EuroLit, WA>

12. At a UN-run conference in this country's capital, Hillary Clinton declared "Human rights are women's rights, and women's rights are human rights." Nancy Pelosi proposed a 1992 act that allowed thousands of people from this country to become permanent residents. CIA director George Tenet accepted blame for the U.S. bombing of this country's embassy in Belgrade in 1999. A leader of this country wore a ten-gallon hat at a Texas rodeo on a (*) 1979 diplomatic visit after the Carter administration normalized U.S. relations with this country. Bill Clinton controversially allowed this country to join the WTO. The "week that changed the world" occurred when another President visited this country in 1972. For 10 points, name this country, many of whose dissidents immigrated to the U.S. following the 1989 massacre at Tiananmen Square.

ANSWER: <u>China</u> [People's Republic of <u>China</u>; or <u>Zhongguo</u> or <u>Zhonghua Renmin Gongheguo</u>] <AmHist, RY>

13. A process of this type has a likelihood proportional to the cosecant of theta over 2 raised to the fourth power. A measure of the likelihood of one of these events occurring is equal to its attenuation over the number density of targets. The path of a particle undergoing this phenomenon is related to a parameter symbolized b which is equivalent to the b parameter of the (*) hyperbolic orbit; that parameter is the impact parameter. This sort of process has its likelihood quantified by the cross section. The plum pudding model was disproved in an experiment where alpha particles experienced a form of this phenomenon named for Rutherford after hitting gold foil. For 10 points, name this phenomenon where a particle or wave is forced to deviate from its initial trajectory, whose Rayleigh form explains the blue color of the sky.

ANSWER: scattering [accept more specific answers such as Rutherford scattering] < Phys, AW>

- 14. In February 2016, this politician said "I will do my damn duty" to solve a certain crisis after admitting "I have no plan B" as a backup to current policy. The hashtag "[this politician's] Summer" began trending in July 2016 after a series of four terrorist attacks in this politician's home country, including an incident in which a foreigner murdered five people with an axe. Frustration over this world leader's apparent capitulation to foreigners and the left has fueled the rise of a party called (*) "Alternative for" [this leader's country]. The government led by this 2015 Time Person of the Year has allowed more than one million refugees to enter the country, some of whom assaulted women in the streets on New Year's Day in Cologne. For 10 points, name this Chancellor of Germany. ANSWER: Angela Merkel <Other, WA>
- 15. A substance that grants this ability is quested after by a god who schemes to become a servant by tricking nine other slaves into fighting to the death over a sharp whetstone. A god with this talent converses with a sea god in the text that follows the *Gylfaginning*. A man skilled in this activity is born in the aftermath of the Aesir-Vanir War when all of the gods gather together and spit into a (*) cauldron, though he is later killed by two dwarves. This activity is the primary talent of Kvasir, as well as a god who is wedded to the goddess of eternal youth and golden apples, Idunn. A mead that grants skill at it is stolen by Odin. Bragi personifies this activity, which was used to write the Elder Edda, unlike the younger Prose Edda. For 10 points, name this genre of verse literature.

 ANSWER: (skill at) poetry [or the Poetic Edda; prompt on literature or writing; prompt on wisdom] < Myth, EK>
- 16. The book that introduced this concept described reality as developing through this concept's "self-alienation." Art, religion, and philosophy arise from the Absolute version of this concept, which represents the reconciliation of its Subjective and Objective parts. This thing realizes its freedom through self-recognition in the process of "pure looking-at" and achieves its purpose through "world-historical figures" like Napoleon. This thing's activity drives (*) history according to the posthumous Lectures on the Philosophy of History. It's not a process, but this thing experiences aufhebung [OWF-heh-boonk] or "sublation," which drives a process of thesis-antithesis-synthesis called the dialectic. For 10 points, Geist is the German for what core concept from the philosophy of Hegel, whose most famous book is titled for the Phenomenology of [it]?

ANSWER: (Hegelian) <u>spirit</u> [or <u>geist</u> or Welt<u>geist</u> until mentioned; accept World <u>Spirit</u> or *Phenomenology* of <u>Spirit</u>; prompt on <u>God</u> until "Absolute" is read; prompt on <u>mind</u> until "Phenomenology" and accept thereafter] <Phil, WA>

17. This scientist is the subject of the book *The Aspiring Adept* by Lawrence Principe. One work by this author is arranged as a dialogue between five friends, including the host Carneades and the judge Eleutherius. In another work, this thinker proposed a perpetual motion device called a "self-flowing flask" as a solution to the hydrostatic paradox. This author's most well-known treatise attacks both Paracelsus' three-principle theory and Aristotle's theory of the four elements in an attempt to address the (*) "Doubts and Paradoxes" of its title subject. While he was investigating what he termed a "spring of air," this author of *The Skeptical Chemist* concluded that pressure and volume were inversely proportional for a gas. For 10 points, name this Anglo-Irish scientist whose namesake gas law keeps temperature constant.

ANSWER: Robert Boyle < OSci, RH>

- 18. A piece in this genre is the last movement of Paul Hindemith's *Symphonic Metamorphosis*. An instrument designed specifically to perform these pieces is sometimes made of fiberglass, and has a body that rests on the musician's left shoulder. A William Walton piece in this genre, written for the coronation of George VI, is "Crown Imperial." Concertgoers stomp their feet during a performance of a piece in this genre by the elder (*) Johann Strauss, while an American "king" of these pieces wrote ones such as "Semper Fidelis." The sousaphone was invented to perform these pieces, since it coils around the body to make it easy to walk in formation while playing pieces such as "The Stars and Stripes Forever." For 10 points, name this genre of music often accompanied by a military procession.

 ANSWER: march [or alla marcia] < Music, EK>
- 19. This good has been exported from around Lake Katwe since the 13th century. This good was exported from a major production center at Taoudenni [tau-den-ee] by the *azalai* trade route. The horses of Alexander the Great's army legendarily found a source of this good at Khewra. A source of this good at Taghaza was the target of expeditions by Ahmad al-Mansur. Taxes on *imports* [emphasize] of this good provided most income of a state ruled from Koumbi Saleh. The (*) Great Hedge blocked the trade of this good, whose taxation prompted a protest that ended at Dandi that protest was an example of *satyagraha*. The trade of this good flowed *south* [emphasize] across the Sahara desert in exchange for gold from West Africa. For 10 points, Gandhi marched to the sea to protest a tax on what good? ANSWER: salt <WorldHist, WA>
- 20. This character swears off speculation after a cow he spends ten dollars on dies and he believes he has lost money on the stock market. This character wears a five-center piece that he acquired after being ridden across the countryside by witches. When he finds out he's worth eight hundred dollars, this character wishes could have that money so he wouldn't "wan' no mo'." This character is painted blue and marketed as "The (*) Sick Arab" by two men claiming to be a Duke and Dauphin. An attempt to free this character is cut short by Aunt Polly's revelation that he had already been freed in Miss Watson's will. A boy who escapes Widow Douglas' attempts to civilize him travels with -- for 10 points -- which runaway slave from Mark Twain's *The Adventures of Huckleberry Finn*? ANSWER: <u>Iim</u> <AmLit, JC>

IF THE GAME IS A TIE AFTER REGULATION: Report to the tournament director. Then, read a bonus from the tiebreakers packet that the tournament director determines the team has not yet heard.

BONUSES

- 1. The success of this campaign was aided by the death of theorist Mikhail Tukhachevsky four years earlier. For 10 points each:
- [10] Identify this military campaign that broke the Molotov–Ribbentrop Pact. The success of this campaign enabled one side to starve a lot of Slavs in the "Hunger Plan."

ANSWER: <u>German invasion</u> of the <u>Soviet Union</u> [or Operation <u>Barbarossa</u>; accept any answer indicating <u>Hitler</u> or <u>Nazis</u> invading the <u>USSR</u>]

[10] The Red Army was weakened before Hitler's invasion by the purges ordered by this paranoid leader, the successor to Lenin.

ANSWER: Joseph Stalin [or Iosif Vissarionovich Dzhugashvili]

[10] This person led Stalin's NKVD secret police for almost all of World War II, implementing atrocities like the Katyń Forest Massacre. This Georgian supposedly ran to kiss Stalin's hand when Stalin was bedridden and was killed when Khrushchev came to power.

ANSWER: Lavrentiy Pavlovich Beria [or Lavrenti Pavles dze Beria] < EuroHist, JZ>

- 2. A foundational book in the mathematical application of this discipline was written by Augustus De Morgan. For 10 points each:
- [10] Identify this philosophical discipline, the systematic study of the reasoning of arguments and their validity.

ANSWER: logic

[10] This group of early 20th-century philosophers were the primary promoters of logical positivism, also known as verificationism, which argues that statements must be rooted on pure deductive logic or evidence.

ANSWER: Vienna Circle

[10] This author of *General Theory of Knowledge* organized the intellectuals that became the Vienna Circle. He corresponded with Einstein after publishing a 1915 paper on the philosophical implications of relativity.

ANSWER: Moritz Schlick < Phil, WA>

3. Answer the following about Greek myths set in remote parts of the world, for 10 points each.

[10] After the Trojan War, Menelaus is stranded in Egypt until he wrestles this shapeshifting sea god and forces out of him directions back to Sparta.

ANSWER: **Proteus** [or the **old man of the sea**]

[10] A distant region in Africa or Asia may be the elusive Mount Nysa where Dionysus is fostered by these rain nymphs. After their brother is killed, these sisters weep so much that they turn into their namesake stars.

ANSWER: **Hyades**

[10] After the gods overthrow Cronus, this Titan is condemned to spend eternity at the western end of the Earth as he holds up the heavens.

ANSWER: Atlas < Myth, EK>

- 4. In a 17th century "supplement" to this novel, the main characters are subjected to bizarre dreams by a spirit whose name translates roughly to "fish spirit of sexual desire." For 10 points each:
- [10] Name this Chinese novel about a motley trio who accompany the monk Tang Sanzang on the title expedition.

ANSWER: *Iourney to the West* [or *Xiyouji* ("shee-yoh-jee")]

[10] In *Journey to the West*, Sun Wukong is given his magical shape-changing staff by the king of the eastern sea, who is one of these creatures. Tang Sanzang rides a white horse who is also one of these creatures.

ANSWER: **dragon**s [or *long*]

[10] The aforementioned spin-off is based on an episode where Sun Wukong turns into a fly and enters a demon's body to beat her up, so that she will give up one of these items, which allows the group to pass flaming mountains.

ANSWER: (a banana leaf) fan [or sanjie bajiao shan] <OLit, RY>

- 5. The active telomerase of these cells makes them effectively immortal. For 10 points each:
- [10] Name these cells whose constant dividing forms tumors which can cause complications if they metastasize.

ANSWER: cancer cells

[10] Mechanisms to stop the formation of cancer cells include the activity of this tumor suppressor gene known as the "guardian angel of the genome." Despite its name, it in fact only has a mass of 43.7 kDa [kilo-daltons].

ANSWER: p53

[10] One of the rarer forms of cancer, sarcomas, form in tissues derived from these sorts of cells, which can develop into cells of the lymphatic system, circulatory system, and form connective tissue. When epithelial cells lose their polarity and adhesion they can become a type of stem cell described by the same word.

ANSWER: mesenchymal cells [accept mesenchymal stem cells] <Bio, AW>

- 6. This composer's E minor *Vocalise* begins with a quick "G, F-sharp, G" sung by the wordless solo soprano. For 10 points each:
- [10] Name this composer whose Symphony No. 2 is also in E minor. That symphony heavily quotes the Dies Irae in its second movement, but is best known for the lush violin theme in its third movement Adagio.

ANSWER: Sergei Rachmaninoff [or Sergei Vasilievich Rachmaninoff]

[10] Subtitled *From the New World*, this composer's E minor Symphony No. 9 was influenced by the African-American and Native American music he heard while vacationing in the United States. ANSWER: Antonín (Leopold) **Dvořák**

[10] The key of E minor has this combination of accidentals in its signature, the same as its relative key, G major.

ANSWER: **one sharp** [or **F-sharp**; prompt on **one** by asking "one what?"; prompt on <u>F</u> by asking "F what?"] <Music, EK>

- 7. A group of Irish people who settled in one of these two countries raided the other in the Fenian raids. For 10 points each:
- [10] Name these two countries that also experienced a border controversy over the San Juan Islands, which almost erupted into a war after the shooting of a pig.

ANSWER: United States of <u>America</u> AND Dominion of <u>Canada</u> (both required) [accept <u>U</u>nited <u>S</u>tates or <u>USA</u> for "America"]

[10] The Treaty of Washington, which did not provide compensation for the Fenians, was a disappointment for this first Prime Minister of Canada, who later lost office for accepting bribes from the builders of the Pacific Railway.

ANSWER: John Alexander Macdonald

[10] This Canadian Prime Minister was shaken by the lapels and told "Don't you come into my living room and piss on my rug!" by Lyndon Johnson after calling for the US to pause aerial bombing of North Vietnam. He also eliminated car tariffs with the US in the Auto Pact.

ANSWER: Lester Bowles **Pearson** [or "Mike" **Pearson**] <Brit/ClassHist, JZ>

8. This country is often described as "Africa in miniature" because it has an incredibly diverse range of climates, from the sahel in its North Region to the rainforests of the Sanaga River. For 10 points each: [10] Name this non-Nigeria country, which controls the oil-rich Bakassi Peninsula along the Bight of Biafra.

ANSWER: (Republic of) **Cameroon** [or République du **Cameroun**]

[10] Cameroon shares its name with one of these natural features known as Mongo maNdemie in native languages. One in Indonesia named Krakatoa sank under the sea after causing havoc in 1883.

ANSWER: **volcano**es [accept any specific type of volcano]

[10] Cameroon conducts most of its trade through this port city, which is larger than its capital of Yaoundé [YAUN-day]. It was called Kamerunstadt [KAHM-ehr-un-shtat] back when it served as the capital of German Cameroon.

ANSWER: Douala < Other, WA>

- 9. These entities were first introduced into literary theory by Maud Bodkin, and they were codified in the mainstream by Northrop Frye's *The Anatomy of Criticism*. For 10 points each:
- [10] Identify these elements of the collective unconscious, whose propagation in literature include the plucky-but-alone waif heroine, the catastrophic Femme Fatale, and the great mother.

ANSWER: archetypes [accept Jungian archetypes; accept archetypal literary criticism]

[10] Carl Jung developed his theory of archetypes after breaking from this psychoanalyst. Literary theory based on this psychoanalyst breaks personality down into the id, ego, and superego, and searched for the Oedipus Complex.

ANSWER: Sigmund Freud [or Sigmund Schlomo Freud]

[10] This archetypal character represents the underlying masculine personality traits found in women. This archetype clashes or dances with a similar underlying feminine personality in Jungian theory. ANSWER: animus [do not accept or prompt on "anima"] < EuroLit, JC>

- 10. This mathematician names a set of functions that equal delta functions when acted on by linear differential operators, which are useful in solving inhomogeneous differential equations. For 10 points each:
- [10] Name this mathematician, who also names the special case of the Kelvin-Stokes theorem in two-dimensions.

ANSWER: George Green

[10] The Kelvin–Stokes theorem may also be known as the theorem named for this quantity, which describes the rotation of a 3D vector field. It is often given as "del cross F."

ANSWER: curl [or curl theorem]

[10] Green's theorem and the curl operator are often encountered when studying this branch of mathematics, whose "fundamental theorem" relates the antiderivative to an integral and vice versa. ANSWER: **calculus** [or first fundamental theorem of **calculus** or second fundamental theorem of **calculus**] <OSci, RH>

11. Andrew Jackson requested that this sculptor not idealize him in one of his busts. For 10 points each: [10] Name this American neoclassical sculptor, who was inspired by stories of Turkish atrocities to create

 $his\ best-known\ sculpture,\ \textit{The\ Greek\ Slave}.$

ANSWER: Hiram Powers

[10] This sculptor created a series of statues called his "slaves," including "The Awakening Slave" and "The Bearded Slave." His other sculptures include the famous *Pietà* in St. Peter's Basilica.

ANSWER: Michelangelo Buonarroti [accept either underlined portion]

[10] Grenada is home to a monument to dead slaves created in this unusual location by Jason deCaires Taylor, who also created a sculpture museum in Cancún with this unusual property.

ANSWER: they are underwater [accept clear equivalents] <OArts, WA>

12. Name these plucky Brits with important dealings in Southeast Asia, for 10 points each.

[10] This Prime Minister didn't go to Southeast Asia much himself, but he did appoint commanders like Joseph Stillwell and Lord Mountbatten to carry out British operations there during World War II.

ANSWER: Sir Winston Churchill

[10] This woman accepted an offer from consul Tan Kim Ching to become royal governess and teacher for the family of King Mongkut, or Rama IV of Siam; her experience inspired the musical *The King and I*. ANSWER: Anna (Harriette) **Leonowens** [prompt on <u>Anna</u>, since that's her character in the musical] [10] This Governor-General of Bencoolen negotiated with Hussein of Johor to establish a trading post, where he subsequently appointed William Farquhar ["FAR"-kwar] as First Resident.

ANSWER: Sir (Thomas) Stamford **Raffles** <WorldHist, WA>

13. Answer the following about the Hindu festival of Raksha Bandhan, for 10 points each.

[10] Raksha Bandhan celebrates the bonds between people with this relationship through the tying of a sacred *rakhi* thread. Groups of them in Hinduism include the Kauravas.

ANSWER: siblings [accept more specific answers, such as brother and sister]

[10] The *Purana* named for this Hindu preserver deity contains many examples of *rakhi* prayers that are used on Raksha Bandhan, such as the one done by Yashoda for Krishna.

ANSWER: Vishnu

[10] Raksha Bandhan always falls during the occurrence of one of these events known as a Purnima. The traditional Mid-Autumn Festival celebrated in China and Vietnam always occurs during one of these. ANSWER: **full moon** [accept equivalents; prompt on moon] <Rel, WA>

- 14. Along with the magnetizing field, this entity must be defined when separating the bound charge and current in Maxwell's equations. For 10 points each:
- [10] Name this vector field, which equals the vacuum permittivity times electric field plus the polarization density.

ANSWER: **displacement** field [accept **D-field**]

[10] The time derivative of the D-field, or the displacement current, was introduced by Maxwell to this equation, which relates the magnetic field around a loop to its current

ANSWER: Ampère's law

[10] The displacement current must be considered in circuits containing one of these charge-storing devices, a simple example of which consists of a pair of parallel plates separated by a dielectric. ANSWER: capacitor < Phys, AW>

15. A blurb for one of this author's poetry collections opens "Often the poet strolled through Manhattan," and describes typing poems up "while never forgetting to eat... his favorite meal." For 10 points each: [10] Name this New York School poet who wrote about a painting of oranges titled "SARDINES" in "Why I am Not a Painter." This author included a poem about a mealtime conversation with Amiri Baraka in a collection of poems.

ANSWER: Frank O'Hara [Francis Russell O'Hara]

[10] Frank O'Hara's most famous collection of poems is titled for this meal. One of the foremost users of the cut-up literary technique, William S. Burroughs, wrote a novel titled after a *Naked* variety of this midday meal.

ANSWER: **lunch** [accept *Lunch Poems*; accept *Naked Lunch*]

[10] In one poem, Frank O'Hara describes braving poor weather before seeing the phrase "LANA TURNER HAS COLLAPSED!" in this medium. John dos Passos included many instances of this medium in his *USA Trilogy* in a precursor to the cut-up technique.

ANSWER: <u>newspaper</u>s [accept <u>newspaper</u> headlines or "<u>News</u>reel"; prompt on <u>writing</u> or <u>print</u>] <AmLit, JC>

16. A boy who befriended Richard Pace warned colonists of a 1622 attack by this ruler's brother, Opechancanough [oh-peh-CHAN-ka-"no"], that massacred hundreds. For 10 points each:

[10] Name this chief of a namesake Algonquian tribal confederation in modern-day Virginia that ruled the region of Tsenacomoco.

ANSWER: **Powhatan** [or **Wahunsenacah**]

[10] Powhatan's confederacy made a temporary peace with Jamestown when the colonists kidnapped this daughter of his, who agreed to marry John Rolfe.

ANSWER: **Pocahontas**

[10] The 1622 massacre also destroyed part of this town, derailing Thomas Dale and the Virginia Company's efforts to build a college here. The modern-day county named for it surrounds Richmond with Chesterfield County.

ANSWER: **Henricus** [or **Henrico**] <AmHist, RY>

17. A poem about this animal is the chronologically-first entry of a 1919 poetry anthology edited by Arthur Quiller-Couch. For 10 points each:

[10] Name this animal that is implored to sing in the 13th-century Middle English round titled "Sumer is icumen in." ["Summer is a-comin' in"]

ANSWER: cuckoo [or cuccu; accept "Cuckoo Song"]

[10] "Sumer is icumen in" is the first entry in an Oxford-published anthology titled for this word; in that context it refers to any type of poetry. This word, preceded by "blank," refers to a poem in unrhymed iambic pentameter.

ANSWER: verse

[10] This poet wrote about Oxford's "dreaming spires" in his poem "Thyrsis," which memorializes his friend Arthur Hugh Clough. He also described an "eternal note of sadness" in "Dover Beach." ANSWER: Matthew **Arnold** Arnold Arnold <a href="https://dreaming.com/html/matthew-arnold-com/html/matthew-arnol

18. Reacting one of these functionalities with an amine can produce an amide, while reaction with an alcohol yields an ester. For 10 points each:

[10] Name this functional group consisting of a -COOH [C-O-O-H]. They are easily deprotonated due to the stability of their corresponding anions.

ANSWER: carboxylic acids [or carboxyl groups]

[10] Carboxylic acids tend to exist as dimeric pairs in solution linked through these interactions between the carbonyl and the hydroxyl portions. They are responsible for the high boiling point of water.

ANSWER: **hydrogen bond**s

[10] This dicarboxylic acid can be obtained from an anhydride used as a classic dienophile [dye-EEN-ohfile] in the Diels-Alder reaction. The ionic form of this *cis* isomer of fumarate serves as an inhibitor of transaminase enzymes.

ANSWER: <u>maleic acid</u> [accept <u>maleate</u> (MALL-ee-ate); prompt on *cis*-<u>butenedioic acid</u>; do NOT accept "malic acid" or "malate"] <Chem, AW>

19. Kenneth Griffin bought this man's painting *Interchange* for a record \$300 million in September 2015. For 10 points each:

[10] Name this Dutch-American artist who utilized heavy impasto in a series of works that likely drew upon fertility idols like the *Venus of Willendorf*.

ANSWER: Willem de Kooning

[10] De Kooning was an Abstract Expressionist, as was this man, who Hans Namuth photographed doing his characteristic "action painting."

ANSWER: Jackson **Pollock** [accept Paul Jackson **Pollock**]

[10] Arshile Gorky helped bridge the gap between Surrealism and Abstract Expressionism with works like this abstract painting, which shows a rooster-headed figure on the right with a seemingly feathered groin.

ANSWER: The Liver is the Cock's Comb < Painting, PC>

20. Carl Rogers outlined his approach to this type of psychology in *On Becoming a Person*. For 10 points each:

[10] Identify this general type of psychology, which promotes the use of scientific means to remove dysfunction in lives. Barbara Fredrickson developed the "broaden-and-build" approach in this area of psychology.

ANSWER: **positive** psychology

[10] Positive psychology focuses on encouraging positive examples of these feelings, which include fear, happiness, and love. Fredrickson argued that there was a "critical ratio" of them separating flourishing and languishing people.

ANSWER: **emotion**s

[10] This positive psychologist and self-help author co-founded *Prevention and Treatment* magazine, which he still edits. While working at the University of Pennsylvania, he developed the theory of "learned helplessness."

ANSWER: Martin Seligman <SocSci, WA>

IF ADDITIONAL BONUSES ARE NEEDED: Report to the tournament director. Then, read a bonus from the tiebreakers packet that the tournament director determines the team has not yet heard.