

Cal's Mid-Spring Tournament 2018

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Tossups

1. **William Butler Yeats's "When You Are Old" is a paraphrase of a sonnet from this country whose speaker says that he'll be buried in a myrtle-glade when the addressee is an old woman. A poem from this country laments that a rose "only lasts from dawn to dusk" and tells the addressee to "gather, gather your youth" while "your young age is in flower." A poet was criticized for using decasyllabic meter in an unfinished epic poem which invents a story about this country being founded by (*) Astyanax ("uh-STY-uh-nax"). A poet from this country expressed his disappointment at his trip to Italy in a sonnet sequence called *The Regrets*. A number of authors in this country's history have been given the unofficial title "prince of poets." A poet from this country wrote a manifesto presenting a "defense and illustration" of this country's language. For 10 points, name this country home to the members of La Pléiade ("play-AHD"), including Joachim du Bellay ("zhoh-ah-SHEM doo bay-LAY") and Pierre de Ronsard ("ron-SAR").**

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

<JN, Poetry>

2. **The magazine *Woman's Message* and a "Revolutionary Association of Women" were founded by an activist from this country known as Meena. Shamsia Hassani is a prominent graffiti artist from this country known for painting women. An all-female student robotics team from this country was briefly denied American visas in 2017 before receiving a special parole. Like the practice of *vani* in a neighboring country, a female is (*) given to the victim's family to repay a crime in this country's practice of *baad*. An escapee of that practice named Bibi Aisha received reconstructive surgery in the United States after her nose and ears were cut off in this country. Young boys are dressed as women in a form of sexual slavery in this country called *bacha bazi*. Steve McCurry photographed a green-eyed girl in this country wearing a red headscarf for an iconic 1985 cover of *National Geographic*. For 10 points, name this country where women's rights have been notoriously abused by the Taliban.**

ANSWER: Islamic Republic of **Afghanistan**

<EC, Current Events>

3. **Neirotti et al. demonstrated that parallel tempering Monte Carlo methods may be used within this entity to perform ergodic simulations of large molecules. Martyna and Klein modified a simulation method to generate systems within this entity which was originally developed by Shuichi Nose ("shoo-EE-chee NOH-say"). In this entity, the Gibbs entropy is equal to the partial derivative of the free energy with respect to temperature, and it is the most common entity used to study the (*) Ising model. The probability given by this entity for each microstate is given by the exponential of "the free energy minus the total energy over $k-T$." This entity, which provides a Boltzmann distribution for all systems, assumes a fixed temperature, volume, and number of particles unlike its "grand" and "micro" counterparts. For 10 points, name this statistical ensemble, which represents the possible states of a system in thermal equilibrium with a constant-temperature heat bath.**

ANSWER: **canonical ensemble** [do not accept or prompt on "microcanonical ensemble" or "grand canonical ensemble"]

<PS, Physics>

4. **This ruler often ranted "I am Caesar! I am Emperor!" in frequent fits of rage to his subordinates. This ruler, who was known as "the Great-Hearted Sinner," arrested his 80-year-old predecessor Celestine V after he resigned. In a literary work, Saint Peter blasts this ruler, accusing him of turning his "burial place into a**

sewer of blood, a sewer of stench.” Archbishop of Canterbury Robert Winchelsey supported this pope’s decree forbidding the taxing of clergy without his consent. The treatise (*) *De Monarchia* was a response to the actions of this ruler, who was supposedly “slapped” by Sciarra (“SHAH-rah”) Colonna in the town of Anagni (“ah-NAHN-yee”) during a feud with Philip IV of France. This pope wrote a document that declared “outside the church, there is no salvation” as part of an extreme assertion of papal power over secular power. For 10 points, name this pope who issued the bull *Unam Sanctam* and famously feuded with Dante.

ANSWER: **Boniface VIII** [or **Benedetto Caetani**; prompt on **Boniface**]

<IJ, European History>

5. In an essay, this author recalled the “fear of disturbing the stillness of the cathedral” while visiting a place where the sight of a dragonfly makes him realize “that the years were a mirage and there had been no years.” Stephen King wrote that “there is little or no detectable bullshit” in a book revised by this author. This author used an “old willow tree” to symbolize a city that could be destroyed by “a single flight of planes” yet “[bestows] the gift of loneliness” in the essay “Here Is New York.” This author, who popularized the phrase “I say it’s (*) spinach” and called *Walden* the “one book in his life,” recalled mistaking his son for himself while revisiting a Maine camp in the *Harper’s Magazine* essay “Once More to the Lake.” This long-time writer for *The New Yorker* attempted to “write [English’s] rules and principles on the head of a pin” with a writing guide that popularized suggestions like “omit needless words” and “use the active voice.” For 10 points, name this American author who revised his teacher William Strunk’s *The Elements of Style*.

ANSWER: E. B. **White** [or Elwyn Brooks **White**]

<RK, Misc Literature>

6. A musical genre from this country developed by Manuel Saumell takes its name from the phrase “country dance.” An instrument that originated in this country consists of a wooden box with a row of metal strips that are plucked. A composer from this country wrote the piece *A Day in November* for guitar. A composer and pianist from this country wrote the songs “Always in my heart” and “Siboney” (“see-boh-NAY”). While touring this country, Dizzy Gillespie discovered another (*) trumpeter who became his protégé, and this country inspired a Gillespie standard that opens with a bass vamp and Chano Pozo’s drumming. This country’s music often uses a 3-plus-2 or 2-plus-3 rhythm named for a pair of rod shaped instruments; that rhythm is called *son clave* (“sohn KLAH-vay”). The *rumba* type of that rhythm provided the original title of a tone poem now titled for this country that calls for the maracas, güiros (“GWEE-rohz”), and bongos to be placed in front of the conductor’s stand. For 10 points, name this country home to Leo Brouwer and Arturo Sandoval that George Gershwin depicted in an overture after visiting Havana.

ANSWER: Republic of **Cuba** [or *República de Cuba*]

<AK, Classical Music>

7. Members of this genus possess characteristic multi-amino acid insertions in their LepA (“lep-A”) and RpoC genes. Mutant strains of one member of this genus are used exclusively in the industrial synthesis of L-lysine. That non-pathogenic member of this genus is named for its ability to aerobically synthesize glutamic acid. Another member of this genus is dependent on the presence of both an iron-starved environment and a lysogenic beta-phage for the synthesis of its two-component exotoxin. Members of this genus are commonly cultured in laboratories on cystine-tellurite (*) blood agar plates supplemented with biotin. The most well-known disease-causing member of this genus notably produces a positive result on the nitrate reductase test and may be diagnosed for using the Schlick test. For 10 points, name this “club-shaped” genus of Gram-positive bacteria whose major pathogenic species is the causative agent of diphtheria.

ANSWER: **Corynebacterium** [accept **Corynebacterium diphtheriae**, **Corynebacterium efficiens**, **Corynebacterium glutamicum**, **Corynebacterium renale**, or **Corynebacterium minutissimum**]

<RH, Biology>

8. A concept with this adjective in its name is illustrated with Jonathan Edwards's analogy of successive images in a glass and Wesley Salmon's example of a rotating spotlight in the center of a room in a Jaegwon Kim paper. Horgan and Lewis challenged supervenience accounts by postulating a world containing a type of ectoplasm described by this adjective. A paper with this adjective in its title imagines a debate between tough-minded and soft-minded sea slug philosophers, and argues that reading in *The Times* that the (*) Spurs won is good evidence that *The Telegraph* also reported that the Spurs won. That paper with this adjective in its title distinguishes between the "modal argument" and the "knowledge argument" for its main claim, illustrating the latter with the example of Fred, who sees two different colors which we would both call "red." The doctrine that physical events are causal with respect to mental events, but not vice versa, is named for this adjective. For 10 points, name this adjective which describes "qualia" ("KWAH-lee-uh") in the title of a Frank Jackson paper.

ANSWER: epiphenomenal [accept epiphenomenal causation or epiphenomenal ectoplasm or "Epiphenomenal Qualia"]

<WN, Philosophy>

9. A 1962 book argued that this disease's initial association with sinners and the Old World faded with changing social attitudes and the development of medical knowledge over the course of thirty-four years; that book was by Harvard University professor Charles E. Rosenberg. The homes of people who suffered from this disease were often doused with chloride of lime, a method promoted by the Metropolitan Board of Health, which employed teams to combat this disease after it was founded in 1866. Filippo (*) Pacini ("pa-CHEE-nee") was the first to isolate the causative agent of this disease, though it was not until later work done in Egypt and India by Robert Koch ("cock") that the discovery became widely accepted. A major blow was dealt to the miasma theory of disease after an outbreak of this disease in 1854 was traced using a dot map by John Snow to a location on Broad Street containing a contaminated pump. For 10 points, name this disease that causes severe vomiting and diarrhea and is often transmitted through the water supply.

ANSWER: cholera

<MC, Other History>

10. A figure with this name is credited with teaching humans about metalworking and cosmetics in a religious text in which Uriel is commanded to bind that figure at Dudael. This name is sometimes translated as "absolute removal," whereas Rashi interpreted this name as a reference to a cliff. A figure with this name was the center of a ritual in which the High Priest put his hands on an animal that was chosen by lot and then (*) confessed the sins of the Jewish people. In some Islamic traditions, this was the name of an angel who refused to bow to Adam and was transformed into Iblis. William Tyndale coined the word "scapegoat" while attempting to translate this Hebrew name into English. For 10 points, Leviticus's instructions on Yom Kippur commanded Aaron to send a goat into the wilderness for an entity with what Hebrew name, sometimes interpreted as a demon?

ANSWER: Azazel [or Azazel]

<WC, Religion>

11. A man with this surname praised the black Methodist preacher Harry Hosier as "the greatest orator in America" and attacked slavery in the pamphlet "An Address to the Inhabitants of the British Settlements in America, upon Slave-Keeping." A diplomat of this surname was responsible for acquiring the inheritance that would be used to found the Smithsonian. Another man with this surname called to replace Washington with "A Gates—a Lee, or a Conway" in a letter given to Patrick Henry. A Secretary of State with this surname negotiated an agreement that led to the construction of a dormitory called the (*) *Stone Frigate* that housed the dismantled parts of ships. A creation by one man of this surname allowed traces of mercury to be discovered by archaeologist Dan Hall in a latrine pit of Travelers' Rest State Park in Montana, verifying the park as an encampment site for the Lewis and Clark expedition. Besides inventing his namesake "Bilious Pills," that man with this surname also used bloodletting to treat patients struck by a yellow fever epidemic in 1793. For 10 points,

give this surname shared by Philadelphia physician Benjamin and his son Richard, who signed a demilitarizing treaty of the Great Lakes with Charles Bagot (“BAG-it”).

ANSWER: Rush [accept Benjamin Rush; accept Richard Rush; accept Dr. Rush’s Bilious Pills]
<CP, American History>

12. In Germany, this movement’s workshops formed a predecessor to the Bauhaus known as the Deutscher Werkbund (“VAIRK-boont”). One of its members used stones for red, blue, and yellow for chromolithography which he used for vibrant images named after him showing carefree women in flowing dresses. The “whiplash” motif of this movement was used in the cover designs of the magazines *Pan* and *Simplicissimus*. Siegfried Bing’s gallery exhibited pieces from this movement. Lettering arches around the head of Sarah Bernhardt in a piece from this movement titled (*) *Gismonda*. This movement included the arts and crafts-inspired Glasgow School of Art of Charles Rennie Mackintosh. In Germany, this movement was known as *Jugendstil* (“YOO-gend-shteel”). The Post-Impressionist Henri-Toulouse Lautrec (“loh-TRECK”) and Alphonse Mucha (“MOO-hah”) contributed to this movement with their posters; in America it was represented by the Favrite glass of Louis Comfort Tiffany. For 10 points, name this movement that used botanically inspired curvilinear shapes, named for the French for “new art.”

ANSWER: Art Nouveau (“noo-VOH”) [accept Jugendstil before mention; accept German arts and crafts until mention; prompt on Japonisme] (Jules Cheret is the artist described in the second clue.)
<AK, Painting/Sculpture>

13. A man in this location says that a palace inscribed with the phrase “A grateful world to the dealer in happiness” should be built for the hashish-maker Abou-Gor, and feeds hashish to a man who has a drug-induced dream in which he is kissed by statues of Phryne (“FRY-nee”), Cleopatra, and Messalina. To get rid of Jacopo, the protagonist kills a goat at this location and makes that character carry it back to camp. The protagonist declares “open, sesame” after pretending that he has broken his (*) ribs at this location and insisting that his companions leave him alone to convalesce. This location serves as a refuge for the crew of *The Young Amelia* and other smugglers. In a cave at this location, Franz d’Épinay dines with a man using the name “Sinbad the Sailor.” Cardinal Cesare Spada buried his family fortune here before being killed by Cesare Borgia, as revealed to the title character by the Abbé Faria. For 10 points, name this island where Edmond Dantès (“don-TESS”) discovers his treasure in an Alexandre Dumas novel.

ANSWER: Monte Cristo
<RD, Long Fiction>

14. The silicification of riebeckite deposits within these geologic structures results in the formation of the gemstone tiger’s-eye. It’s not an amphibole or a sill, but exposed examples of these structures in Quebec’s Nuvvuagittuq (“noo-voo-AG-it-tuck”) Greenstone Belt provides evidence for an intrusion event in that region. The Sudbury impact basin is notable for showing evidence of a pause in the formation of these structures within the North American Animikie group. Joseph Kirschvink cited the deep-water formation of these structures within the past (*) billion years as evidence for his “snowball earth” theory. The transition from the widespread formation of these structures to the formation red-beds coincided with the start of the Great Oxidation event. These structures consist of jasper, shale, or chert interspersed with layers of hematite and magnetite. For 10 points, name these sedimentary rock formations that formed from their namesake metal binding free oxygen molecules in the ocean prior to the oxidation of the earth’s atmosphere.

ANSWER: banded iron formations [or BIFs or banded ironstone formations; prompt on answers mentioning iron ore]
<RH, Other Science (Earth)>

15. This man’s lover marries another man after he abandons her to accept a king’s invitation in the 1958 play *One Day in the Season of Rain*. In a play by this author, a chaplain reports seeing a “heavenly light” that

bears a woman away. In a play by this author, a king is told of “a host of demons who call themselves Invincible” by a charioteer. A stage director instructs an actress on how best to please the audience in the prologue to that play, which begins with a (*) “Benediction Upon the Audience.” This man wrote a play in which a character cursed to die on Earth writes of her love on a birch leaf and is “won by valor.” In a play by this man, a king falls in love with the title character after seeing her speak of love at Kanva’s hermitage. In that play by this man, the sage Durvasa curses King Dushyanta to forget his wife unless he sees the signet ring he had given her. For 10 points, name this Sanskrit dramatist of *The Recognition of Shakuntala*.

ANSWER: Kālidāsa

<JN, Drama>

16. A compound containing this metal transitions from a beta phase to alpha phase at 420 kelvins, at which it becomes a very good fast ion conductor. Spherical materials containing this element were synthesized by Sastry and coworkers using extracts from the plant *Aloe vera* and were used by Sondi and Salopek-Sondi to form “pits” in the cell wall of *E. coli*, causing cell death. This element has a higher plasmon excitation efficiency than a related metal, thus making it a better roughened surface in Surface-Enhanced Raman Spectroscopy. This element is industrially used to catalyze the conversion of ethylene to ethylene oxide. Polyvinylpyrrolidone (“poly-vinyl-pyrrole-id-own”) and ethylene glycol can be added to this element’s (*) nitrate to produce nanoparticles of this element. This element borrows an electron from its 5s (“five-S”) orbital to complete its 4d orbital, causing it to typically have a plus-one oxidation state. For 10 points, name this metal that precipitates out of solution when reacted with an aldehyde, producing a namesake “mirror.”

ANSWER: silver [or Ag]

<RD, Chemistry>

17. A theorist who supports this movement used the example of Antoni Gaudi’s Casa Batlló (“bull-YOH”) as being “multivalent,” one of his requirements for the creation of “cosmogenic architecture.” A building from this movement features a giant copper statue by Raymond Kaskey atop a pedestal extending out from the green podium that makes up its first two stories. “Radical eclecticism” advocate Charles Jencks describes this movement’s predecessor as dying when the “final *coup de grace* by dynamite” destroyed the Pruitt-Igou Housing Project. A cube-shaped building from this movement has white stucco facades interrupted by a grid of square shaped windows and (*) dark trapezoidal wedges. Both Michael Graves’s Portland Building and a building with an open pediment called a “Chippendale” are part of this movement. For 10 points, Philip Johnson’s AT&T Building is part of what post-1960’s movement that deliberately juxtaposed Classical and contemporary architectural elements as a reaction to the rigidity and lack of ornamentation of the International Style?

ANSWER: postmodernism [or postmodern architecture]

<AK, Other Art (Architecture)>

18. A Jesuit missionary of this ethnicity established missions in the Pimería Alta to convert the local Pima people. A group of this ethnicity adopted a black flag with a volcano to represent their homeland. These people’s language was mixed with local languages to form the pidgin Cocoliche and people of this ethnicity spoke the Lunfardo dialect. The Chilean Constitution of 1925 was ratified under the presidency of a person of this ethnicity. That leader’s son was defeated in a 1970 election by Salvador Allende. Many people of this ethnicity settled in the state of (*) Rio Grande do Sul, which was supported by a leader of this ethnicity during the Ragamuffin War. A legion of people of this ethnicity defended Montevideo against Manuel Oribe during the Uruguayan Civil War. Another man of this ethnicity enslaved many of the native Taíno people while serving as Governor of the Indies from 1492 to 1499. For 10 points, name this ethnicity of Arturo Alessandri, Christopher Columbus, and Giuseppe (“joo-ZEP-pay”) Garibaldi.

ANSWER: Italians [accept Italian-Argentines or Italian-Brazilians or Italian-Chileans]

<RD, World History>

19. *Description acceptable.* **This period is reimagined in the story of a man who saves a snake in a burning tree; that snake transforms him into an ugly dwarf, allowing him to return to his beloved. During this period, a retelling of a Jataka tale describes a king who offers increasingly larger portions of his flesh to placate a hawk trying to kill a dove. Toward the end of this period, a series of 124 ethical questions is asked to a man who witnesses men go one by one to fetch water after witnessing a deer steal a priest's firebrand. This period takes up the entirety of the *Vana* and *Virata parvas*, and is directly caused by an event (*) won using magical objects belonging to Shakuni. This period is spent in the Kamyaka and Dwaita forests and is immediately followed by preparations for the Kurukshetra war. For 10 points, name this event precipitated by Yudhishtira losing a dice game, an event in which five brothers were forced to leave the kingdom for thirteen years.**

ANSWER: **exile** of the **Pandavas** [or **banishment** of the **Pandavas** or equivalents] (The first clue describes Nala and Damayanti; the second clue describes King Shibi.)

<AK, Legends>

20. **The linguistic behavior of six subgroups of these people is the subject of a 2017 book by Rusty Barrett. William Leap, who founded a conference on these people's language in 1993, is the world's foremost expert on the language of these people. University of Toronto linguist Ron Smyth, who conducted a study on the speech of these people with Henry Rogers, was interviewed in a 2014 documentary by David Thorpe. Paul Baker described a "lost language" of these people in a book about a form of British cant slang called (*) Polari. Fronted or high-frequency alveolar sibilants are the feature most commonly stereotypically associated with these people's speech. In *Language and Women's Place*, Robin Lakoff ("LAKE-off") argued that these people imitate the properties of women's speech, which she argues is the source of their stereotypical "lisp." For 10 points, name these people whose speech is studied in lavender linguistics.**

ANSWER: **gay** men [accept **LGBTQ** people; accept clear equivalents; do not accept "lesbians," as all the clues apply either to gay men specifically or LGBTQ people broadly]

<WN, Social Science>

Bonuses

1. Answer some questions about Californian conceptual artist John Baldessari, for 10 points each:

[10] In a series of photographs, Baldessari displayed everyday objects like a paperclip juxtaposed with phrases taken from the titles of prints from *Disasters of War*, a series of prints by this Spanish artist of *Los Caprichos* (“kah-PREE-chohss”).

ANSWER: Francisco de **Goya** [or Francisco José de **Goya** y Lucientes]

[10] In 1970, students from UCSD helped Baldessari perform this action, with him claiming afterward that he “would not make any more boring art.” After World War II, Gustav Metzger founded a movement including Jean Tinguely (“tang-guh-LEE”) that centered on art that performed this action.

ANSWER: they **destroyed** art [accept auto-**destructive** art or anything mentioning **destruction**]

[10] In the LACMA-commissioned “Brief History of John Baldessari,” Baldessari predicts that in a hundred years, he will be remembered for art adding these things to black and white portraits. Another artist drew on hallucinations of these things to create *With All My Love for The Tulips, I Pray Forever* and her *Obliteration Room*.

ANSWER: colorful **dots** [or polka **dots**] (That artist is Yayoi Kusama.)

<RK, Painting/Sculpture>

2. A Marlène Rabaud (“mar-LEN rah-BOH”) and Arnaud Zajtman (“ar-NOH zite-MAHN”) documentary claims that this event was committed by the bodyguard Rachidi Muzele under the direction of a Lebanese diamond businessman. For 10 points each:

[10] Name this event. State press claimed that this event was masterminded by Eddy Kapend, the victim’s cousin, but it is generally believed that it was perpetrated by one of its victim’s child soldiers.

ANSWER: **assassination** of Laurent-Désiré **Kabila** [accept obvious equivalents]

[10] Laurent Kabila became the president of this country in 1997 after overthrowing Mobutu Sese Seko. Joseph Kabila has been president of this country since his father’s assassination in 2001.

ANSWER: **Democratic Republic of the Congo** [or **DRC**; do not accept or prompt on “Zaire” or “Republic of the Congo”]

[10] Kabila’s 1997 coup was largely by people of this ethnic group, who were targeted by the Interahamwe paramilitary group. Uganda invaded the Congo in 1998 to support a rebellion by the Banyamulenge people of this ethnicity.

ANSWER: **Tutsis**

<RD, World History>

3. In his Farewell Sermon, Muhammad warned against considering these people superior to others, stating that only piety, or *taqwa*, was important. For 10 points each:

[10] Name these people, whose preeminence was opposed by the *shu’ubiyya* movement. During the Umayyad caliphate, the word *mawla* came to refer to Muslims who were *not* these people.

ANSWER: **Arabs**

[10] Until reforms by Umar II, the *mawali* were required to pay this tax usually levied on *dhimmi*s, who are non-Muslim subjects of a Muslim ruler. The Surat At-Tawbah mandates the payment of this tax.

ANSWER: **jizya**

[10] An oft-cited example of racial equality in early Islam is this freed African slave, who was appointed by Muhammad as the first *muezzin* (“moo-EH-zin”).

ANSWER: **Bilal** ibn Rabah

<AK, Religion>

4. One of these structures is alternatively called the Treasury of Atreus or the Tomb of Agamemnon, despite it almost certainly being neither. For 10 points each:

[10] Identify these stone tombs, common in Bronze Age Greece, named for their domed shape. They are also called beehive tombs.

ANSWER: **tholos** tombs [or **tholoi**]

[10] The Treasury of Atreus was located in this ancient city, the center of a Bronze Age civilization in Greece. Other archaeological discoveries in this city include the Lion Gate, the Mask of Agamemnon, and an archive of Linear B script.

ANSWER: **Mycenae** (“my-SEE-nee”)

[10] This Mycenaean grave site outside Pylos was first excavated by Jack Davis and Sharon Stocker in 2015. It contained an intricately carved depiction of its title figure known as the Pylos Combat Agate (“AGG-it”).

ANSWER: **Griffin Warrior** Tomb [prompt on Tomb of **Nestor**]

<JM, European History>

5. These objects are “largely determined by necessity” and “determined to some extent by superstition.” For 10 points each:

[10] Name these objects that include a smooth pebble, a rabbit’s foot, and a severed thumb. Jimmy Cross possesses some of these objects in the form of letters and photographs from Martha.

ANSWER: the **things they carried** in *The Things They Carried* [accept equivalents that indicate **items belonging to soldiers** in *The Things They Carried*]

[10] Tim O’Brien’s collection *The Things They Carried* is set during this conflict. An unnamed communist spy leaves as a refugee for Los Angeles near the conclusion of this conflict in Viet Thanh Nguyen’s (“VEE-it tang win’s”) novel *The Sympathizer*.

ANSWER: **Vietnam** War

[10] A Vietnamese soldier is tasked with killing American troops to steal their possessions in the story “Selma” from the Pulitzer-winning collection *A Good Scent from a Strange Mountain* by this author.

ANSWER: Robert Olen **Butler**

<JN, Short Fiction>

6. The GFAJ-1 bacteria, which a 2010 *Science* article falsely claimed could substitute arsenic for phosphorus, was discovered in this lake. For 10 points each:

[10] Name this large saline lake located east of the Sierra Nevada in Inyo National Forest. This lake is known for its tufa towers on its southern shore and for having an endemic species of brine shrimp. It became the subject of a major conservation effort after a number of creeks that fed it were diverted to supply water to Los Angeles.

ANSWER: **Mono** (“MOH-noh”) Lake

[10] Mono Lake serves as a resting stop for numerous migratory species of this general type of animal, which feed on the aforementioned shrimp. The Audubon Society worked with the Mono Lake Committee to protect the lake for these animals.

ANSWER: **birds** [or **Aves**]

[10] Mono Lake is also home to this insect species, which can trap an air bubble within its densely packed hairs allowing it to feed on underwater algae. The Kucadikadi (“koots-ah-dee-KAH-dee”) band of Northern Paiutes (“PY-yoots”) are named for eating the pupae of this member of the Ephydriidae family.

ANSWER: **alkali fly** [or *Ephydra* **hians**, *Hydropyrus* **hians**; prompt on **brine fly**]

<EC, Geography>

7. In this novel, Marija (“Maria”) asks the protagonist if she comes from a country near Canada and constantly gives her plums. For 10 points each:

[10] Name this novel subtitled “Reflections from a Black-eyed Squint” in which Sissie travels from Ghana to Germany and the United Kingdom on a scholarship. It is the debut novel of Ama Ata Aidoo.

ANSWER: **Our Sister Killjoy**

[10] The narrator of this Tayeb Salih novel returns from an education in England to Sudan and meets Mustafa, who recounts his many affairs with British women and ultimately drowns in the Nile.

ANSWER: **Season of Migration to the North** [or **Mawsim al-Hiġra ilā ash-Shamāl**]

[10] The Umuofia Progressive Union takes up a collection to send Obi to law school in England where he meets the *osu* Clara at a dance in the novel *No Longer at Ease* by this Nigerian writer.

ANSWER: Chinua **Achebe** [or Albert Chinualumogu **Achebe**]

<JN, Long Fiction>

8. Answer some questions about the mythology of the Greek region of Boeotia (“bee-OH-shuh”), for 10 points each:

[10] A Boeotian poet wrote this didactic poem that discusses two versions of Eris, or Strife, one causing war and the other providing jealous inspiration. This book also discusses the hawk and the nightingale and places the Heroic age between the Bronze and Iron ages.

ANSWER: **Works and Days** (by Hesiod)

[10] This largest city of Boeotia was founded by Cadmus. Amphion and Zethus built the walls of this city, which was attacked by seven men including Amphiaraus (“am-fee-uh-RAY-us”) and Polynices.

ANSWER: **Thebes** [or **Thēbai**]

[10] According to Pausanias, this race left Thessaly to found the Boeotian city of Orchomenus. In the *Argonautica*, Apollonius claims Jason’s mother was a member of this race, which is why the Argonauts are sometimes named after them.

ANSWER: **Minyans** (“mih-NY-unz”) [or **Minves**]

<AK, Legends>

9. In a major scene in this work, its protagonist converses with a number of intelligent serfs who have been illegally sold into military service. For 10 points each:

[10] Identify this polemical work by Aleksandr Radishchev (“ruh-DEE-shev”) which attacks the institution of serfdom in Russia along with various other government policies. This book was quickly banned after it was published in 1790, and its author was exiled to Siberia.

ANSWER: **Journey from St. Petersburg to Moscow** [or **Journey from Petersburg to Moscow** or **Puteshestvie iz Peterburga v Moskvu**; also accept the title with either the article “A” or “The”]

[10] Radishchev’s *Journey* was published during the reign of this empress, who read and criticized it. Although she had been heavily influenced by Enlightenment philosophy, she did not call for the emancipation of the serfs.

ANSWER: **Catherine the Great** [or **Catherine II**; or **Ekaterina II**; or **Ekaterina velikaia**; or **Ekaterina Alekseevna**; or **Sophie of Anhalt-Zerbst**]

[10] Diderot criticized Catherine in his *Observations* on this Enlightenment-inspired text which she wrote to guide the work of the Legislative Commission. In it, she suggested that agriculture is most successful when farmers own their own land, and it drew heavily on the writings of Montesquieu (“MON-tuh-skew”) and Beccaria (“beck-uh-REE-uh”).

ANSWER: **Nakaz** [or **Instructions to the Legislative Commission**]

<MC, European History>

10. Seymour Benzer discovered a countercurrent distribution of *Drosophila* deficient in this ability in a landmark 1967 experiment. For 10 points each:

[10] Name this phenomenon discovered to be lacking in *sevenless Drosophila* mutants. In Benzer’s experiment, flies lacking this phenomenon produced a random migration, whereas wild-type flies showed a guided migration.

ANSWER: **UV-light detection** [accept **phototaxis**; prompt on **vision** or **sight**]

[10] The phototaxis-deficient *sevenless* mutants in Benzer’s experiment have structural defects in these units of the arthropod eye. A normal one of these structures contains eight photoreceptor cells, and *sevenless* flies are so-named for possessing a mutation in the seventh of those cells.

ANSWER: **ommatidium** [or **ommatidia**]

[10] During eye development in wild-type flies, the *sevenless* protein functions by producing a receptor kinase dependent on this amino acid with a phenol side group that, like phenylalanine and tryptophan, is aromatic.

ANSWER: **tyrosine** [accept receptor **tyrosine** kinase; prompt on Y]

<RH, Biology>

11. In a book on this concept “and its limits,” Timothy Williamson argued that it cannot be broken down into other concepts. For 10 points each:

[10] Name this concept that is typically broken down into three components by defining it as “justified true belief,” sometimes with a fourth condition added.

ANSWER: **knowledge**

[10] Lehrer and Paxson define knowledge as justified true belief, with the extra condition that there must not be any propositions of this type. In Lehrer and Paxson’s example, “Tom Grabbit’s mother testifies that Tom’s identical twin brother was in the library” serves as this type of proposition.

ANSWER: **defeaters**

[10] Alvin Goldman added a fourth condition based on this concept. According to a theory of reference based on this concept, referents are fixed by a “dubbing” or “initial baptism.”

ANSWER: **causality** [or **causation**; or **causal** chains]

<WN, Philosophy>

12. For an operator x , this quantity is equal to the square root of the expectation value of Δx^2 , where Δx is the difference between x and the expectation value of x . For 10 points each:

[10] Name this quantity whose product for two incompatible observables, such as position and momentum, is always greater than or equal to Planck’s constant over four-pi.

ANSWER: **uncertainty** [prompt on “standard deviation” or “sigma”]

[10] For two observable operators A and B, the generalized uncertainty principle states that “the variance of A, times the variance of B” must be greater than or equal to the square of “one over two- i times this function of A and B.”

ANSWER: square of the **expectation value of the commutator** of A and B [do not accept or prompt on partial answer]

[10] At time zero, the uncertainty of a wave packet is minimized if the wave packet is of this type. The wave function of a free particle takes on this form.

ANSWER: **Gaussian** wave packet

<RD, Physics>

13. This slogan was first used in a poster for Seagram’s Corporation by Seymour R. Goff. For 10 points each:

[10] Name this slogan, popularized through many posters disseminated by the Office of War Information during World War II as part of the American war propaganda campaign. This rhyming slogan was the American equivalent to the British “Careless Talk Costs Lives.”

ANSWER: “**loose lips** might **sink ships**”

[10] This director of the domestic branch of the Office of War Information claimed that usage of the “strategy of truth” did not mean the organization was neutral. This newspaper publisher accompanied Wendell Willkie during his tour around the world and helped him write *One World*, and once bought the fake “Cardiff Giant.”

ANSWER: Gardner **Cowles**, Jr. [or Mike **Cowles**]

[10] The Office of War Information used this medium to mock Adolf Hitler in *Der Fuehrer’s Face*, which featured Donald Duck doing exercise during his “vacation with pay” at the command of his supervisor in front of a backdrop with the Alps.

ANSWER: **cartoons** [or **animated** films; or **animation**; prompt on film]

<CP, American History>

14. This character notes that “what’s dumb in show I’ll plain with speech” to introduce one of several dumb shows. For 10 points each:

[10] Name this character who comes “from ashes ancient” in order to “sing a song that old was sung,” and introduces each act of the play in which he appears. This man’s account of Apollonius is the basis for that play.

ANSWER: John **Gower**

[10] Gower serves as the chorus in this play, likely a collaboration between William Shakespeare and George Wilkins. Its title prince flees the incestuous Antiochus and suffers various misfortunes until he is reunited with Thaisa (“thuh-EE-suh”) and Marina.

ANSWER: **Pericles**, *Prince of Tyre*

[10] At the beginning of *Pericles*, Antiochus offers his daughter’s hand to whoever can perform this task. A prince must perform this type of task in order to marry his love in a play by Carlo Gozzi (“GOD-zee”).

ANSWER: solve a **riddle** [or solve **riddles**] (The Carlo Gozzi play is *Turandot*.)

<JN, Drama>

15. Hopcroft and Tarjan developed a linear-time algorithm to test for this property that relies on depth-first search. For 10 points each:

[10] Give this property of graphs with thickness one. Algorithmic testing of this property is based on the work of Auslander and Parter, and seeks to improve naively searching for forbidden subgraphs isomorphic to K -sub-5 or K -sub-3-3.

ANSWER: **planarity** [or **planar**]

[10] One property of planar graphs is that they possess a planar dual graph, which are constructed by swapping these two components of a graph. The sum of the number of these two features minus the number of edges equals the Euler characteristic.

ANSWER: **vertices** and **faces** [accept **V** and **F**]

[10] In 1990, Carsten Thomassen utilized planarity criteria to formulate a proof of this simple theorem.

J. W. Alexander used a construction made by repeatedly connecting punctured toruses together called his “horned sphere” to show this theorem didn’t extend to three dimensions.

ANSWER: **Jordan curve** theorem [or **Jordan–Schönflies** (“SHURN-flees”) theorem]

<RK, Math>

16. The use of this process as a source of evidence in psychology was promoted by Wilhelm Wundt (“voont”). For 10 points each:

[10] Name this process of observing or reflecting upon one’s own mental state, which the behaviorists rejected as a source of psychological evidence.

ANSWER: **introspection**

[10] T. D. Wilson and this psychologist argued that introspection is not a reliable source of evidence about how people really think in the paper “Telling More Than We Know.” He argued that East Asians think differently than Westerners in his book *The Geography of Thought*.

ANSWER: Richard **Nisbett** [or Richard Eugene **Nisbett**]

[10] This student of Wilhelm Wundt considered introspection to be the only valid psychological methodology, and developed a detailed experimental methodology based on introspection. He also coined the word “empathy.”

ANSWER: Edward **Titchener** [or Edward Bradford **Titchener**]

<WN, Social Science>

17. A translation of one of this author’s works suggests that “there is no end of things in the heart,” and is titled “Exile’s Letter.” For 10 points each:

[10] Name this Chinese poet whose work inspired a poem that ends “I will come out to meet you as far as Cho-fu-sa,” titled “The River-Merchant’s Wife.” A famous poem of his expresses homesickness while comparing the moonlight to frost on the ground.

ANSWER: Li Bai [or Li Po; or Li Bo; accept Rihaku]

[10] “The River-Merchant’s Wife” appeared in this 1915 collection of translations of Chinese poetry by Ezra Pound, based on the notes of Ernest Fenollosa. It uses the Japanese translation of Li Bai’s name, Rihaku.

ANSWER: Cathay (“kath-AY”)

[10] The first poem in *Cathay* is named for these people, who describe picking fern-shoots and wonder when they will be allowed to go back home.

ANSWER: bowmen [accept “Song of the Bowmen of Shu”]

<RK, Poetry>

18. Answer the following about Pierre-Auguste Renoir’s (“run-WAHR’s”) influence on French cinema, for 10 points each:

[10] This film character has a neighbor who repaints *The Luncheon of the Boating Party* every year and who compares her to the woman sipping from a glass near the center of the canvas.

ANSWER: Amélie Poulain (“ah-may-LEE poo-LAN”) [accept either underlined portion]

[10] This character poses in front of a poster of a Renoir portrait and asks whether she’s prettier than it. In the final scene, she imitates her lover’s gesture of rubbing his lips with his thumb, which is itself an imitation of Humphrey Bogart.

ANSWER: Patricia Franchini [accept either underlined portion] (from Godard’s *Breathless*)

[10] Renoir’s most enduring contribution to cinema is presumably fathering a son of this first name who directed such masterpieces as *The Rules of the Game* and *Grand Illusion*.

ANSWER: Jean (“zhahn”)

<WN, Other Art (Film)>

19. Answer the following about Harry Partch’s contributions to music theory, for 10 points each:

[10] Partch coined this term, which quantifies the harmonic complexity of a piece of music or a tuning system. The just intonation system known as five-prime-[this term] does not use frequency ratios with prime factors higher than five, so all intervals are formed by combining octaves, perfect fifths, and major thirds.

ANSWER: limit

[10] By constructing his eleven-limit 43-tone scale, Partch furthered Schoenberg’s (“SHURN-burg’s”) goal of “emancipating” this concept. This term describes unpleasant sounding intervals like the minor second and the tritone.

ANSWER: dissonance [accept word forms]

[10] Partch defined an ottonality (“OH-tonality”) as a chord made of an arithmetic (“AIR-ith-MET-ic”) sequence of frequencies. This chord, made of the notes A, C-sharp, E, and G in the key of D, is approximately an ottonality with the ratio four to five to six to seven in equal temperament.

ANSWER: A dominant seventh chord [or A V7 (“five-seven”); or A dom 7; or A major minor seventh chord; prompt on A seventh chord]

<EC, Classical Music>

20. This compound is produced by oxidizing isoeugenol (“iso-YOO-gen-all”) with nitrobenzene in basic conditions. For 10 points each:

[10] Name this fragrance compound that can also be synthesized through the reaction of guaiacol (“GWAI-uh-col”) with alkali chloroform via a carbene intermediate in a variation of the Reimer–Tiemann reaction. In nature, the biosynthesis of this compound in orchids makes use of the phenyl-propanoid pathway.

ANSWER: vanillin [accept methyl vanillin; or vanillic aldehyde; accept 4-hydroxy-3-methoxybenzaldehyde]

[10] More recently, Mayu Yamamoto developed a method of isolating vanillin from this material in cow manure. This polymer of coumaryl, coniferyl, and syringyl alcohols is removed from wood in the Kraft process through the addition of water, sodium hydroxide, and sodium sulfide.

ANSWER: lignin

[10] Vanillin is closely related to anisaldehyde, which can be used as a stain for this lab technique in which a solvent moves up a silica-coated plate.

ANSWER: **thin layer chromatography** [or **TLC**; prompt on chromatography]
<RD, Chemistry>