1. **This man was made mayor of Panama City after participating in the arrest of Vasco Núñez de Balboa** [VAHSS-koh NOON-yez “day” bal-BOH-uh]**. He was the leader of the “Famous Thirteen” on his second voyage to South America. The *Capitulación de Toledo*** [kah-pee-too-lah-SYOHN “day” toh-LAY-doh] **authorized this conquistador to march on the city of (\*)** Cusco [KOOZ-koh], during which he won the Battle of Cajamarca [kah-“ha”-MAR-kah] and captured Atahualpa [ah-tah-“WALL”-pah]. For 10 points—name this Spanish explorer who conquered the Incan Empire.

answer: Francisco Pizarro (González)

<HIST, WORLD>

2. **In a test of this effect, John Darley and Bibb Latané measured how long it took for people filling out a questionnaire to notice smoke being pumped into a room. An oft-cited article about how 38 people witnessed the murder of Kitty (\*)** Genovese is often used as an example of this effect, in which there is a diffusion of responsibility. For 10 points—name this effect in which onlookers fail to respond to an emergency.

answer: bystander effect (accept Genovese Syndrome before “Genovese”)

<RMPSS, SOC SCI>

3. **The explanation of this effect also resolved Heinrich Hertz's observations of gas ionization by UV light. The key assumption is “the energy of light is distributed discontinuously in space,” or, in modern terms, there are quanta of light called (\*)** photons. The ”work function” is the minimum energy for the ejection of electrons from a metal in—for 10 points—what effect whose explanation won Albert Einstein a Nobel Prize?

answer: photoelectric effect

<SCI, PHYS>

4. **This character is puzzled by the apparent disappearance of Thomas Pérez, who cuts through fields to keep pace with a hearse that is carrying the body of this man's mother. The question of God's existence fails to interest this character when he is visited by a prison chaplain shortly before his execution. A knife-wielding (\*)** Arab man is shot on a beach by—for 10 points—what narrator of Albert Camus's [al-“bare” kam-oo'z] novel *The Stranger*?

answer: (Monsieur) Meursault [mur-SOH] (prompt on ”(The) Stranger” ”(L')Étranger” or ”(The) Outsider”)

<LIT, EURO>

5. **This country was the birthplace of stained glass artist John La Farge. A copper *Diana* and a bronze relief war memorial were designed in it by Augustus Saint-Gaudens** [“saint” GAW-dunz]**. An artist from here painted *A Dash for the Timber* and showed a man atop a rearing (\*)** horse in his sculpture *Bronco Buster*. For 10 points—name this nation of Frederic Remington, the location of Gutzon Borglum's massive carving of four heads on Mount Rushmore.

answer: United States of America or U.S.A. (accept any underlined portion)

<FA, OTHER>

6. **This desert contains the Puritama hot springs and provides an alternative name for the Vallenar toad. The Very Large Telescope is in this desert whose coastal cliffs are home to Humboldt penguins. Marine fog from the Pacific provides rare moisture to this desert, whose vast salt pans provide sustenance for (\*)** Andean flamingos. The Andes run east of—for 10 points—what driest desert in the world that lies mostly in Chile [CHEE-lay]?

answer: Atacama Desert (or Desierto de Atacama; accept Atacama toad after “toad”)

<GEO, GEO>

7. **This object was hidden under a church floor after the Battle of Brandywine Creek. One story claims that this object was damaged in connection with the death of John Marshall in 1835. This object is engraved with a quote from the Book of Leviticus, as well as the names of two men who (\*)** recast it 1753, John Pass and John Stow. For 10 points—name this object that likely did not ring on July 4, 1776 at Independence Hall.

answer: Liberty Bell

<HIST, AMER>

8. **The stability of these substances is given by their zeta potential, with values close to zero indicating that they can undergo a process called flocculation** [FLOK-yuh-lay-shun]**. They produce a form of light scattering called the (\*)** Tyndall [“TIN-doll”] effect, which explains the blue tinge of some smoke. Milk is an example of—for 10 points—what class of materials in which one substance is dispersed in another, examples of which are gels and emulsions?

answer: colloids

<SCI, CHEM>

9. **This poem describes an “old gas light” that produces a “pale dull pallor.” The central figure of this poem sits on a rickety stool as his foot goes “thump, thump, thump” on the floor. This poem's speaker hears the words “I can't be satisfied” and “I ain't happy no mo'” while watching ”ebony hands” move on “each (\*)** ivory key” of a piano. A Harlem singer performs the title “syncopated tune” in—for 10 points—what poem by Langston Hughes?

answer: The Weary Blues

<LIT, AMER>

10. **In this war a Scottish army led by John Stewart, Earl of Buchan** [BUH-kun] **was decimated at the Battle of Verneuil** [vur-NOY]**. The Jacquerie** [zhah-kuh-REE] **revolt occurred during a phase of this war ended by the Treaty of Brétigny** [bray-teen-YEE]**. The ascension of Philip VI** [“the sixth”] **of Valois** [val-WAH] **led to the start of this war, during which (\*)** longbowmen helped Henry V [“the fifth”] win the Battle of Agincourt [AH-zhin-koor] in 1415. For 10 points—name this war between England and France that lasted over a century.

answer: Hundred Years' War (accept Lancastrian War before “Jacquerie”)

<HIST, EURO>

11. **A “school” of composition named for this city employed a style described as *prima prattica*** [PREE-mah PRAH-tee-kah]**. An orchestral work portraying ”Harvest in October” and ”Circuses” is named for this city, whose namesake school was led by Giovanni Pierluigi da Palestrina** [joh-VAH-nee P'YAIR-loo-EE-jee duh pah-less-TREE-nuh]**. Another work about this city depicts an army marching past (\*)** trees of the Appian Way. Ottorino Respighi [OHT-toh-REE-noh reh-SPEE-gee] portrayed the ”festivals” and ”pines” of—for 10 points—what Italian city?

answer: Rome (or Roma; accept Roman School or Roman Festivals or The Pines of Rome or Feste Romane or Il Pini di Roma)

<FA, AUDIO>

12. **This trigonometric function has no inflection points, but it does have an asymptote** [AA-simp-“tote”] **at *x* = pi over 2. Its *square* is both the derivative of the tangent function, and, according to a Pythagorean identity, equal to 1 plus the (\*)** tangent squared. In a right triangle, this function of an acute angle is the ratio of the hypotenuse to the adjacent side. For 10 points—name this function, the reciprocal of the cosine function.

answer: secant function (accept secant theta and similar answers that mention a variable)

<SCI, OTHER>

13. **One of these objects sitting outside the U.S. Senate chamber is named, for unknown reasons, for Ohio. After being jilted, Miss Havisham disables several of these objects in *Great Expectations*. The Bulletin of the Atomic Scientists manages a symbolic one of them that is moved forward or back based on global stability, the (\*)** ”doomsday” one. For 10 points—name these devices that also come in ”grandfather” and ”cuckoo” varieties.

answer: clocks (accept Ohio clock or Doomsday Clock or grandfather clock or cuckoo clock)

<MISC., MISC.>

14. **In this country, a turquoise-green river flows through the 700 meter-deep Verdon Gorge. This country's 59 nuclear plants produce more than 70 percent of its electricity, the highest percentage in the world. Red-colored salt flats characterize the Camargue** [kah-MARG] **marshes of this country's (\*)** Rhône River. The 2015 U.N. Climate Change Conference was held in—for 10 points—what country where the IUCN [I-U-C-N] was founded in Paris?

answer: France (or French Republic or République française)

<GEO, GEO>

15. **This school was attended by Laura Ingraham and Dinesh D'Souza, both of whom wrote for its conservative campus newspaper, the *Review*. This university was represented by alumnus Daniel Webster in an 1819 Supreme Court case that upheld the inviolability of its (\*)** charter as a private institution; in that case, this school sued college secretary William Woodward. For 10 points—name this Ivy League college in New Hampshire.

answer: Dartmouth College [The case is *Dartmouth College v. Woodward*.]

<MISC., MISC.>

16. **In 2015 one of these objects named Lovejoy was revealed to spew sugar and ethyl alcohol. One named Catalina, on a hyperbolic trajectory, was visible via binoculars in January 2016. In 2014 one of these objects named 67P** [“67-P”] **was revealed to have water ice on its surface by the lander *Philae*** [“feel-eye”]**, part of the (\*)** *Rosetta* mission of the European Space Agency. For 10 points—name these objects whose tails point away from the Sun.

answer: comets

<CE, CE>

17. **This team defeated Miami in a 1982 game thanks to their snowplow operator, who cleared a spot for John Smith to kick a field goal. Three seasons later, this team was crushed by Mike Ditka's Chicago Bears in its first Super Bowl appearance; it has appeared in seven more Super Bowls since, including one in (\*)** 2015 against Seattle. For 10 points—name this NFL team coached by Bill Belichick and led by quarterback Tom Brady.

answer: New England Patriots (accept either underlined portion)

<TRASH, SPORTS>

18. **This author wrote about a bombing that destroys an Englishman's flute in the novel *Aaron's Rod*. In another novel by this author, Gertrude's unhappy marriage to the coal miner Walter Morel leads her to become overly close to her artistic child Paul. This author also wrote a novel that was (\*)** censored for its graphic account of Connie's affair with Oliver Mellors. For 10 points—name this author of *Lady Chatterley's Lover*.

answer: D. H. Lawrence (or David Herbert Richards Lawrence)

<LIT, BRIT>

19. **In eukaryotes** [yoo-KAIR-ee-ohtz]**, this structure is the site of O-linked glycosylation** [glye-KAH-suh-LAY-shun]**, which aids in creating molecules like proteoglycan** [proh-tee-oh-GLYE-kan]**. One model of this structure proposes “maturation” of cisternae** [sis-TUR-nee] **as they progress from its (\*)** *cis* [siss] face to its *trans* face. This structure modifies and dispatches proteins that arrive from the endoplasmic reticulum [en-doh-PLAZ-mi reh-TIK-yoo-lum]. For 10 points—what cellular “apparatus” is named for its Italian discoverer?

answer: Golgi [GOHL-jee] apparatus (or Golgi complex(es) or Golgi body/ies; accept dictyosome(s))

<SCI, BIO>

20. **This scientific breakthrough is achieved by the “Box” accidentally invented by the scientists in the movie *Primer*. It is necessary to perform this action to save humpback whales in *Star Trek IV*,** [“four”] **and it is made possible with “1.21 gigawatts** [JIG-uh-“watts”] **of power” and a (\*)** DeLorean in a 1985 film starring Michael J. Fox. For 10 points—name this type of journey that underlies the films *Looper* and *Back to the Future*.

answer: time travel (accept journeying through time and similar answers that mention time and the notion of a trip; accept similar answers specific to the future until “humpback”; do not accept or prompt on answers specific to the past)

<TRASH, POP CULT>

21. **One character in this novel is ordered to pay a $6 fine after the Italian immigrant Julio** [HOO-lee-oh] **accuses him of kidnapping. Another character in this novel, who is said to smell “like trees,” is scolded for wearing muddy underwear as she is put to bed by the maid Dilsey. Quentin becomes obsessed with the sexual behavior of his sister Caddy in this novel about the (\*)** Compsons. For 10 points—name this novel by William Faulkner.

answer: The Sound and the Fury

<LIT, AMER>

22. **In 2013 in this state Reverend William Barber began a series of “Moral Monday” protests against this state's governor, who signed the repeal of its Racial Justice Act. This state's former House Speaker, Thom** [“Tom”] **Tillis, joined Richard Burr in the U.S. Senate after defeating Democrat (\*)** Kay Hagan in a 2014 election fought partly on Governor Pat McCrory's record. For 10 points—name this Atlantic coast state governed from Raleigh.

answer: North Carolina

<CE, CE>

24. **This city was the site of the Massacre of the Latins. It served as the capital of the Empire of Romania before it was reconquered by Michael VIII Palaeologus** [“Michael the eighth” pay-lee-uh-LOH-guss]**. The Doge of Venice, Enrico Dandolo, ordered this city to be sacked in the (\*)** Fourth Crusade. The victor of the Battle of Milvian Bridge chose this city to be the capital of the Eastern Roman Empire. For 10 points—name this capital city of the Byzantine Empire.

answer: Constantinople (prompt on “Byzantium” before “Byzantine”; do not accept or prompt on “Istanbul”) [Milvian Bridge was won by Constantine the Great, the namesake of the city.]

<HIST, EURO>

Bonuses

1. The nearest known example of these objects is Sirius B. For 10 points each—

A. Name these extremely dense stellar remnants that are usually the last observable evolutionary states of low- to medium-mass stars.

answer: white dwarfs (or white dwarf stars)

B. White dwarfs are supported by electron degeneracy pressure, which may be viewed as a consequence of this principle from quantum mechanics. It led to the introduction of the spin quantum number.

answer: Pauli exclusion principle (accept either underlined portion)

C. If a white dwarf absorbs matter from a companion star, it may produce a type Ia [“one-A”] supernova in a detonation process named for this non-oxygen element.

answer: carbon (or C; accept carbon detonation)

<SCI, OTHER>

2. For 10 points each—answer the following about the fauna of Indonesia:

A. An extinct, namesake subspecies of tiger once lived on this most populous island of Indonesia, which contains its capital of Jakarta.

answer: Java

B. A faunal boundary line that divides Indonesia between Asian and Australian species is named after this British naturalist, who developed a theory of evolution independently from his contemporary Charles Darwin.

answer: Alfred Russel Wallace

C. This large Indonesian species of monitor lizard lives on the eastern side of the Wallace Line. These largest lizards in the world have a possibly venomous bite.

answer: Komodo dragons (or Komodo monitor or Varanus komodoensis)

<MISC., MISC.>

3. This amendment was passed to overrule the Supreme Court's decision in the case *Chisholm v. Georgia*. For 10 points each—

A. Name this amendment that declared states have sovereign immunity and are thus protected from lawsuits.

answer: Eleventh Amendment (or Amendment 11)

B. The Eleventh Amendment was upheld in the Supreme Court's *Hollingsworth* decision, which was a suit against this state. Confiscation of Loyalist property in it was the subject 1816's *Martin v. Hunter's Lessee*.

answer: (Commonwealth of) Virginia

C. One of the Court's opinions in *Chisholm v. Georgia* was written by this man, who was the first Chief Justice.

answer: John Jay

<HIST, AMER>

4. In this method of solving a system of equations, one equation is solved for one variable, and that expression is used to replace that variable in another equation from the system. For 10 points each—

A. Give this word that also describes a method of integration that essentially reverses the chain rule.

answer: substitution method (or substitutes or substituting)

B. In the DNA mutation called a transversion, this kind of nucleotide [NOOK-lee-oh-“tide”] is substituted for a pyrimidine [pih-RIM-uh-deen], or vice versa.

answer: purine(s) [PYOO-reen]

C. In organic chemistry substitution reactions are classified as electrophilic if the incoming molecule receives electrons, or as this type of substitution if the incoming molecule donates electrons.

answer: nucleophilic [NOO-klee-uh-FIH-lik] substitution

<SCI, BIO>

5. This character has a hairy wart on the end of his nose, and plays the bagpipes for his fellow pilgrims. For 10 points each—

A. Name this second storyteller of the *Canterbury Tales*, who drunkenly insists on going ahead of the Monk.

answer: (the) Miller (or Robin; accept The Miller's Tale)

B. In the *Miller's Tale*, this clever astrologer is burned with a poker after he exposes his backside to his angry rival Absolon.

answer: Nicholas

C. Nicholas convinces his landlord to sleep in a tub hanging from the roof by predicting this type of natural disaster, which afflicted the biblical Noah.

answer: floods (or deluges or inundations; accept answers describing (heavy) rains or downpours; prompt on “storm(s)”)

<LIT, BRIT>

6. This man was first elected as MP for Islington North in 1983. For 10 points each—

A. Name this U.K. politician who replaced Ed Miliband as Leader of the Opposition in September 2015.

answer: Jeremy (Bernard) Corbyn

B. Corbyn leads this British political party, whose previous leaders include Gordon Brown and Tony Blair.

answer: Labour Party

C. Corbyn, like many Labour MPs, opposes this proposed event involving Britain and a multinational organization. David Cameron resigned after a majority of referendum voters approved of this event.

answer: leaving the European Union (accept answers indicating both the European Union or E.U. or Union européenne and the notion of leaving or withdrawing or ending membership; accept British exit or Brexit)

<CE, CE>

7. This king introduced the Pains and Penalties Act in an attempt to divorce his estranged wife, Caroline of Brunswick. For 10 points each—

A. Name this king who took over his mentally ill father's duties during the Regency period.

answer: George IV [“the fourth”] of the United Kingdom (prompt on “George”)

B. George IV was an opponent of this man, who became prime minister at the age of 24 and led Britain during the French Revolution.

answer: William Pitt the Younger (prompt on “Pitt” or “William Pitt”)

C. George was succeeded by his brother, the fourth English king to bear this name. The third king with this name was married to Mary II and won the Battle of the Boyne.

answer: William (accept William IV or William III)

<HIST, EURO>

8. These birds are only found in the New World. For 10 points each—

A. Name this family of birds, the only one whose members can hover and fly backwards. They have the highest metabolic rate of any homeothermic [HOH-mee-oh-THUR-mik] animal.

answer: hummingbirds (or Trochilidae)

B. Hummingbirds specialize in feeding on this sugar-rich fluid produced by flowers.

answer: nectar

C. Scientists have discovered that flowers pollinated by hummingbirds have an especially high concentration of this disaccharide [“die-SACK-uh-ride”], the most common one with a beta 1,2 [“one two”] linkage between its two subunits.

answer: sucrose [SOO-krohss]

<MISC., MISC.>

9. For 10 points each—answer the following about people who were unprepared for winter:

A. At the end of *A Dance With Dragons*, this king's army becomes snowbound while marching on Winterfell; he had brought it from Dragonstone to defeat the Wildlings.

answer: Stannis Baratheon [buh-RATH-ee-un] (prompt on “Baratheon”)

B. This foolish insect starves in the winter after he wastes the summer, during which the industrious ant works.

answer: grasshopper (accept The Ant and the Grasshopper)

C. Nearly 10,000 of Napoleon's soldiers froze to death on the night of November 8, 1812 during a retreat that began in this city, which in September 1812 had nearly burned to the ground.

answer: Moscow (or Moskva)

<MISC., MISC.>

10. The U.S. Census Bureau produces annual estimates of state populations. For 10 points each—

A. From 2010 to 2015, the largest overall *percentage* increase in population has been in this state, because of its oil and natural gas boom at the Bakken formation.

answer: North Dakota

B. The third-largest gain in that time span was in this state governed by John Hickenlooper, who oversaw its 2012 implementation of cannabis legalization via Amendment 64.

answer: Colorado

C. This state, governed by Earl Ray Tomblin, is the only one estimated to have *lost* population since 2010. In 2014 its Elk River was contaminated by a massive chemical spill.

answer: West Virginia

<CE, CE>

11. The characters in this musical attend the Jellicle Ball. For 10 points each—

A. Name this Andrew Lloyd Webber musical featuring Old Deuteronomy, who has lived many lives.

answer: Cats

B. In *Cats*, Grizabella sings this song in which she laments “I remember / a time I knew what happiness was.”

answer: Memory

C. *Cats* is based on this poet's *Old Possum's Book of Practical Cats*. He also wrote *The Waste Land* and *The Hollow Men*.

answer: T(homas) S(tearns) Eliot

<FA, OTHER>

12. A woman named Rosina [roh-ZEE-nuh] sings an aria titled “Una voce poco fa” [OO-nah VOH-chay POH-koh FAH] in this city. For 10 points each—

A. Name this Spanish city in which Figaro repeatedly sings his name in the aria “Largo al factotum” [LAR-goh ahl fahk-TOH-toom].

answer: Seville (or Sevilla)

B. *The Barber of Seville* was written by this Italian composer whose opera *William Tell* contains an iconic overture evoking a cavalry charge.

answer: Gioachino (Antonio) Rossini [joh-ah-KEE-noh roh-SEE-nee]

C. Another opera that takes place in Seville is this *dramma giocoso* [jaw-KOH-zoh] by Mozart. In this work's final act, the servant Leporello [leh-poh-RELL-oh] witnesses the supernatural punishment of his master.

answer: (The Rake Punished, or) Don Giovanni, K. 527 (or Il dissoluto punito, ossia il Don Giovanni)

<FA, OTHER>

13. These electrical components maintain a potential difference across two separated conductive plates. For 10 points each—

A. Name these components whose strengths are measured in farads [FAIR-udz].

answer: capacitors (accept condensers)

B. This property of a capacitor equals one-half its capacitance times the square of the voltage across its plates.

answer: (electrical) energy stored (accept electrical potential energy)

C. Pencil and paper ready. Two capacitors, each with a capacitance of 6 picofarads [“PIE”-koh-“FAIR-ads”] and connected in series, are equivalent to a single capacitor of how many picofarads?

answer: 3 picofarads [Capacitors in series add the same way as resistors in parallel: *C* = 1/(1/6 + 1/6) = 1/(2/6) = 1/(1/3) = 3 farads.]

<SCI, PHYS>

14. Upon reading this poem, the editor Richard Henry Dana Sr. suggested it was too good to have been written by an American. For 10 points each—

A. Name this poem in which “the gray-headed man” and the “speechless babe” are among those who will eventually join the “innumerable caravan” of the dead.

answer: Thanatopsis [THAN-uh-“TOP”-sis]

B. This poet, who wrote “Thanatopsis” as a teenager, described a bird that flies above the “pathless coast” in “To a Waterfowl.”

answer: William Cullen Bryant

C. In a lecture on this author of *The Last of the Mohicans*, Bryant claimed that the “defects” of this man's novels were offset by the vividness of his style.

answer: James Fenimore Cooper

<LIT, AMER>

15. For 10 points each—answer the following about Andrew Jackson's military career:

A. Jackson became a national hero by defeating the British at this 1815 battle, which was fought several weeks after the signing of the treaty that ended the War of 1812.

answer: Battle of New Orleans

B. In March 1814 Jackson ended the Creek War by defeating the Red Sticks at this battle fought in present-day Alabama.

answer: (First) Battle of Horseshoe Bend (accept Battle of Tohopeka or Battle of Cholocco Litabixbee or The Horseshoe)

C. After the War of 1812, Jackson commanded troops in this war fought in what is now the southeastern U.S. At the end of this war, Jackson appointed William King military governor of part of the conquered Spanish territory.

answer: First Seminole War (prompt on “Seminole War” or “Florida War”)

<HIST, AMER>

16. The ship used on this man's return from Crete was maintained in the Athenian harbor, where its constant reconstruction gave rise to a philosophical paradox. For 10 points each—

A. Name this Greek hero, whose failure to change his ship's sails from black to white led his father Aegeus [“AGE-use”] to leap into the sea.

answer: Theseus [THEE-see-us] (accept ship of Theseus paradox)

B. While on Crete, Theseus slew this monster, a half-man, half-bull imprisoned in the Labyrinth.

answer: Minotaur (or Asterion)

C. On his first journey to Athens, Theseus killed this bandit who fit travelers to his iron bed by stretching them or cutting parts off.

answer: Procrustes [proh-“CRUST”-eez] (prompt on “Procrustean (bed)”; accept Prokoptas or Damastes)

<RMPSS, MYTH>

17. The sacred texts of this religion, which include one known as the *Gleanings from Ancient Stories*, are collectively known as *shinten*. For 10 points each—

A. Name this religion whose adherents believe in divine beings known as *kami*.

answer: Shintoism (accept kami-no-michi)

B. The other sacred texts of Shinto include this document compiled in the early 8th century. Its name translates as “Records of Ancient Matters.”

answer: Kojiki [koh-JEE-kee]

C. According to the *Kojiki*, this female deity was born out of the left eye of her father, Izanagi [ee-zah-nah-gee].

answer: Amaterasu(-omikami) [ah-mah-teh-rah-soo]

<RMPSS, REL>

18. For 10 points each—name these Mexican beach resorts:

A. This resort city on the northeastern tip of the Yucatan Peninsula is a popular spring break destination.

answer: Cancún [kan-KOON]

B. Another popular spring break destination is this resort city on Mexico's southwestern coast. Its attractions include the cliffs of La Quebrada [kay-BRAH-dah], where performers dive over 100 feet into the ocean.

answer: Acapulco [AH-kuh-POOL-koh]

C. This resort city on the southern tip of Baja [BAH-hah] California is named after a nearby rock arch, which separates the Sea of Cortez from the Pacific.

answer: Cabo San Lucas

<GEO, GEO>

19. For 10 points each—answer the following about crime in Los Angeles during the 1990s:

A. Throughout the 1990s, this gang founded in L.A. continued its long and violent war against rival gang the Bloods.

answer: Crips

B. In 1992 riots broke out in L.A. following the acquittal of local police officers who had been videotape beating this African-American man.

answer: Rodney (Glen) King (III)

C. This former NFL player was acquitted after a high-profile 1995 trial for the murder of his ex-wife Nicole Brown and Ron Goldman.

answer: O(renthal) J(ames) Simpson

<TRASH, POP CULT>

20. Pencil and paper ready. Four actresses named Abby, Bethany, Chloe, and Desiree are performing in a play that has 4 distinct characters. For 10 points each—

A. In how many different ways can those 4 actresses be assigned roles?

answer: 24 ways [4! = 24]

B. If Bethany absolutely refuses to play the role of the lawyer, in how many ways can the 4 roles be assigned?

answer: 18 ways [Bethany can have any of the 3 other roles, and, once that is decided, there are 3! = 6 ways to assign the other 3 actresses; 3 × 6 = 18. Alternatively, since Bethany cannot be assigned to 1 of the 4 roles, the total number of ways must be reduced by one-fourth; 24 × (1 - (1/4)) = 24 × (3/4) = 6 × 3 = 18.]

C. If the roles are randomly assigned, what is the probability that Abby is the doctor and Chloe is the musician? You have 10 seconds, and should assume Betty and Desiree have no restrictions.

answer: 1/12 or 1 in 12 [There is a 1/4th chance that Abby is the doctor, and, if so, a 1/(4 - 1) = 1/3rd chance Chloe is the musician, so the overall probability is (1/4) × (1/3) = 1/12.]

<SCI, OTHER>

21. For 10 points each—answer the following about an aspect of the Buddha called the Amida [AH-mih-duh] Buddha:

A. The Amida Buddha is worshiped by the Pure Land sect, which became popular in this Asian country after the end of the Han Dynasty.

answer: (People's Republic of) China (or PRC or Zhongguo or Zhonghua Renmin Gongheguo; do not accept or prompt on “Republic of China”)

B. The Pure Land sect, which reveres the Amida Buddha, is part of this most popular branch of Buddhism, which is contrasted with Theravada [theh-ruh-VAH-dah] Buddhism.

answer: Mahayana Buddhism

C. The name “Amida” is a variation on the name “Amitabha” [ah-mih-TAH-bah] in this language, which was used not only to write the Buddhist sutras [SOO-truz], but also the Hindu *Vedas* [VAY-duz].

answer: Sanskrit

<RMPSS, REL>

22. This story's protagonist claims that she would be humiliated to wear roses as her only ornament at a ball. For 10 points each—

A. Name this story in which the protagonist and her husband go into debt to replace the title piece of borrowed jewelry.

answer: The Necklace (or The Diamond Necklace or La Parure)

B. “The Necklace” was written by this French author, who depicted cruel Prussian officers in his stories “Two Friends” and “Ball of Fat.”

answer: Guy de Maupassant [ghee duh moh-pah-sahnt] (or Henri René Albert Guy de Maupassant)

C. The protagonist of “The Necklace” is Madame Loisel [lwah-ZEL], who shares this first name with the daughter of the Marquis [“mar”-KEE] de la Mole in Stendhal's *The Red and the Black*.

answer: Mathilde [mat-TEELD] (accept Mathilde Loisel or Mathilde de la Mole; prompt on “Matilda”)

<LIT, EURO>

23. For 10 points each—answer the following about the kula ring of the Trobriand Islanders:

A. The kula ring is an example of this type of exchange in which objects are given without expecting value in return. In American culture, this type of exchange often occurs around Christmas.

answer: gift exchange (accept gift-giving or other words involving gift; accept giving present(s))

B. The kula ring led this Polish-born anthropologist to propose the idea of a ”gift economy” in his book *Argonauts of the Western Pacific*.

answer: Bronislaw (Kasper) Malinowski [BRAH-nuh-swahf MAH-luh-NAHF-skee]

C. The islands that participate in the kula ring are part of this Melanesian nation whose capital is Port Moresby [MORZ-bee].

answer: (Independent State of) Papua New Guinea (or Papuaniugini; do not accept or prompt on “Papua” or “New Guinea”)

<RMPSS, SOC SCI>

24. The molecule xenon tetrafluoride [ZEE-nahn TET-ruh-“FLOW-ride”] has two lone pairs. For 10 points each—

A. The xenon also forms four single bonds to fluorine, so according to VSEPR [“vesper”] theory, xenon tetrafluoride has this molecular geometry.

answer: square planar (prompt on partial answer; prompt on “octahedral”)

B. Because there are six pairs of electrons around the central xenon atom, it violates this rule that atoms have a tendency to acquire eight valence electrons.

answer: (Lewis) octet rule

C. Another molecule exhibiting square planar geometry is this drug, used to treat testicular cancer, in which a platinum atom forms bonds to two ammonia molecules and two chlorine atoms.

answer: cisplatin [siss-PLAT-in] (accept Peyrone('s) salt)

<SCI, CHEM>