ACF Fall 2019

Packet by Cornell A, Penn State B, Wesleyan Edited by Rahul Keyal, Ganon Evans, Justin French, Halle Friedman, Katherine Lei, Caroline Mao, Ben Miller, Tracy Mirkin, Clark Smith, Kevin Yu

Tossups

1. A letter to this thinker objects to his invocation of the Scholastic notion of a rock's weight since his own mechanistic physics denied that "weight" was a "real" quantity; that letter inquires about the "interaction problem." Another woman argued that souls do not have a sex after she read this thinker's work on "animal spirits." This man died shortly after arriving in the court of Queen Kristina. Mary Astell argued for women's education on account of this man's idea that extended substances were separate from mental substances. Elizabeth of Bohemia critiqued this thinker's namesake mind-body dualism. For 10 points, name this author of *Meditations on First Philosophy* whose *Discourse on Method* claims "I think therefore I am."

ANSWER: René <u>Descartes</u> ("day-CART") [or Rene Des <u>Cartes</u>; accept words derived from his name, such as <u>Cartesian</u>s or <u>cartesienne</u>s] (The first line is from Descartes's correspondence with Elizabeth of Bohemia; the second is on <u>Passions of the Soul</u>; female followers of Descartes were known as <u>cartesiennes</u>.)
<Philosophy>

2. This character describes meeting the "head Llama" in Tibet and visiting the Khalifa at Khartoum in a short story about the card player Ronald Adair. This character, whose brother founded the Diogenes Club, helps a man who is paid to copy the encyclopedia. The captain of the *Lone Star* is sent the title objects by this character after the Ku Klux Klan murders John Openshaw in "The Five Orange Pips." This character reveals he faked his death in "The Adventure of the Empty House" after battling Professor Moriarty at Reichenbach Falls in "The Final Problem." For 10 points, Dr. John Watson is the companion of what detective created by Arthur Conan Doyle? ANSWER: **Sherlock Holmes** [accept either name]

ANSWER. SHEFFOCK Homes [accept either name]

<British Literature>

3. George Palmer translated this man's endorsements of the *angareion* for use as the United States Postal Service's unofficial motto. This man first described a rival kingdom's demands of "earth and water," and how their soldiers were marched to war between the two halves of Pythius's son. The Muses lend their names to the nine divisions of this man's most famous work, which was largely discovered as papyrus fragments at Oxyrhynchus. In that work, the Himalayan marmot may have inspired this man's often-mocked descriptions of furry, gold-digging "ants." Cicero called this man the "Father" of his discipline for his contemporary accounts of the Greco-Persian Wars. For 10 points, name this ancient Greek author of the *Histories*.

ANSWER: <u>Herodotus</u> [or <u>Herodotus</u> of Halicarnassus] <European History>

- 4. The nickname of a site at Mogao suggests that it contains a thousand depictions of this figure's predecessors. This figure, who was often symbolically represented in early art with a pair of footprints, is depicted throughout the Longmen Grottoes. Sculptures of different predecessors to this figure hold different hand positions, or *mudras*, based on the direction they face at the site of Borobudur. The Ajanta caves depict this figure's life in their paintings and rock-cuttings based on the Jataka tales. The Taliban destroyed massive sandstone statues of this figure at Bamiyan. For 10 points, what religious figure is often sculpted sitting in a lotus position as he meditates? ANSWER: **Buddha** [or **Siddhartha Gautama**; accept either part]
- 5. A popular introductory textbook on the study of these constructs is commonly abbreviated "CLRS." Formally, one of these constructs can be defined as a Turing machine that computes a function *f*. One paradigm of these things

involves incrementally finding locally optimal choices and is exemplified by ones named for Prim and Kruskal; that is the "greedy" model of these constructs. The time and space complexity of these things can be expressed with big-O notation. Categories of these constructs include "randomized" and "divide-and-conquer." For 10 points, name these step-by-step methods of solving problems, examples of which may "search" or "sort" data structures.

ANSWER: algorithms [accept greedy algorithms]

<Other Science>

6. During a quarrel between this man's sons, Zeus helped one of them by moving the sun backwards across the sky. In order to win his wife, this man convinced Myrtilus to replace bronze linchpins with ones made of wax. This man threw a rival off a cliff, bringing about a curse by which this man's sons Atreus and Thyestes ("thee-ESS-teez") destroyed his family. Oenomaus ("EE-no-MAY-uss") was killed when his sabotaged chariot fell apart, letting this man beat him in a race. Hephaestus made an ivory shoulder for this man after Demeter accidentally ate his real one during a feast prepared from this man's flesh by his father. For 10 points, name this husband of Hippodamia and son of Tantalus.

ANSWER: <u>Pelops</u> <Mythology>

7. Description acceptable. The "Diary of Merer" was written by an official charged with procuring limestone for this task and is one of the world's oldest surviving written texts. Jean-Pierre Houdin ("oo-DAN") proposed the contested "internal ramp" hypothesis to explain how this task was accomplished. A method for accomplishing this task was developed to complete a project commissioned by Djoser ("JO-sir") in Saqqara ("suh-KAR-uh") and was designed by the chancellor and architect Imhotep. Contrary to Exodus-inspired myths, this task was likely accomplished by paid craftsman rather than Jewish slaves. For 10 points, name this process by which ancient Egyptians constructed a certain kind of monument at Giza.

ANSWER: <u>building the Pyramids</u> [accept <u>building the Great Pyramid</u> or descriptive equivalents that indicate the construction of **pyramids**]

<World History>

8. A reference to a necklace of "topaz" was omitted when this author's poem about "a pure white hind" was adapted as the poem "Whoso List to Hunt." Although this author's poem "If no love is, O God, what fele I so?" was translated by Chaucer, this author was first popularized in England through adaptations by the Earl of Surrey and Sir Thomas Wyatt. This author described being "caught" by a woman's "lovely eyes" in a poem set on "the day the sun's ray had turned pale." This author wrote "You who hear the sound, in scattered rhymes" to begin his *Il Canzoniere* ("kont-sone-YAY-ray"), which contains many poems addressed to Laura. For 10 points, name this 14th century Italian poet who names a type of sonnet.

ANSWER: <u>Petrarch</u> [or Francesco <u>Petrarca</u>; accept <u>Petrarchan sonnet</u>] <European Literature>

9. The central figure of this painting is contrasted with a figure based on the model Laure in a Lorraine O'Grady essay on "Black female subjectivity," which notes that woman's role as both "Jezebel and Mammy." The profession of this painting's central subject is indicated by her pearl earrings, oriental shawl, and orchid in her hair. This painting's subject stares directly at the viewer and is modeled on Victorine Meurent ("murr-ON"). The artist of this painting based it on Titian's *Venus of Urbino*, but replaced that painting's dog with a black cat. For 10 points, a black maid extends a bouquet to the title reclining nude woman in what painting by Édouard Manet?

ANSWER: *Olympia* <Painting/Sculpture>

10. In 2018, researchers at LLNL compressed this compound hat

10. In 2018, researchers at LLNL compressed this compound between two diamond fragments and then laser-shocked it to create the "superionic" form of this compound. Theodor Grotthuss developed the model of the

proton-jumping mechanism for this compound. This compound is susceptible to dielectric heating because of its large dipole moment, which is why microwave ovens primarily target this molecule. This amphoteric molecule has high specific heat because it can form hydrogen bonds with itself. The Kelvin scale was previously defined by the triple point of this substance. For 10 points, identify this compound nicknamed the universal solvent.

ANSWER: <u>water</u> [or <u>H2O</u>; or <u>ice</u>; accept superionic <u>water</u>] <Chemistry>

11. Blanche Wiesen Cook wrote a three-volume biography of this activist that analyzes her relationship with AP reporter Lorena Hickok. This activist helped create an experimental community for miners in Arthurdale, West Virginia which she promoted in her syndicated column "My Day." After the Daughters of the American Revolution blocked a performance by Marian Anderson, this woman resigned from DAR and booked Anderson at the Lincoln Memorial. In 1946, one year after her husband's death, this woman became the first chair of the U.N. Commission on Human Rights. For 10 points, name this woman who served as First Lady from 1933 to 1945.

ANSWER: <u>E</u>leanor <u>Roosevelt</u> [or <u>A</u>nna Eleanor <u>Roosevelt</u>; prompt on <u>Roosevelt</u>] <American History>

- 12. Within this field, left realists and right realists dispute Gottfredson and Hirschi's ("HER-skee's") "general" social control theory. Alexandre Lacassagne ("la-ka-SAH-nyuh") opposed the phrenology-obsessed "father" of this field who searched for "atavistic" features in subjects' skull shapes; that man was Cesare ("CHEZ-ah-ray") Lombroso. Durkheim's idea of *anomie* ("ah-no-MEE") inspired sociologist Robert Merton's strain theory in this other field. Cesare Beccaria is best-known for work in this discipline, which is the subject of a Michel Foucault book that studies Jeremy Bentham's *Panopticon*. Scholars in this field may research recidivism or "white collar" phenomena such as embezzlement and forgery. For 10 points, name this field that studies law-breaking acts. ANSWER: **criminology** [accept **penology**; accept **criminal justice**; prompt on <u>criminal psychology</u>; prompt on <u>crime</u> by asking "what is the field that studies crime?"] (The Foucault book is *Discipline and Punish*.) <Social Science>
- 13. A group of composers from this modern-day country who created the collection *The Triumphs of Oriana* were members of its namesake Madrigal School. A composer from this country used a "falling tear" motif in *Lachrimae* ("LACK-ree-MAY"), his most popular lute song. A ruler of this country granted two of its composers a 21-year monopoly on polyphonic music. John Dowland ("DOH-lind") was born in this country, and another composer from here wrote the 40-part motet *Spem in alium*. An anthem originally from this country is often sung as the American patriotic song "My Country 'Tis Of Thee." For 10 points, name this country in which Thomas Tallis and William Byrd composed for Anglican services.

ANSWER: England [accept UK or United Kingdom] or Great Britain; do not accept or prompt on "Scotland," "Wales," or "Ireland"] (The anthem is "God Save the Queen.")

<Classical Music>

14. This author wrote about a woman who moves back to Paris after her husband learns about her affair with Dimitri Desjardins ("day-zhar-DAN"). In a short story by this author, a boy who begs his babysitter to put on a silver cocktail dress defines a compliment she heard earlier at the Mapparium as "loving someone you don't know." This author of "Sexy" created a character who is found holding the pages of "The Overcoat" after a train wreck. After a trip to the Sun Temple at Konarak, Mr. Kapasi saves Bobby from monkeys in a short story by this author. For 10 points, name this author who created Gogol Ganguli in *The Namesake* and wrote *Interpreter of Maladies*. ANSWER: Jhumpa Lahiri [or Nilanjana Sudeshna Lahiri]

<American Literature>

15. An argument ironically named for this scientist centers around the spontaneous formation of a human brain due to random thermodynamic fluctuations. One of this man's theorems was criticized for being in conflict with time

reversal symmetry and can be derived from his "transport function." The product of temperature and this man's namesake constant appears in the denominator of thermodynamic beta. This man's tombstone is engraved with the equation "S equals $k \log W$," a statistical definition of entropy that includes his namesake constant. For 10 points, name this pioneer of statistical mechanics who co-names a probability distribution with James Clerk Maxwell. ANSWER: Ludwig Boltzmann [or Ludwig Eduard Boltzmann] <Physics>

16. *Description acceptable*. Mentions of "physical attributes" were commonly reinterpreted as metaphors as part of a modification of this general belief that was held by all members of the Mu'tazila school. The 112th *surah*, Al-Ikhlāṣ, consists entirely of a short proclamation regarding this concept, which is not believed in by performers of *shirk*. When reciting the *Shahada*, before stating that "Muhammad is the messenger of God," one first states this idea, which is also known as *tawhid* ("tao-HEED"). Early Arabs often worshipped a plethora of idols in opposition to this religious idea. For 10 points, a belief in what general idea lies at the center of Islam, in light of its status as a monotheistic religion?

ANSWER: the <u>oneness</u> of <u>God</u> [or there is only <u>one <u>God</u>; accept <u>Allah</u> in place of "God"; accept answers indicating that <u>God</u> is <u>unique</u>; accept <u>monotheism</u> until read, but prompt after; accept "there is <u>no god except God</u>"; accept <u>tawhid</u> until read, but prompt after; accept <u>lā 'ilāha 'illā llāh</u>; accept the <u>first half/part</u> of the <u>Shahada</u> until read]</u>

<Religion>

17. William Dalrymple's 2019 book *The Anarchy* chronicles the "relentless rise" of this organization, whose actions were discussed in the Pratt-York opinion. This organization put a reward out for the head of Henry Every, sparking the first worldwide manhunt. One representative of this organization, Warren Hastings, reported on a 1770 famine caused by the policies of its official, Robert Clive. Unease over pre-greased rifle cartridges catalyzed the Sepoy Mutiny against this organization, which traded many commodities with Qing China and the Mughals. For 10 points, name this joint-stock company whose actions in India brought about the creation of the British Raj.

ANSWER: <u>British East India</u> Company [or <u>BEIC</u>; accept <u>Honorable East India</u> Company or <u>HEIC</u>; accept <u>John Company</u>; accept <u>Company Bahadur</u>; prompt on <u>East India Company</u>]
<European History>

18. A man finds a refrigerator filled with the heads of these animals in a novel that features a character who eats these animals' hearts and plans to use their souls to make a flute. At the end of a novel, a drunk one of these animals owned by Mr. Sneaze drowns in a barrel. A woman nicknamed for this animal taunts a man who hurt himself while jumping hurdles for his attraction to his friend Skipper. Nakata has the ability to talk to these animals in *Kafka on the Shore*. In a play titled for this animal, Gooper and Brick pretend that their father has a "spastic colon" instead of cancer. For 10 points, the Pollitt family features in a Tennessee Williams play titled for what type of animal *on a Hot Tin Roof*?

ANSWER: <u>cat</u>s [or <u>feline</u>s or <u>kitten</u>s or synonyms; accept <u>I Am a Cat</u> or <u>Cat on a Hot Tin Roof</u>] <World/Other Literature>

19. Industrialist Alexander Temerko's firm Aquind Ltd controversially ran this politician's campaign for his highest office. The Emirates Air Line is a trolley system this leader imported from Colombia. This leader dubbed payment from continuing his column in the Telegraph "chicken feed," but ended his editorship in *The Spectator* while updating transportation in 2008. In October 2019, Jeremy Corbyn asked this leader "which clause in the bill" would protect the NHS from privatization. For 10 points, name this former Mayor of London who attempted to organize an October 31st leave from the EU as Prime Minister of the United Kingdom.

ANSWER: Boris **Johnson** [or Alexander Boris de Pfeiffel **Johnson**] <CE/Geo/Other/Pop Culture>

20. An Olszewski ("ol-SHEFF-skee") tube is a device designed to reverse the effects of this condition through destratification. A score of 50 to 70 on Carlson's index indicates this condition, which can be controlled through the addition of calcium, aluminum, or iron salts. That aforementioned index for this condition is calculated from chlorophyll *a* concentration, total phosphorus, and Secchi ("SECK-ee") disk visibility. This condition is most commonly caused by nonpoint source pollution, which increases turbidity and decreases light penetration, leading to the formation of hypoxic regions called dead zones. For 10 points, name this harmful phenomenon seen in bodies of water with excess nutrients that often leads to algal blooms.

ANSWER: <u>eutrophication</u> ("yoo-tro-fih-KAY-shun") [or word forms; accept <u>hypereutrophication</u>; accept algal <u>bloom</u>s or phytoplankton <u>bloom</u>s until read; prompt on <u>dead zone</u>s or <u>hypoxiac</u> until read by asking "what causes them?"]

<Biology>

Bonuses

- 1. A Joy Harjo poem titled "She Had Some" of these animals describes how "Some will see [these animals] with their hearts of sleeping volcanoes." For 10 points each:
- [10] Name these animals. A "little" one of these animals "must think it queer" according to a speaker who describes woods as "lovely, dark and deep" and talks about "miles to go before I sleep."

ANSWER: <u>horse</u>s [accept "She Had Some <u>Horses</u>" or "my little <u>horse</u>"]

[10] This author's journey home on his horse after failing to make money for buying Christmas presents inspired his poem "Stopping by Woods on a Snowy Evening." He wrote "The Road Not Taken."

ANSWER: Robert Frost [or Robert Lee Frost]

[10] This poet wrote "Don't let that horse / eat that violin" in a poem on Marc Chagall's ("shuh-GALL's") creation of the painting *The Horse With Violin In Mouth*. This poet also wrote *A Coney Island of the Mind*.

ANSWER: Lawrence Ferlinghetti [or Lawrence Monsanto Ferlinghetti]

<American Literature>

- 2. In this type of current, the electric charge flows in one direction. For 10 points each:
- [10] Name this type of current, abbreviated DC, that is contrasted with alternating current.

ANSWER: direct current

[10] This type of generator uses a moving belt to produce direct current. In a common science demonstration of static electricity, putting one's hands on this device will cause their hair to stand up.

ANSWER: Van de Graaff generator

[10] A van de Graaff generator accumulates charge via this effect, in which rubbing two materials together causes them to become electrically charged.

ANSWER: **triboelectric** effect

<Physics>

- 3. This economist's failed prediction that the stock market had reached a "permanently high plateau" just before the 1929 crash led him to propose that recessions are caused by "debt deflation." For 10 points each:
- [10] Name this American economist whose namesake equation states the nominal interest rate is the sum of the real interest rate and the inflation rate.

ANSWER: Irving Fisher

[10] Fisher was a proponent of this school, whose microeconomic ideas are fused with Keynesian ("CANE-zee-in") macro in a namesake synthesis. It is named for updating the ideas of John Stuart Mill and Adam Smith.

ANSWER: neoclassical economics

[10] The transition from classical to neoclassical economics was a "revolution" named for this adjective. This adjective is used to describe the change in utility from consuming an additional unit of a good or service.

ANSWER: <u>marginal</u> revolution [or <u>marginalism</u>; accept <u>marginal</u> utility]

<Social Science>

- 4. Answer the following about famed railroads that connected Europe to Asia, for 10 points each.
- [10] Two answers required. In 1903, construction began on a railway that would connect these two cities, in the German and Ottoman Empires respectively. The railway didn't finish until 1940 but is often considered a factor in the outbreak of World War I.

ANSWER: **Berlin** AND **Baghdad** [accept **Berlin–Baghdad** Railway; do not accept or prompt on individual answers]

[10] This snowy, sparsely populated region names a massive railway system that was spearheaded by Tsar Alexander III, and connected Moscow to Vladivostok in the Far East.

ANSWER: Siberia [or Sibir; accept Trans-Siberian Railroad]

[10] George Nagelmackers's *CIWL* passenger car company operated this railway system that originally connected Paris to Constantinople. This system's name derived from a broad, historical term for the East.

ANSWER: the **Orient Express** [or the **Express d'Orient**]

<European History>

- 5. Answer the following about the travels of French painter Paul Gauguin. For 10 points each:
- [10] Gauguin is best-known for his work done on this island, the setting of works like *Spirit of the Dead Watching* and *Primitive Tales*. He often depicted this island's native women on beaches or surrounded by lush vegetation.

ANSWER: Tahiti [prompt on French Polynesia]

[10] Gauguin also spent much of his time in this region of France, especially its town of Pont-Aven ("pon-tah-VAWN"). He depicted the tall white bonnets of its peasant women's traditional dress in paintings like *Vision After the Sermon*.

ANSWER: **Brittany** [or **Breton** region; or **Bretagne**]

[10] In 1888, Gauguin stayed with this other artist at the Yellow House in Arles ("arl"), where scholars believe he may have cut off this artist's ear. This Dutch-born artist painted *The Starry Night*.

ANSWER: Vincent Van Gogh

<Painting/Sculpture>

- 6. A test of strength for men on this island was to catch one of the native *tahrir* ("tah-REER") species of goat with each hand. For 10 points each:
- [10] Name this island in the Gulf of Aden where early explorers believed red sap from "dragon blood" trees was cinnabar. Hadibu is home to the only airport on this island.

ANSWER: Soqotra [or Socotra]

[10] The Avenue of the Baobabs lines a road leading to this island country's city of Morondava. This largest island in the Indian Ocean speaks a Malayo-Polynesian language in its capital of Antananarivo.

ANSWER: <u>Madagascar</u> [or <u>Madagasikara</u>; accept Repoblikan'i <u>Madagasikara</u> or the Republic of <u>Madagascar</u>] [10] In the Maldives, blocks from massive coral reefs were used to construct one of these buildings titled Hukuru. In September 2019, renovations to one of these non-Christian buildings in Mayotte was dubbed the sister project to the Notre-Dame renovations.

ANSWER: mosque [or masjid; accept Malé Friday Mosque]

<CE/Geo/Other/Pop Culture>

- 7. Syrena Tricksy rises the social ladder in an "Anti-" version of this novel by Eliza Haywood subtitled "Feign'd Innocence Detected." For 10 points each:
- [10] Name this novel that also inspired a parody in which the female heroine tricks Squire Booby into marriage. Both parodies mock the ideals presented in this Samuel Richardson novel, subtitled "Virtue Rewarded."

ANSWER: **Pamela** [or **Pamela**; or, Virtue Rewarded]

[10] This author of *Shamela* frequently digressed while chronicling the life of a "foundling" in his novel *Tom Jones*. ANSWER: Henry **Fielding**

[10] Pamela and Shamela both have this surname. A Henry Fielding novel written "in imitation of the manner of Cervantes" imagines Pamela's brother of this surname, who is mentored by Abraham Adams.

ANSWER: Andrews [accept Joseph Andrews]

<British Literature>

- 8. A fleet led by David Farragut captured this city after slipping past Forts Jackson and St. Philip. For 10 points each:
- [10] Name this Louisiana city, the most populous in the Confederacy, that was captured by Union forces in April 1862.

ANSWER: New Orleans

[10] This Massachusetts general and future radical Republican became the first military governor of New Orleans. He sparked scandal by ordering that New Orleans women who disrespected Union troops should be given as little respect as prostitutes.

ANSWER: Benjamin **Butler**

[10] In May 1862, Butler's men found the wife of this Confederate general living in New Orleans. This French Creole captured Fort Sumter and, with Joseph Johnston, defeated Irwin McDowell at the First Battle of Bull Run in 1861.

ANSWER: P. G. T. **Beauregard** [or Pierre Gustave Toutant-**Beauregard**]

<American History>

- 9. The "para" form of these proteins is used to make cheese. For 10 points each:
- [10] Name these proteins that comprise around 80% of the protein content in cow's milk.

ANSWER: <u>casein</u> ("KAY-seen") [or para<u>casein</u>; or <u>casein</u>ogen]

[10] Due to its protein-rich nature, non-fat milk often functions as a blocking agent in this biological technique used to detect and analyze the expression of proteins separated by gel electrophoresis.

ANSWER: western blot [prompt on blotting]

[10] In addition to proteins, milk contains carbohydrates such as this sugar. People with a mutation in the *MCM6* gene develop an "intolerance" for this disaccharide.

ANSWER: lactose

<Biology>

- 10. Answer the following about traditional African faiths, for 10 points each.
- [10] Describing many native African religions, this term was held by Edward Tylor to be the developmental phase for all religions. This term, from the Latin for "breath," is the belief that all objects and phenomena possess a spirit or soul.

ANSWER: **animism** [or word forms, such as **animistic** religions; prompt on <u>fetishism</u> or <u>totemism</u> or <u>pantheism</u>] [10] African faiths also often feature this practice, which *babalawos* perform by reading kola nuts on a wooden tray. In ancient China, "oracle bones" were used for this practice, which may be performed by reading tarot ("TAIR-oh") cards.

ANSWER: <u>divination</u> [or word forms, such as <u>divining</u>; accept <u>Ifá</u>; accept descriptive answers such as <u>prophecy</u>, <u>fortune-telling</u>, or <u>telling</u> the <u>future</u>]

[10] The Bwa of Burkina Faso are known for making the tall *nwantaytay* type of these objects, which are often used in the ancestor venerating *egungun* festival. Dogon dance societies, or *awa*, are centered around these objects.

ANSWER: masks [prompt on costumes]

<Religion>

- 11. Arrangements of Philip Glass's music by this composer, and vice versa, make up the 1990 album *Passages*. For 10 points each:
- [10] Name this musician who collaborated with Yehudi Menuhin ("yeh-HOO-dee MEN-yoo-in") on two albums titled *East Meets West*. This composer also wrote the music for the *Apu Trilogy*.

ANSWER: Ravi Shankar

[10] Long after meeting through the Asian Music Circle, Ravi Shankar collaborated with a member of this musical group on the album *Chants of India*. That man, George Harrison, switched to playing sitar for this band's 1965 track "Norwegian Wood" for their album *Rubber Soul*.

ANSWER: The Beatles

[10] Indian conductor Zubin Mehta is the only *Conductor Emeritus* of this city's premier orchestra. Esa-Pekka Salonen and Gustavo Dudamel conducted that orchestra in this city's Walt Disney Concert Hall.

ANSWER: Los Angeles [or LA; accept Los Angeles Philharmonic, LA Phil, or LAP]

<Classical Music>

- 12. After multiple failed attempts on this leader's life, he responded, "Stop sending people to kill me. We've already captured five of them... if you don't stop sending killers, I'll send one... and I won't have to send a second." For 10 points each:
- [10] Name this leader who imprisoned many political opponents on the island of Goli Otok. This first Chairperson of the Non-Aligned Movement split with Stalin over matters such as the Hungarian Revolution.

ANSWER: Josip Broz <u>Tito</u> [or Josip <u>Broz</u>]

[10] Tito led this Central European country, which would eventually break up into multiple successor states including Serbia and Montenegro, Bosnia and Herzegovina, and Croatia.

ANSWER: Yugoslavia

[10] As leader of the Partisan resistance during World War II, Tito strongly opposed the Axis collaboration of this other Yugoslavian royalist faction, led by Draža Mihailović.

ANSWER: the <u>Chetnik</u> movement [or <u>Chetnik</u>s; accept <u>Ravna Gora</u> Movement; accept <u>Yugoslav Army in the Homeland</u>]

<European History>

- 13. After accusing this character of stealing a gun, a woman runs toward a helicopter at the end of the novel in which this character appears. For 10 points each:
- [10] Name this servant who worries his employers when he uses the bakkie ("back-ee") without their permission. This character brings those employers to his village during a civil war.

ANSWER: July

[10] This author of *The Conservationist* wrote about Bam and Maureen Smales fleeing to their servant's village in her novel *July's People*.

ANSWER: Nadine Gordimer

[10] The fictional civil war in July's People depicts the downfall of apartheid in this home country of Gordimer.

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

<World/Other Literature>

- 14. The Yogachara ("yo-ga-CHAH-ruh") school's notion of *Vijnapti-matram* ("vij-NOP-tee MAW-thrum") is usually interpreted as a version of this perspective, since it holds that the world is an "unreal object." For 10 points each:
- [10] Name this view. George Berkeley's ("BARK-lee's") "immaterialism" is another variant of this position, which holds that only minds and mental constructs truly exist.

ANSWER: subjective **idealism** [or word forms]

[10] Samuel Johnson made the first *argumentum ad lapidem* by performing this specific action and proclaiming "I refute it thus" when discussing Berkeley's "ingenious sophistry to prove the non-existence of matter."

ANSWER: **kick**ing a **rock** [or equivalents]

[10] Berkeley attacked the fluxions used by this other thinker as "ghosts of departed quantities." Berkeley's *De motu* opposes the notions of absolute space and time argued in this physicist's *Principia Mathematica*.

ANSWER: Issac Newton

<Philosophy>

- 15. The Theis ("tice") equation describes the movement of this substance. For 10 points each:
- [10] Name this substance contained in aquifers. The distribution of this substance is studied in hydrogeology.

ANSWER: groundwater

[10] The ability of groundwater to flow through an aquifer can be described by this law. This law establishes a proportional relationship between a fluid's flow rate and its viscosity, the medium's permeability, and the pressure drop over a given distance.

ANSWER: **Darcy**'s law [do not accept or prompt on "Darcy–Weisbach equation"]

[10] The groundwater flow equation is formulated by combining Darcy's law with this other law. This law implies that its namesake quantity can be neither created nor destroyed.

ANSWER: law of **conservation of mass** [or **mass conservation**; do not accept or prompt on "law of conservation of matter"]

<Other Science>

- 16. Peter Sculthorpe's multi-language *Rites of Passage* was intended to be the first work staged in this building, but since he was a year behind schedule, Edward Downes passed over it in favor of Prokofiev's *War and Peace*. For 10 points each:
- [10] Name this performing arts center on Bennelong Point. Ove Arup engineered the fourteen shells that resemble "white sails" atop this opera house designed by Jørn Utzon ("YURN OOT-sun").

ANSWER: Sydney Opera House

[10] A proscenium theater in the Sydney Opera House is named for this Australian-born Dame. This six-foot-tall soprano was nicknamed "La Stupenda" for her coloratura technique.

ANSWER: Joan Sutherland

[10] Due in part to the difficulty of finding partners taller than her, this singer toured with Sutherland in the early '60s. With José Carreras and Placido Domingo, he formed the Three Tenors.

ANSWER: Luciano Pavarotti

<Other Arts>

- 17. This character gives her former suitor Eilert Lovberg a pistol to kill himself with, but instead he dies by starting a brawl. For 10 points each:
- [10] Name this character who plays a "wild dance" on the piano before shooting herself in the play titled for her.

ANSWER: **Hedda Gabler** [accept either name]

[10] Hedda Gabler is the title character of a play by this Norwegian author of *A Doll's House*.

ANSWER: Henrik Ibsen

[10] Ibsen was given a front-row seat when attending a lecture by this younger author, who proceeded to insult Ibsen for writing shallow social drama with an "indefensibly coarse and artificial psychology." This fellow Norwegian wrote about a man who "wandered about and starved in Christiania" in his novel *Hunger*.

ANSWER: Knut **Hamsun** [or Knut **Pedersen**]

<European Literature>

- 18. This process is used in the Downs process in the production of metallic sodium. For 10 points each:
- [10] Name this technique also used in the Castner–Kellner process. Faraday's Laws give the mass of the result of this process.

ANSWER: electrolysis

[10] The Downs cell uses electrolysis to produce sodium at the cathode and this gaseous element at the anode. Along with sodium, this element is found in table salt.

ANSWER: **chlorine** [or **Cl**]

[10] About 4% of the commercial production of this element is created through electrolysis. Along with carbon dioxide and carbon monoxide, this element is found in syngas ("sin-gas").

ANSWER: **hvdrogen** [or **H** or **H2**]

<Chemistry>

- 19. In the 1880s, this island was ruled by the English-Jewish-Tahitian merchant Alexander Salmon, who promoted the production of counterfeit *rongorongo* scripts. For 10 points each:
- [10] Give the European name for this isolated Pacific island whose population was annihilated in the late 19th century. This island's huge *moai* statues are sometimes referred to as its namesake heads.

ANSWER: Easter Island

[10] This indigenous ethnic group of Easter Island wrote in rongorongo and built the island's moai.

ANSWER: Rapa Nui

[10] The Rapa Nui's moai-centered religion either coexisted with or was supplanted by the worship of this creator deity who sponsored the island's birdman cult.

ANSWER: Makemake ("MA-kay-MA-kay")

<World History>

- 20. This deity is sentenced to death by seven judges in a trial overseen by Ereshkigal. For 10 points each:
- [10] Name this Sumerian goddess of beauty and fertility. In a poem, this goddess descends to the underworld and is forced to relinquish a garment of clothing at each of its seven gates.

ANSWER: <u>Inanna</u> [accept <u>Ishtar</u>]

[10] Ereshkigal turns Inanna into a rotting corpse, but she is rescued and revived by two *gallu* created by this deity. This Sumerian god of freshwater and wisdom is also the father of Marduk.

ANSWER: **Enki** [accept **Ea**; do not accept "Enkidu"]

[10] Inanna travels to the underworld for the funeral of Ereshkigal's husband, Gugalanna, who had been killed by Enkidu and this hero. This king of Uruk searches for immortality in his namesake epic.

ANSWER: Gilgamesh [or Gilgames or Bilgamesh or Bilgames]

<Mythology>