ACF Regionals 2015: A Livable Community
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Tossups

1. The ancient name of a river in this modern-day country is the origin of the word "pheasant." A person called a tamada pronounces toasts at this country's supra dinners, during which you can eat lobiani bean bread and sulguni cheese. Men in this country traditionally wear the Chokha. The alluvial deposits of this country's Inguri and Rioni rivers form the Kolkhida Lowland, known to classical geographers as Colchis. This country's biggest port is Batumi, located in the autonomous region of Adjara. This country claims a region to the northwest governed from Sukhumi, and it is known as Sakartvelo in its native language. This country still claims possession of two breakaway regions lost in 2008: South Ossetia and Abkhazia. For 10 points, name this Caucasian country with capital Tbilisi.
ANSWER: Republic of **Georgia** [accept **Sakartvelo** before mention]

2. This thinker's distinction between "the possible" and "the real" was given a new third term, the "virtual," in a 1996 book about his *–ism* by Gilles Deleuze, who also built on this thinker's ideas in essays about cinema. This thinker distinguished between qualitative and quantitative types of multiplicity. This man linked emotional detachment to the "meaning of the comic" in three articles on laughter. This man used the image of a tape running between two spools to represent the flow of aging and the growth of memory. This author of *Matter and Memory* described the succession of conscious states as *durée,* or "duration." For 10 points, name this author of *Time and Free Will,* a French philosopher who discussed a non-mechanistic life force called *élan vital* in *Creative Evolution.*
ANSWER: Henri[-Louis] **Bergson**

3. This composer was instrumental in the relocation from Paris of the Mabou Mines theater company, for whom he wrote *Music for Voices* as well as a string quartet accompanying a performance of Samuel Beckett's *Company.* This composer attempted to popularize his work with a six-movement chamber composition including movements titled "Floe," "Island," and "Rubric." He wrote for a characteristic ensemble of four saxophones, two flutes, three electric organs, and female voice with his *Music in Twelve Parts.* This composer scored Martin Scorsese's *Kundun* as well as a film directed by Godfrey Reggio whose title is a Hopi word meaning "life out of balance." For 10 points, name this minimalist composer of *Koyaanisqatsi* also known for such operas as *Einstein on the Beach.*
ANSWER: Philip **Glass**

4. In *Moby-Dick*, this animal is the namesake of a ship whose captain can't answer Ahab's question about the White Whale because he drops his trumpet into the sea. In one poem, one of these creatures "ate the food it ne'er had ate" after several men "hailed it in God's name" "as if it had been a Christian soul." In another poem, a man limps to mimic one of these "weak and gauche" animals as his companion teases it with a "stubby clay pipe" for having become "comic and ugly." When one of these animals outside that Charles Baudelaire poem comes "through the fog" following "a good south wind," it is shot with a crossbow and hung around a narrator's neck. For 10 points, name this unlucky bird killed in Samuel Coleridge's "The Rime of the Ancient Mariner."
ANSWER: **albatross**es [prompt on "birds," "*Aves,*" "tubenoses," or "*Procellariiformes*"]

5. This man collaborated with the urban ecologist Robert E. Park on a study of European poverty called *The Man Farthest Down*. His advisory role on a German colonial expedition to Togo is recounted in Louis Harlan's two-volume, Bancroft prize-winning biography, and he recalled his journey to see Samuel C. Armstrong after leaving Kanawha valley's coal mines in his own memoirs. This Hampton alumnus imagined "nearly sixteen millions of hands" lifting a load six years before he dined at the White House with Theodore Roosevelt. He advised "Cast down your bucket where you are" in his "Atlanta Compromise" speech. For 10 points, name this black leader criticized for his focus on vocational skills by W.E.B. DuBois, the author of *Up from Slavery* and leader of the Tuskegee Institute.
ANSWER: Booker Taliaferro **Washington**

6. In a parody of this work, Walter Barnes photographed Edgar Degas perched on the stoop of a house with three women standing above him. The structure in the background of this work features a marble relief of an eagle with a woman on its back, while its foreground includes a pointing figure in black that was copied from a 1650 self-portrait by Poussin. Commissioned by Charles X for a ceiling in the Louvre, this painting shows Raphael led by the hand toward the title figure, whose own output is symbolized by two women sitting at his feet, one with a sword and the other with an oar. Nike prepares to crown the enthroned title man of this painting with a laurel crown as a crowd of great artists and poets look on. For 10 points, name this Ingres painting of a Greek bard's moment of immortality.
ANSWER: The ***Apotheosis of Homer*** [or *L'**Apothéose d'Homère*** or ***Homer Deified***]

7. For an object at high redshift, a *K*-correction must be applied to this quantity to convert it to an equivalent measurement in the rest frame of the object. Dividing a body's kinetic energy by this quantity gives its Kelvin-Helmholtz time scale. An empirical law sets this quantity for a main-sequence star proportional to its mass to the 3.5th power. The fifth root of one hundred is known as Pogson's ratio because N. R. Pogson developed the Hipparchus scale for measuring a logarithmic variety of this quantity, which is called "apparent" if measured from the perspective from the earth. For 10 points, name this quantity which is proportional to the fourth power of temperature in the Stefan-Boltzmann equation, the energy per unit time emitted by a stellar object.
ANSWER: **luminosity** [or apparent **magnitude**; or absolute **magnitude**; prompt on "brightness"]

8. This institution was notably lacking from a "New Palace" toured by Evliya Çelebi [CHEL-uh-bee] before he left his home city to travel. The *selamlik* was kept completely separate from this institution. Select members of this institution became *gedik,* who could be promoted to *gödze* or "favored" status. Talking to members of this institution demystifies it per the letters of Mary Wortley Montagu, which also discussed inoculation. One official supervisor of this thing, the Kizlar Agha, was always both black and a eunuch. The Valide helped lead this institution, which held effective power for much of the 16th century, after Roxelana used her role in it to gain the title of Haseki Sultan. For 10 points, name this set, greatly expanded by Murad III, of secluded Ottoman imperial concubines.
ANSWER: Ottoman imperial **harem** [or **seraglio**; or **serail**; or **saray-i-duhteran**; prompt on "Topkapi palace" or "Ottoman palace" or similar answers; prompt on "women" or "women's quarters"]

9. Strain 121 was discovered in one of these ecosystems. An organism that lives in these ecosystems uses multiple forms of hemoglobin to shuttle gas to symbiotic bacteria colonizing the trophosome that takes up its coelom instead of a gut. Martin et al. proposed that acetate production during serpentinization in these ecosystems is driven by a natural form of chemiosmosis facilitated by the alkalinity of peridotites. The "iron-sulfur world" theory is based on studies of these ecosystems, which are inhabited by scavenging "dandelions" and *Riftia* tube worms. The Lost City field and Loki's Castle black smokers are examples of these ecosystems, which are more volatile than cold seeps. For 10 points, name these chemosynthetically-driven geothermal ecosystems on the ocean floor.
ANSWER: **hydrothermal vent**s [or hydrothermal **chimney**s; accept **black smoker**s until it is read; prompt on "vents"; prompt on "deep sea," "ocean," "deep sea communities," or "ocean communities"]

10. This poem was adapted from a ballad written by Clemens Brentano, and was first set to music by Friedrich Silcher in a song so popular that it created a misconception about the origin of this poem's title character. This poem is set near "the crest of [a] mountain" "gleaming / in fading rays of sunshine." The speaker of this poem "cannot determine the meaning / of sorrow that fills [his] breast" but does know that a story he has heard "allows [his] mind no rest." The title character of this poem is introduced wearing glistening jewelry and using a gilded comb. This poem features the death of a man who "has no eye for the jagged cliff" and "by and by" will be devoured by the waves. For 10 points, name this German poem about a golden-haired siren by the Rhine river, by Heinrich Heine.
ANSWER: "The **Lorelei**" [or "Die **Lorelei**"]

11. According to Eustathius, this god killed a king of Cyprus who sent earth-made ships and fake men instead of the fifty manned ships which he promised Agamemnon. This killer of Cinyras also killed a being who picked up the aulos that Athena cast away upon being horrified at her reflection. This god transformed the nymph Castalia into a spring, and he fathered the beekeeper Aristaeus. At the beginning of the Iliad, this god spreads a plague among the Greeks. This god gave a pair of asses' ears to Midas, and he flayed the satyr Marsyas after beating him in a music contest. With his sister, this archer god killed the children of Niobe. For 10 points, name this Greek god who killed the python and established the Oracle at Delphi, the brother of Artemis.
ANSWER: **Apollo** [or **Apollon**; or **Phoebus**]

12. George Steer's reporting for *The Times* helped foster international outrage for an incident during this conflict. A key siege during this war saw a woman called "Passionflower" give the non-French "They shall not pass!" speech. One side in this war sent 510 tons of gold to Moscow soon after its outbreak, saw one of its cities destroyed in Operation Rügen, and lost the bloody Battle of Teruel. A clandestine faction working against that side within its cities was given the name "fifth column" by a general in this war who soon died in a plane crash, Emilio Mola. This war, in which Republican forces were crushed at the Battle of the Ebro, also included the Condor Legion's bombing of the Basque city of Guernica. For 10 points, name this 1930s conflict won by Francisco Franco's fascists.
ANSWER: **Spanish Civil** War

13. This interaction changes the refractive index of a thin gold film on which a molecule is immobilized with a Biacore sensor chip. Programs like Autodock simulate this interaction, which is screened by fragment-based lead discovery. Protein-directed dynamic combinatorial chemistry is a method used to optimize the strength of this interaction for molecules. The major uses of isothermal titration calorimetry and surface plasmon resonance are to test potential drugs for this non-enzymatic interaction, which is modeled by the MWC and Hill equations if it's cooperative. Affinity constants quantify the strength of this interaction, which is measured in saturation experiments that can be visualized on a Scatchard plot. For 10 points, name this physical interaction between a ligand and its receptor.
ANSWER: ligand **bind**ing [or **bind**ing to a receptor; prompt on **protein-protein** interaction or **PP**I or similar answers; anti-prompt on protein **activation** or **inhibition** or specific cases of binding; prompt on **drug activity** or related answers; do not accept "forming a bond", "bonding", or any answer about covalent bonding]

14. During a rulership controversy in this polity, Isabella of Anjou's marriage to Humphrey of Toron was annulled in favor of a man who was assassinated a few days after taking the crown. This state denounced illegal confiscation of fiefs in the *Assise sur la ligence*, issued by its *Haute Cour* during the rule of Amalric I. At age sixteen, a ruler of this kingdom overcame overwhelming odds at the Battle of Montgisard, and lifted the Siege of Kerak shortly before his death. This kingdom's coat of arms had five golden crosses on a white field. It was ruled by the leprous Baldwin IV, whose successor Guy of Lusignan lost the disastrous Battle of Hattin, after which Saladin captured its main city and provoked the Third Crusade. For 10 points, name this crusader kingdom named for its extremely holy city.
ANSWER: Kingdom of **Jerusalem**

15. A 2011 trial for religious extremism in this country prosecuted a translation of *The Bhagavad-Gita As It Is*. In this non-Turkey country, the reformer Abdurrauf Fitrat promoted the teaching of *usul ul-jadid* in *maktabs*, initiating the Jadidism movement. Members of an exiled sect from this country established a large community in Woodburn, Oregon. This country was the birthplace of a pacifist movement whose name means "Warriors of the Spirit," which conducted naked protests and eventually resettled in Canada. In this home of the *doukhobors*, the introduction of a three-fingered sign of the cross and other reforms by Nikon led to a schism with the Old Believers. For 10 points, name this country where Patriarch Kirill leads the most populous Orthodox church.
ANSWER: **Russia** [or **Russia**n Empire; or **Russia**n Federation; or **Rossiya**; or **Rossiy**skaya Imperiya; or **Rossiy**skaya Federatsiya; do not accept "Soviet Union" or "USSR"]

16. The title character of a story by this author is run over and killed by Mr. Shortley's tractor while Mrs. McIntyre is on her way to fire him. This author who wrote about an unfortunate Pole named Mr. Guizac in "The Displaced Person" also wrote a story in which an old man moves to New York and mistakenly calls his new neighbor "preacher," leading to a fight that causes him to have a stroke. This author of "Judgment Day" wrote a story in which a typewriter salesman denigrates the decayed mansion of his Godhigh ancestors. In that story, a woman in a purple hat has a stroke after she condescendingly gives a penny to a young black boy while riding the bus to the Y with her son Julian. For 10 points, name this extremely Catholic American author of "Everything that Rises Must Converge."
ANSWER: Mary Flannery **O'Connor**

17. Internal massless components of these objects are associated with a factor proportional to i divided by the momentum q squared, while coupling constants equal to the square root of 4 pi times the fine structure constant are introduced for each of these objects' vertices. Processes are called OZI suppressed and have much shorter lifetimes if these objects can be "cut" by touching only gluons. Antisymmetrization results in subtraction between matrix elements when two of these objects differ by the exchange of identical fermions. Arrows moving opposite the direction of time in these objects represent antiparticles, while helices denote gluons and waves indicate photons. For 10 points, name these diagrams used to model particle interactions, named for a Caltech physicist.
ANSWER: **Feynman diagram**s

18. A treatise in this language discusses the rise of science in the section "The Discovery of the World and of Man" and argues that a certain period involved the beginning of self-conscious, calculated government in "The State as a Work of Art." Another book in this language examines the "fear of being touched," uses the memoirs of a judge with dementia to connect ruling and paranoia, and seeks to explain why "packs" of people follow despots. This language was used to write *The Civilization of the Renaissance in Italy* as well as *Crowds and Power*. A treatise in this language explains how a "reserve army of labor" counters the tendency of profits to fall over time, and argues that "commodity fetishism" characterizes modern society. For 10 points, name this original language of *Das Kapital*.
ANSWER: **German** [or **Deutsch**]

19. Twice, this character mysteriously alludes to having "failed him, once at Constantinople." This character's sister Sylvia was killed, somewhat ironically, by a falling tree at their childhood home. The *Cymbeline* line "fear no more the heat o' the sun" is repeatedly quoted by this character, who is distracted from her mending of a green dress by the appearance of an old boyfriend. This character thinks that the most exquisite moment of her life was kissing Sally Seton at Bourton. In her youth, this character rejects Peter Walsh to marry the wealthier politician Richard. Before guests arrive at this woman's house, Septimus Smith kills himself. For 10 points, name this character who throws a party in 1923 London in a novel by Virginia Woolf.
ANSWER: Mrs. **Dalloway** [or **Clarissa** Dalloway]

20. A 1901 contest to construct one of these buildings in Liverpool was won by Giles Gilbert Scott, who then completed that building with George Frederick Bodley. Bodley himself designed one of these buildings featuring Frederick Hart's *The Creation*. One of these buildings in Christchurch was constructed out of cardboard by Shigeru Ban. Ronald Reagan's state funeral was held in one of these buildings, which were designed with vast windows in the Rayonnant style. "Emmanuel" is the largest of ten huge bells at one of these buildings famous for its chimera statues and located on the Île de la Cité. For 10 points, identify these buildings exemplified by Notre Dame de Paris.
ANSWER: **cathedral**s [prompt on **church**es]

TB. This publication adds the word "SIR--" in all caps to preface all published letters to the editor. This publication uses Officina Sans Bold for its headlines, such as a 2012 headline asking "Which One?" on an image of Barack Obama and Mitt Romney walking over the American flag. A special "no boundaries" award is included in this publication's yearly "innovation awards". An early editor of this publication also wrote a book on *The English Constitution.* Walter Bagehot ["BADGE"-it] edited this publication, which reviews books in its Prospero section. James Wilson started this publication to oppose the Corn Laws. For 10 points, name this periodical with anonymous editorials, a weekly British magazine whose coverage of world affairs often has a financial bent.
ANSWER: *The **Economist***

Bonuses

1. Answer the following about chemical speciation analysis, for 10 points each.
[10] These diagrams depict the possible equilibrium phases of an aqueous electrochemical system as a function of redox potential, usually depicted on the y-axis, and pH, usually depicted on the x-axis.
ANSWER: **Pourbaix** diagrams
[10] A leading method of metal speciation uses inductively coupled plasma to ionize a sample before analyzing it with this technique, which breaks molecules into fragments and separates them by their mass-to-charge ratio.
ANSWER: **mass spec**trometry [or **MS**]
[10] This hexadentate organic ligand is used in complexometric titration, another tool used in metal speciation to determine the quantity of oxidized metal ions present in a solution. It is also used in the treatment of lead poisoning.
ANSWER: **EDTA** [or **ethylenediaminetetraacetic** acid]

2. This dynasty's second of three emperors, Yangdi, launched a disastrous attempt to reconquer Vietnam and an even more disastrous invasion of the Korean peninsula. For 10 points each:
[10] Name this short-lived dynasty which reunified China for about four decades starting in the 6th century CE.
ANSWER: **Sui** dynasty
[10] This lasting public works project, which connects Beijing to Hangzhou and intersects both the Yellow and Yangtze rivers, was built by the Sui dynasty using forced labor.
ANSWER: **Grand Canal**
[10] Yangdi moved the Sui capital to this rebuilt eastern city. This home of the White Horse Temple was burned during the Yellow Turban Rebellion in its role as Eastern Han capital after Wang Mang's 1st-cenutry usurpation.
ANSWER: **Luoyang** [or **Loyang**]

3. Identify some types of animals used in psychology research, for 10 points each.
[10] John Watson conditioned Little Albert to fear one of these animals. Edward Tolman created his theory of cognitive maps while experimenting on how these animals run mazes.
ANSWER: **rat**s [do not accept "mice"]
[10] Mary Cover Jones demonstrated counterconditioning by eliminating Little Peter's fear of one of these animals. A cutaneous effect named for this creature, discovered by Geldard and Sherrick, is caused by quick taps on different areas of skin.
ANSWER: **rabbit**s [or cutaneous **rabbit** illusion]
[10] Martin Seligman placed these animals in a shuttle box and applied electric shocks, demonstrating that they exhibit learned helplessness.
ANSWER: **dog**s

4. The bourée was an optional movement in compositions of this type. For 10 points each:
[10] Name this genre of Baroque music that traditionally included an allemande, a courante, a sarabande, and a gigue as its four standard movements.
ANSWER: **suite**s
[10] This French dance popularized at the court of Louis XIV is usually in 4/4 time and begins on the third beat of a measure. It became an optional component of Baroque suites.
ANSWER: **gavotte**
[10] This other dance in 3/4 time was the standard choice for the third movement of symphonies until it was supplanted by the scherzo. A very famous and simple one in G is found in the *Notebook for Anna Magdalena Bach*.
ANSWER: **minuet**

5. The electronic symbol for these circuit elements consist of a triangle adjacent to a rectangular S-like shape, and they are characterized by semiconductor-metal junctions, which form a similarly-named barrier. For 10 points each:
[10] Name these objects which have a low forward voltage drop and very fast switching action. At around 0.15 to 0.45 volts, their voltage drops are much lower than that of typical silicon diodes.
ANSWER: **Schottky diode**s [or **hot carrier diode**s]
[10] These diodes consist of P-N junctions in which electrons annihilate with holes to produce photons. The band gap of the semiconductors in the junction determines the wavelength of the photons emitted by this type of diodes.
ANSWER: **light-emitting** diodes [or **LED**s]
[10] This type of bias exists where the voltage applied across P-N junction is in the direction of easy current flow for the diode, such that the P side is made more positive and electrons are free to move across the junction.
ANSWER: **forward** bias

6. Sibyl Sanderson made her professional debut playing the title Byzantine sorceress in this composer's opera *Esclarmonde*. For 10 points each:
[10] Name this composer, who also composed an opera featuring "En fermant les yeux," known as the "Dream Song," and the soprano aria "Adieu, notre petite table."
ANSWER: Jules **Massenet**
[10] Massenet's *Manon* was based on the same novel that inspired this composer's 1893 opera *Manon Lescaut*. This composer also wrote an opera featuring the aria "Un bel di."
ANSWER: Giacomo **Puccini**
[10] "Un bel di" appears in this Puccini opera, in which it is sung by the title character Cio-Cio San, who is tragically married to the American Navy Lieutenant Pinkerton.
ANSWER: *Madame Butterfly* [or *Madama Butterfly*]

7. Answer the following about the Vedic god Tvastr, a craftsman god who gave all beings form, for 10 points each.
[10] According to the *Mahabharata*, Tvastr created this creature to get revenge on the killer of his son Trisiras. This primordial creature, which blocked off the waters of the world, is killed with a weapon made from Dadhichi's bones.
ANSWER: **Vritra** [or **Vrtra**; or **Vitra**; or **Ahi** Vitra]
[10] Indra, the killer of Tvastr's son Trisiras, was a deity of this natural phenomenon, which he wielded as Vajra. Zeus frequently used this natural phenomenon to dispose of people he didn't like.
ANSWER: **lightning** [accept **thunder** even though that's not quite the same; accept **lightning bolt**s]
[10] Tvastr's daughter Saranyu married this Hindu deity of the sun, who rides in a chariot pulled by seven horses around the celestial Mount Meru every day.
ANSWER: **Surya** [or **Aditya**]

8. The remains of the tenth and eleventh Shi'a imams are found in this city's al-Askari mosque. For 10 points each:
[10] Identify this city, which contains a giant spiral "Great Mosque" constructed by the caliph al-Mutawakkil. In a famous tale, a merchant flees to this city in order to escape Death, but ends up meeting her here.
ANSWER: **Samarra**
[10] Samarra is a city in this country, whose northern part is disputed by the mostly-autonomous Kurds and the Islamic State. The Tigris and Euphrates form the Shatt al-Arab after they meet in this country.
ANSWER: Republic of **Iraq** [or Jumhuriyyat al-**Iraq**]
[10] This city found along the Shatt-al-Arab, Iraq's main port, is the legendary home of the sailor Sinbad. Before it moved, the 2014 Gulf Cup of Nations was first supposed to take place in this city's massive Sport City complex.
ANSWER: **Basra**

9. After the defeat of Perseus of Macedon at the Battle of Pydna, this man was taken as a hostage to Rome, where he eventually became a tutor to Scipio Aemilianus. For 10 points each:
[10] Name this Greek-born historian whose forty-book *Histories* frequently express his belief that *tyche*, or fortune, shapes history. He believed in a recurring pattern of regime change called *anakyklosis*.
ANSWER: **Polybius**
[10] Polybius was personally present at this key event of the Third Punic War, at which his student Scipio destroyed Rome's greatest rival. The legend that the Romans sowed salt into the soil after this event is probably false.
ANSWER: **Sack of Carthage** [accept anything involving the **destruction** of **Carthage**]
[10] A man with this name defended Carthage before the sack. A more famous man with this name died at the Battle of the Metaurus while trying to reinforce his brother, after which his severed head was flung into Hannibal's camp.
ANSWER: **Hasdrubal** [accept **Hasdrubal** Barca or **Hasdrubal** the Boetharch]

10. Hannah Arendt wrote that "Modern existential philosophy begins with" this man, even though he was a Christian and that term was coined by atheist Jean-Paul Sartre decades after his death. For 10 points each:
[10] Give the real name of this Danish philosopher, who used the pseudonym Johannes de Silentio while analyzing Abraham's sacrifice of Isaac in *Fear and Trembling*.
ANSWER: Soren Aabye **Kierkegaard** [do not accept any pseudonyms]
[10] Problema I of *Fear and Trembling* asks this question, which roughly means: Can an individual ever stand above universal rules of proper conduct, ignoring them to fulfill a specific end goal given directly by God?
ANSWER: "Is there a **teleological suspension** of the **ethical**?"
[10] *Fear and Trembling* then asks if we have this sort of duty to God. Hegel scholars often modify his idealism with this adjective, which British Idealist F.H. Bradley used as a noun to denote the first principle of existence.
ANSWER: **absolute** [or "Is There An **Absolute** Duty To God?"; or **absolute** idealism; or the **Absolute**]

11. Two soldiers in this story pass through the Khyber Pass with a caravan while disguised as toy salesmen. For 10 points each:
[10] Name this novella in which the wife of Daniel Dravot bites him, revealing to Kafiristan through the resulting trickle of blood that he is not a god.
ANSWER: *The **Man Who Would Be King***
[10] This author of *Gunga Din*, who showed a reversal of colonial power structures when a white man falls in a ravine full of cholera victims in "The Strange Ride of Morrowbie Jukes," wrote "The Man Who Would Be King".
ANSWER: Rudyard **Kipling**
[10] Kipling was among the first authors to make a great deal of money selling his work in these places, where the narrator of "The Man Who Would Be King" delivers the message "He has gone South for the week."
ANSWER: **train station**s [or **railway station**s; or **railway junction**s; or other reasonable equivalents]

12. This two-word phrase was first used in JFK's Executive Order 10925, which asked government contractors to pursue it. For 10 points each:
[10] Name this often-litigated practice, which intends to remedy past discrimination against underrepresented groups. The *Regents v. Bakke* case concerned it in college admissions.
ANSWER: "**affirmative action**"
[10] This current president of Columbia University was the defendant in the *Gratz* and *Grutter* cases, which upheld affirmative action at the University of Michigan but ended a system giving 20 extra "points" to minority applicants.
ANSWER: Lee **Bollinger** [or *Gratz v. **Bollinger***; or *Grutter v. **Bollinger***]
[10] Since becoming subject to strict scrutiny in the 1995 *Adarand v. Peña* case, race-based affirmative action has to be justified by this kind of government priority. A policy which furthers one of these must be "narrowly tailored".
ANSWER: **compelling** government **interest** [or **compelling** state **interest**]

13. Comparison-based algorithms for accomplishing this task include a divide-and-conquer algorithm that breaks down elements into small sublists that are later merged. For 10 points each:
[10] Identify this common task in computer science, the rearrangement of items in a list into a defined order.
ANSWER: **sort**ing
[10] In this probabilistic sorting algorithm of average time complexity $n \log n$, a random pivot is chosen, all elements smaller than the pivot are moved to one side, and the algorithm is called recursively on the right and left lists.
ANSWER: **quick**sort
[10] This other sorting algorithm, with average-case performance of $n \log n$, first searches for sub-arrays that are already sorted. It uses insertion-sort to increase the length of sorted sub-arrays to a minimum size, then merges them.
ANSWER: **Timsort**

14. The title characters of this book represent Adam, Moses, Jesus, Mohammed, and a magician. For 10 points each:
[10] Name this novel about five sons of a tyrannical patriarch, which earned its author a 1994 assassination attempt.
ANSWER: *Children of Gebelawi* [or *Children of the Alley*]
[10] This author of *Children of Gebelawi* described several generations of the Abd al-Jawad family in the novels *Palace Walk*, *Palace of Desire*, and *Sugar Street*.
ANSWER: Naguib **Mahfouz**
[10] This possibly autobiographical character begins Mahfouz's *Cairo Trilogy* as a curious and happy child. This man eventually becomes a teacher and carries his dying father home from an air raid shelter.
ANSWER: **Kamal** Abd al-Jawad

15. A terrorist attack at *La Belle* discothèque in this city took place in 1986, prompting the American bombing campaign against Libya known as Operation El Dorado Canyon. For 10 points each:
[10] Name this European city out of which the terrorist group 2 June Movement was based. It was assisted by Gail Halvorsen in his best known mission, which earned him the nickname "Uncle Wiggly Wings."
ANSWER: **West Berlin** [prompt on "Berlin"]
[10] This mayor of West Berlin from 1957 to 1966 was later Chancellor, in which role he championed *Ostpolitik* to ease tensions with East Germany. He won the Nobel Peace Prize in 1971.
ANSWER: Willy **Brandt** [or Herbert Ernst Karl **Frahm**]
[10] Brandt resigned after it was revealed that his aide Günter Guillaume was working for this Stasi spymaster, who headed the HVA, or foreign intelligence, division.
ANSWER: Markus Johannes "Mischa" **Wolf**

16. Along with IFN-gamma, this molecule is the major common mediator of all forms of delayed-type hypersensitivity. For 10 points each:
[10] Name this central inflammatory cytokine, the primary upstream activator of NF-kappa B.
ANSWER: **TNF**-alpha [or **tumor necrosis factor** alpha; or **cachexin**; or **cachectin**; or **tasonermin**]
[10] As a supplement to anti-TNF-alpha therapy, "costimulation blockers" like Abatacept block the second signal from these antigen-presenting cells, preventing excessive T cell activation. They are named for their projections that look similar to those of neurons.
ANSWER: **dendritic** cells [or **DC**s; or **veiled** cells]
[10] An emerging treatment for autoimmune diseases like Crohn's involves inoculating patients with pig whipworms, which belong to this phylum. *C. elegans* is also a member of this phylum.
ANSWER: **Nematoda** [or **nematode**s; or **roundworm**s]

17. This man wrote about a soldier who is driven insane by an experimental diet of only peas and ultimately kills his lover in a fit of jealousy. For 10 points each:
[10] Name this tragically short-lived playwright of *Woyzeck* and *Leonce and Lena*.
ANSWER: Georg **Buchner**
[10] In this other Buchner play, the title character is marched to the guillotine after making an enemy of Robespierre as his loyal wife commits suicide.
ANSWER: *Danton's Death* [or *Dantons Tods*]
[10] This other French revolutionary helps reenact the death of his rival Jean-Paul Marat from within prison in a Peter Weiss play. His own orgiastically violent fiction includes the novel *Justine, or the Misfortunes of Virtue*.
ANSWER: Marquis Donatien Alphonse Francois de **Sade**

18. In a collaboration between Giovanni and Gentile Bellini, a giraffe and some camels appear in front of a palace while this man preaches in an Alexandrian courtyard full of turbaned and white-robed figures. For 10 points each:
[10] Name this man who, in another artwork, descends from the sky to save a servant about to have his legs broken and eyes put out for venerating this man's relics. That painting is *The Miracle of the Slave*.
ANSWER: Saint **Mark** [or San **Marco**]
[10] *The Miracle of the Slave* was painted by this Venetian artist, who showed ghost-like angels swirling around a lamp in his diagonally organized *The Last Supper*.
ANSWER: **Tintoretto** [accept Jacopo **Robusti** or Jacopo **Comin**; prompt on **Il Furioso**]
[10] Tintoretto's massive *Paradise* is located in the Sala del Maggior Consiglio, whose frieze contains 76 of these paintings. One of them is unusual in that it depicts a black cloth inscribed with a description of a beheading.
ANSWER: portraits of **doge**s [prompt on "portraits"]

19. In this play, Rosemary's pretended indifference to marriage disappears after she has sex with Howard. For 10 points each:
[10] Name this play in which the often-shirtless drifter Hal tells the protagonist, "When you hear that train pull outa town and know I'm on it, your little heart's gonna be busted."
ANSWER: *Picnic*
[10] This American playwright of *Picnic* also wrote about Doc and Lola, who agree to put the past behind them after Lola realizes her lost dog will never return, in *Come Back, Little Sheba*.
ANSWER: William **Inge**
[10] In this other play by William Inge, Dr. Lyman attempts to seduce the teenaged waitress Elma while Bo convinces Cherie to marry him during a night spent stranded in a diner.
ANSWER: *Bus Stop*

20. The Sahih al-Bukhari is among six trusted collections of these texts used by Sunni Muslims. For 10 points each:
[10] Identify these sayings of the prophet Muhammad. Along with the Qur'an and *Sunnah,* they provide the ultimate source for *shari'a*.
ANSWER: **hadith** [or a**hadith**]
[10] This term, which literally means "understanding," refers to religious jurisprudence interpreting *shari'a*. The Shafi'i school of this task draws heavily on knowledge of authentic *ahadith*.
ANSWER: **fiqh**
[10] A *hadith* is placed in this disreputable category if there is a gap in the chain of testimonies, or *isnad,* linking reports of the story back to Muhammad.
ANSWER: **da'if** [or **weak** hadith]

21. Almost everyone is infected with a herpes virus of some kind. Answer the following about why they're so successful, for 10 points each.

[10] Herpes viruses belong to Group 1 in the Baltimore scheme, meaning they have this kind of genome. Viruses with this genome have the lowest mutation rates since they replicate with a polymerase that can repair errors.

ANSWER: **double-stranded DNA** [or **dsDNA**; or **double-stranded deoxyribonucleic acid** or other equivalents; prompt on "DNA"]

[10] While other dsDNA viruses like smallpox are extremely virulent, herpes simplex enters a latent, non-infectious state in the bodies of these cells. These cells send electrical signals up and down the spinal cord.

ANSWER: **neuron**s [or **nerve** cells]

[10] Latency allows herpes simplex viruses to resist vaccination. However, the reactivated virus can be induced back into quiescence using Acyclovir, an antiviral that mimics the structure of this molecule. This molecule is formed from XMP by the action of its namesake synthase.

ANSWER: **guanine** [or **guanosine**; or **G**]