

**Brookwood Invitational Scholars Bowl XXVI: Brought to you by the letter *J'accuse***  
**Round 12**

Written and edited by Mostafa Bhuiyan, Kunal Naik, Adam Silverman, and Brady Weiler

**Tossups**

1. In Fiammetta's story from the *Decameron*, Ghismonda drinks poison after repeatedly kissing one of these items that was originally in the cup. In a certain short story, one of these objects makes a sound like a "watch enveloped in cotton." A polar equation of the form  $r$  equals  $a$  times the quantity one minus cosine of  $\theta$  will yield a limaçon resembling these items. People in the Hall of Ma'at could enter the afterlife if this object was lighter than a feather. Christiaan Barnard was the first to successfully transplant this organ, which contains the vena cava and tricuspid valve. For 10 points, name this organ responsible for the pumping of blood.

ANSWER: heart

2. One of this man's films uses title cards such as "In Spring" and "Eight Years Later". A Philippe Halsman photograph shows three cats in mid-air with water and this man, and is called "[this man] Atomicus." This man combined a rotary phone and a plaster crustacean in his *Lobster Telephone*. In a collaborative effort with Luis Bunuel, this man filmed a couple being buried in sand and a woman's eye getting cut out. In a painting by this man, ants crawl over a clock in the bottom left corner. For 10 points, name this Spaniard behind *Un Chien Andalou*, a Surrealist artist better known for paintings like *The Persistence of Memory*.

ANSWER: Salvador Dali [accept answers of Luis Bunuel before "Phillippe"]

3. The speaker of Frost's "Acquainted with the Night" proclaims *this* thing "was neither wrong nor right". John Keats addresses the Grecian urn as the "foster child of Silence" and *this* figure. In the last stanza of "Fern Hill," the speaker notes that *this* thing "held [him] green and dying." This word appears last in the title of a poem whose speaker asks his subjects to "gather ye rosebuds while ye may" so that the virgins "make much of" it. The speaker of another poem hears this figure's "winged chariot hurrying near." In "To His Coy Mistress," the speaker laments that he lacks "world enough" and *this*. For 10 points, name this figure often depicted as a "Father" holding a scythe.

ANSWER: time [or "Slow time" from the Grecian Urn clue]

4. Birbeck granules are found in cells in this organ. Pacinian corpuscles are localized to this organ, which, in infants, produces vernix caseosa. Merkel cell carcinoma and Langerhans cell histiocytosis affect this organ. Though not the kidneys, it is subdivided into sections named for Malpighi. An acid mantle surrounds it. The *stratum corneum* consists of cornified cells in this organ, which in humans is the site of desquamation. This organ houses sebaceous glands in humans. Keratinocytes constitute most of the epithelial tissue on the outer section of this organ. For 10 points, name this large organ serving as defense against pathogens, consisting of the dermis and epidermis.

ANSWER: the skin

5. This empire's military included commanders called noyans, and was made up of divisions of 10,000 soldiers called *tumen*. Archers in this empire introduced a thumb ring on a composite recurved bow. This force used human shields in a tactic called *kharash*. Their light "suicide" cavalry were called the mangudai. This empire, which lost to the Mamluks at Ain Jalut, notoriously flung the bodies of plague-infested corpses with their counterweight trebuchets, spreading the Black Death. Legendarily, this empire's forces drank the milk of the horses that they rode on. They failed to invade Japan due to *kamikaze*. For 10 points, name this huge land empire led by *khans* such as Genghis.

ANSWER: Mongol Empire [or the Mongols; or the Golden Horde; or the il-Khanate]

6. One of this composer's works, commissioned and premiered by Eleanor Steber, opens with the words "It has become that time of evening when people sit on their porches, rocking gently and talking gently." Another of his works written in arch form primarily uses the unorthodox 4/2 time signature; that work opens with a soft B-flat in the violins. He used a James Agee essay as the basis for his *Knoxville: Summer of 1915*. This composer is best known for a work, originally the second movement of his string quartet, named for its tempo marking and broadcast on the radio after FDR's death. For 10 points, name this composer of *Adagio for Strings*.

ANSWER: Samuel Barber

7. (Note to moderator: Be very, very emphatic with the phrase “In 2012” in the following question.)

The Tascon List attempted to recall this politician, who formed the PSUV party in his home country. This baseball prodigy led riots during the Caracazo. In 2012, this politician defeated Henrique Capriles in a presidential election. This man suggested that a rival country had developed a biological weapon after Cristina Fernandez was misdiagnosed with cancer. This man complained that a podium at the UN stunk of sulfur after George W. Bush had spoken at it. He spent several months in Cuba, possibly comatose, before returning to his home country in early 2013 to die. For 10 points, name this leader who was succeeded by Nicolas Maduro as president of Venezuela.

ANSWER: Hugo Rafael **Chavez** Frias

8. Motifs in one of this author’s novels include street lamps and ribbons, which stop appearing after the protagonist sees that his now-elderly lover has white hair. Another novel by this writer details an agricultural fair at Yonville in real time. In that novel, the protagonist attends *Lucia di Lammermoor* with a man who works as a “health doctor” because he is not good enough to be a real doctor. This author wrote a novel in which Marie Arnoux carries on an affair with Frederic Moreau. His most famous character, married to Charles, romances Leon and Rodolphe before drinking arsenic. For 10 points, name this author of *A Sentimental Education* and *Madame Bovary*.

ANSWER: Gustave **Flaubert**

9. Though not synchotrons, one type of these devices makes use of wigglers to accelerate electrons through a transverse magnetic field. In 2012, physicists used one of these devices to create particles which were successfully quantum teleported 150 kilometers away. These devices use optical pumping to bring the system to a short-lived state which decays into the most populated metastable state. That’s called population inversion. These devices, which come in a free-electron type, are used to create a transmission hologram. They create coherent photons through stimulated emission. For 10 points, name these devices which can make a monochromatic beam of light.

ANSWER: **lasers** [or **light amplification by the stimulated emission of radiation**; or **masers** before “light”]

10. Fort Gibson was originally located at this place. Castle Garden was replaced by this location. A controversial practice implemented here was asking people how much money they were carrying. This place’s namesake “special” refers to the myth that it forced people to change their names. The National Origins Act limited the operation of this place during the 1920s. An analog to this place located in San Francisco Bay was called Angel Island. This place, which today is mostly claimed by New Jersey, rejected about 2% of those who entered it. For 10 points, name this island abutting the Statue of Liberty, where many immigrants to the US were processed.

ANSWER: **Ellis** Island

11. This man’s image is notably *absent* from a temple that Aeneas visits in Book VI of the *Aeneid*, because casting it in gold caused the sculptor so much grief. This man’s mother was Naucrate, and his brother Iapyx was Aeneas’ personal healer during the Trojan War. Heracles renamed the island of Doliche for this man and buried his body. This man’s *father* was recognized at Cocalus’ court because he threaded a shell by tying the thread to an ant’s leg. This man’s death came after his father gave Ariadne a spool of thread. He drowned in the sea now bearing his name after his feathers began to melt. For 10 points, name this son of Daedalus who flew too close to the Sun.

ANSWER: **Icarus**

12. Mud Island is located in this city. In a hotel in this city, ducks live in a palace on the roof and march down to a fountain in the lobby twice a day. The National Civil Rights Museum is at the Lorraine Motel in this city. An attraction in this city has a green gate with musical notes written on it. Sun Studio is located in this city, where WC Handy first got his start playing blues music. This seat of Shelby County is the largest city on the Mississippi River. The world’s largest barbecue competition is located in this city each May. Popular tourist attractions in this city include the Peabody Hotel, Beale Street, and the estate of Elvis Presley, Graceland. For 10 points, name this largest city in Tennessee.

ANSWER: **Memphis**, Tennessee

13. The Kleene star is a superset of data of this type. In FORTRAN, Hollerith notation is used to identify this type of data. Regular expressions are used to match this type of data. Splitting these up based on a delimiter is called tokenizing. In C, these are classified as either “byte” or “wide.” When these are placed directly into source code, they are called “literals”. In Java, a plus sign is used to concatenate two of these together. Data of this type is often set off by quotation marks. This type of data can be represented as an array of char data. Parsing is used specifically on this kind of data, which may include prefixes and suffixes. For 10 points, name this type of data which represents text.

ANSWER: **strings** [or **characters**; prompt on “text” or same-knowledge equivalents before mention]

14. This story describes a “barleycorn” of a king whose “florid”, “untrammelled” ideas had only been sharpened by progressive Latin neighbors. The author of this story also wrote “The Griffin and the Minor Canon.” At its conclusion, one character in this story silently signals to the right. One title character experiences sleepless nights after she discovers the secrets of the doors, debating what to tell her death-sentenced lover. This story’s last line is, “And so I leave it with all of you. Which came out of the opened door?” then the title phrase. For 10 points, name this short story by Frank R. Stockton about a choice between a ferocious feline and a beautiful woman.

ANSWER: “The **Lady or the Tiger**” [do not accept “The Lady and the Tiger”]

15. One side in this campaign decided to march northwards because of the Lossberg Study. This campaign was revived a year later in Operation Little Saturn, part of a continuation called Case Blue. This campaign’s goal was to establish a line of demarcation stretching from Arkhangelsk to Astrakhan. Georgy Zhukov led the victors during its turning point, which came during a harsh winter. This campaign is named after a red-bearded Holy Roman Emperor, and effectively ended the Molotov-Ribbentrop Pact. It ended after the bloody Siege of Stalingrad. For 10 points, name this 1941 operation in which Hitler failed to take a nation led by Joseph Stalin.

ANSWER: Operation **Barbarossa** [or Fall **Barbarossa**; or Case **Barbarossa**; or **Germany’s invasion of the USSR**; or **Hitler’s invasion of Soviet Russia** or similar answers before the end]

16. A man of this profession wears a black suit and rests his chin in a Luke Fildes painting. In two portraits of a man with this job, two books appear in front of the subject, who holds a foxglove plant and has his right hand up to his chin. This job is held by a man standing in a lecture hall at Jefferson College as four men work on the central scene. This job of Vincent van Gogh’s Paul Gachet is also the occupation of a man observed by students with goatees in a Rembrandt work depicting an “anatomy lesson”. For 10 points, name this job of Nicolaes Tulp and Samuel Gross, who is seen performing femur surgery in Thomas Eakins’ painting of his “Clinic.”

ANSWER: **doctor** [or **physician**, **surgeon**, etc.]

17. A fast in this religion on the thirteenth day of the new month commemorates a certain deity’s “favorite day.” In one holiday for this religion, sisters tie strings around their brothers’ right wrists to protect them from evil. Another festival in this religion commemorates a man who survived being burned alive while sitting on the lap of a woman who couldn’t be hurt by fire. Members of this religion light lanterns to celebrate a figure’s return from the forest after 17 years. *Pujas* are celebrated by members of this faith, who throw colored powder on each other during Holi. For 10 points, name this religion which also celebrates a festival of lights called Diwali and venerates Vishnu and Shiva.

ANSWER: **Hinduism**

18. Hydrocarbons are ordered based on the “adiabatic” temperature at which this condition occurs. According to the NFPA rating system, the red number represents susceptibility to this condition. A common test for either the presence of hydrogen gas or oxygen gas involves introducing this condition. Atomic emission spectroscopy relies on the emission spectra produced when this is introduced to various metals, causing a red color for lithium and a yellow color for sodium; that’s called its namesake “test”. Robert Bunsen invented a lab device used to create it. For 10 points, name this form of ionized plasma that results from combustion reactions.

ANSWER: **fire** [or **flame**; or **combusting**; or **combustion**; or being **flammable**; or being near a **fire**; or **glowing splint**; or **burning** splint; or really anything in that vicinity that has something to do with ignition]

19. In Act III of one of this man's plays, a character jokes she's never met a man whose "origin was a Terminus." In another of his plays, a businessman gives his love a diamond brooch and stops building canals in Argentina. One of this author's characters suspects her husband of having an affair with Mrs. Erlynne, and accidentally leaves the title object with Lord Darlington. This playwright of *An Ideal Husband* also wrote about the love between Gwendolyn Fairfax and Jack Worthing, who instead goes by a punny name. For 10 points, name this Irish playwright of *Lady Windermere's Fan* and *The Importance of Being Earnest*.

ANSWER: Oscar Wilde

20. This man received many letters from Tushratta, king of the Mitanni, after his father married Tushratta's daughter Tadukhipa. The Coregency Stela depicts this man with his queen, who may have been the mysterious "feminine ruler" who succeeded him. A circle with rays of light coming out in all directions symbolizes this ruler, who moved his capital into the middle of the desert at Amarna. Horemheb annihilated most of the changes implemented by this leader. This man's wife is the subject of a famous bust, while his son's tomb was discovered by Howard Carter. For 10 points, name this husband of Nefertiti, father of Tut, and pharaoh who introduced monotheism to Egypt.

ANSWER: Akhenaten [or Amenhotep IV; or close phonetic equivalents]

**The Round is Now Over. Continue Only if There is a Tie.**

21. One character participating in this conflict compares his inability to flee to a "little finger [committing] a revolution from a hand". Another character participating in this conflict compares man to a "murderin' angel". Frank Kennedy dies during this conflict, the subject of Allen Tate's most famous poem and Michael Shaara's *The Killer Angels*. During this war, a young character is entrusted to be a flag bearer and witnesses the death of Jim Conklin. Scarlett O'Hara struggles to function during this war in *Gone With the Wind*. For 10 points, name this war faced by Henry Fleming in Stephen Crane's *The Red Badge of Courage*.

ANSWER: American Civil War

## Round 12 Bonuses

1. When writing electron configurations, it's customary to write a member of this group of elements in brackets first. For 10 points each:

[10] Name these elements which have full valence shells, which results in their low reactivities.

ANSWER: **noble gases** [or Group **18**; or Group **8**]

[10] Electron configurations start misbehaving for transition metals, which are the first to have ground-state electrons in these orbitals. Copper loses an electron from a 4s orbital to fill one of these orbitals.

ANSWER: **d** orbitals [or **3d** orbitals]

[10] In fact, rather than an eight-electron octet rule, transition metals follow a rule named for this many electrons, the sum of their d electrons and ligand electrons. This rule actually almost never holds true.

ANSWER: **18**-electron rule

2. Answer the following about Indian Ocean trade in the fifteenth century. For 10 points each:

[10] This European power controlled much of the Indian Ocean, occupying ports in Macao and Goa, after its sailors like Vasco da Gama found the first sea route to India. Henry the Navigator hailed from it.

ANSWER: Kingdom of **Portugal**

[10] Muslim merchants mostly got around the ocean by using these ships. They had a characteristic triangular lateen sail and could carry surprisingly heavy loads.

ANSWER: **dhow**s

[10] China opened up the Indian Ocean to trade too, mostly thanks to this Muslim eunuch and merchant whose grand treasure ship expeditions ended once the Ming Dynasty closed itself off.

ANSWER: **Zheng He** [or **Cheng Ho**; or similar phonetics]

3. Answer some questions about "Bad Hemingway," for 10 points each:

[10] In the winner of the 2002 "Bad Hemingway" contest, Kathryn Bold substituted the word "Flea" for the second noun in the title of this Hemingway novella, in which Santiago catches a marlin.

ANSWER: "The **Old Man and the Sea**" [accept "The **Old Man and the Flea**"]

[10] In another "Bad Hemingway" story, this character buys a "big, two-parted liver," a reference to the Hemingway story "Big Two-Hearted River," which features this protagonist. This man also appears in "The Killers."

ANSWER: **Nick Adams** [accept either name]

[10] The "Bad Hemingway" contest requires at least a mention of Harry's, a bar of choice for Hemingway. A bar was also the setting of this Hemingway short story, in which the old, deaf, male protagonist seeks the title dwelling.

ANSWER: "A **Clean, Well-Lighted Place**"

4. When he was slain in his sleep by the treacherous Guttorm, this man got up in bed and threw his sword at Guttorm, slicing the assassin in half. For 10 points each:

[10] Name this hero who manages to marry into the Nibelung family via Gudrun, even though he probably still had a relationship with Brunhild.

ANSWER: **Sigurd** [or **Siegfried**]

[10] Sigurd rescues Brunhild from Odin after she failed the god in this duty. These shield maidens in Norse myth were responsible for picking mortals to save on the battlefield and bring to Valhalla.

ANSWER: **valkyries**

[10] At the end of the *Volsung Saga*, Gudrun is forced to marry this man, but she feeds him her children and forces this king to drink their blood. This real-life figure legendarily died of a nosebleed.

ANSWER: **Attila** the Hun [or King **Atli**]

5. The naturalistic fallacy arises when an object is described as being *this* based solely on its natural properties. For 10 points each:

[10] Name this philosophical concept . Philosophers often debate over the dichotomy between this concept and evil.  
ANSWER: goodness

[10] This philosopher attempts to supersede the debate over morality by characterizing truth as a woman in his book *Beyond Good and Evil*.

ANSWER: Friedrich Nietzsche

[10] In *Beyond Good and Evil*, Nietzsche claims people can achieve the “will to power” by escaping a morality named for these figures. Unlike the morality which values strength, this type of morality values humility.

ANSWER: slave morality

6. The author of this work claimed that “one night givest back the hopes of his youth, and hands washed pure of blood”. For 10 points each:

[10] Name this nonfiction account written in the 19th century about the author’s addiction to a namesake drug.

ANSWER: *Confessions of an English Opium Eater*

[10] When he wasn’t whining about his drug problems in *Confessions of an English Opium Eater*, Thomas de Quincey found time to write *On the Knocking of the Gate* in this Shakespearean tragedy, “the Scottish play”.

ANSWER: *Macbeth*

[10] This author translated the *Confessions of an English Opium Eater* into French. He’s best-known for his decadent collection *Les Fleurs du Mal*.

ANSWER: Charles Baudelaire

7. This function’s derivative equals one for positive numbers, negative one for negative numbers, and is undefined at zero. For 10 points each:

[10] Name this function which returns the distance a number is from zero on a number line.

ANSWER: absolute value function

[10] If the absolute value of the common ratio of one of these series is greater than one, then the series diverges. The infinite sum of these series equals the first term over one minus the ratio.

ANSWER: geometric series

[10] If a series converges, but its absolute value does not, then it is said to have this kind of convergence. An example is the alternating harmonic series.

ANSWER: conditional convergence

8. During this event, captives were forced to eat “slabber sauce” to mask the terrible taste of horse beans. For 10 points each:

[10] Name this brutal leg of triangular trade. During it, future slaves were packed tightly under boats as they were transported to the Americas to be sold.

ANSWER: Middle Passage

[10] Sometimes, slaves revolted on the Middle Passage; the most prominent mutiny happened aboard this ship in 1839. In the subsequent court case, the slaves were ruled to be free after being defended by John Quincy Adams.

ANSWER: *La* *Amistad*

[10] In 1789, this freed slave from Benin wrote an “interesting narrative” of his time on the Middle Passage, which includes an account of his life with his master, Michael Henry Pascal.

ANSWER: Olaudah Equiano

9. Name these homes of mass transit systems, for 10 points each:

[10] The world’s first subway system was this city’s “Tube”, or Underground, which connects places like Kennington, King’s Cross, and Wembley.

ANSWER: London, England

[10] The first American subway was in this city, whose other touristy attractions include Faneuil Hall and the Freedom Trail.

ANSWER: Boston, Massachusetts

[10] The world’s longest subway and the one with the second-most stations after New York’s, is found in this Asian city. Bukhansan abuts this capital city on the Han River.

ANSWER: Seoul, South Korea

10. Two of these animals named Fulang Chang and Caimito de Guayabal inspired Frida Kahlo's self-portrait with four of them. For 10 points each:

[10] Name these types of animals. One of them is tied to a leash and stares at the Seine in an 1884 pointillist painting.

ANSWER: monkey [accept primate or capuchin or spider monkey or chimpanzee]

[10] The aforementioned monkey on a leash appears in *A Sunday Afternoon on the Island of La Grande Jatte*, the masterpiece of this French artist.

ANSWER: Georges-Pierre Seurat

[10] Two monkeys appear in the jungle in a work by this other French artist of *The Dream*. A lion stands over a dormant woman wearing a striped dress in his *The Sleeping Gypsy*.

ANSWER: Henri Rousseau

11. The protagonist of this play misses a point-blank shot at Serebryakov and ends up giving back a bottle of morphine he stole from Astrov. For 10 points each:

[10] Name this play, a reworking of the author's earlier work *The Wood Demon*.

ANSWER: Uncle Vanya [or Dyada Vanya]

[10] *Uncle Vanya* was written by this Russian playwright who also wrote *The Cherry Orchard* and *The Seagull*.

ANSWER: Anton Chekhov

[10] Serebryakov's kindly daughter in *Uncle Vanya* has this name. This is also the first name of Marmeladov's daughter, who tells Raskolnikov the story of Lazarus, in *Crime and Punishment*.

ANSWER: Sonya

12. In the 19th century, this country was the home of the betyar Sandor Rozsa, a legendary highwayman. For 10 points each:

[10] Name this European country founded by the Magyars. The *Ausgleich* of 1867 made it part of a dual monarchy with Austria.

ANSWER: Hungary

[10] Like a lot of other European countries in the 19th century, Hungarians protested against Austrian dominance during this "Year of Revolution."

ANSWER: 1848

[10] This Hungarian revolutionary called for the removal of the "dead hand" of Habsburg rule at the Diet of 1847. His uprising, however, was put down by Russia's intervening in Austria.

ANSWER: Lajos Kossuth

13. Britten wrote the *Nocturnal after John Dowland* for this instrument. For 10 points each:

[10] Name this instrument which was performed by Jose Ferrer and the gypsy Django Reinhardt.

ANSWER: classical guitar

[10] The *Concierto de Aranjuez*, one of the best-known compositions for classical guitar, is a work by this composer.

ANSWER: Joaquín Rodrigo

[10] Joaquín Rodrigo was a composer from this country, the subject of Isaac Albeniz's piano suite *Iberia*. Other composers from this country include Manuel de Falla, who hailed from Madrid.

ANSWER: Kingdom of Spain

14. This principle is a result of time's symmetry according to Noether's theorem. For 10 points each:

[10] Name this principle expressed by the First Law of Thermodynamics and Kirchoff's Loop Rule. It prohibits the existence of a perpetual motion device.

ANSWER: conservation of energy [or same-knowledge equivalents like "energy is conserved" or "energy cannot be created or destroyed"; do not accept specific forms of energy]

[10] This equation directly follows from conservation of energy. It can be obtained by requiring that kinetic energy, potential energy, and work sum to a constant, then dividing by volume.

ANSWER: Bernoulli's principle/equation

[10] All fluids will lose energy due to friction, however, unless they have a zero value for this quantity, such as in a superfluid. This quantity appears in the denominator of the Reynolds number.

ANSWER: viscosity

15. This character goes to Madagascar and Siberia in a sequel published the same year as his first adventures. For 10 points each:

[10] Name this character who, in the first novel, purchases a plantation in Brazil after he escapes from Arab pirates.

ANSWER: Robinson Crusoe

[10] *Robinson Crusoe* was written by this English novelist.

ANSWER: Daniel Defoe

[10] This character dies in *The Second Adventures of Robinson Crusoe*. Crusoe rescues this captive from the Carib Indians and converts him to Christianity.

ANSWER: Man Friday

16. Answer the following about reasons that late-night comedians loved Mitt Romney, oh so much. For 10 points each:

[10] Pundits had a field day after Romney claimed that *this percent* of people would vote for Obama no matter what, because they are dependent on the government.

ANSWER: 47%

[10] Romney never heard the end of it for a gaffe during the second debate, when he used this four-word phrase to describe what he was brought when he asked for female candidates for his cabinet while Governor of Massachusetts.

ANSWER: "binders full of women"

[10] In response to Romney's claim that the US Navy had shrunk in size since WWI, President Obama noted in the third debate, "Well, Governor, we also have fewer" of these two things. Name both.

ANSWER: horses and bayonets [or bayonets and horses]

17. This part of Phineas Gage's brain was destroyed by a railroad spike, causing Gage to start cursing randomly. For 10 points each:

[10] Name this part of the brain which deals with reasoning, emotions, and personality. This lobe is adjacent to the parietal and temporal lobes.

ANSWER: frontal lobe

[10] One area of the frontal lobe is named for this 19th-century French neurologist who worked with a patient unable to speak. That inability to produce speech is his namesake "aphasia."

ANSWER: Paul Broca [accept Broca's area or Broca's aphasia]

[10] Broca's patient with aphasia was given this nickname because it was the only word he could say. Broca's autopsy on this patient revealed part of his frontal lobe was damaged.

ANSWER: "Tan" [accept Leborgne]



18. Pat Buchanan would later lambast the speaker of this phrase, which was originally written by Peggy Noonan. For 10 points each:

[10] Name this six-word phrase spoken at a Republican National Convention, which would turn out to be a lie after the passage of the Gramm-Rudman-Hollings Balanced Budget Act.

ANSWER: **Read my lips: no new taxes** [accept no other answer]

[10] “Read my lips: no new taxes” was a gaffe by this 41st US President that would cost him in his reelection campaign against Bill Clinton. His son later became president.

ANSWER: George **Herbert Walker Bush** [accept **Bush Sr.** or **Daddy Bush** and other similar answers; prompt on “Bush”; prompt on “George Bush”]

[10] Before ascending to Vice President under Ronald Reagan, George H.W. Bush served in this post, also held by men like Allen Dulles and George J. Tenet.

ANSWER: **Director** of **Central Intelligence** [accept **Director** of the **CIA**; or **head** of the **CIA** and other same-knowledge equivalents]

19. This figure raises his right arm in a statue of him located at the center of a lake in Hyderabad, India. For 10 points each:

[10] Name this religious figure. Plump, smiling statues of him are scattered throughout China and India.

ANSWER: the **Buddha** [or Siddhartha **Gautama**]

[10] This Buddhist Khmer-style temple complex in Cambodia is located on an artificial island surrounded by a moat. A large collection of flowers is located at the center of this complex.

ANSWER: **Angkor Wat**

[10] A Buddha at the Grand Palace in Bangkok is named for this material. The “Chalk” and “Duke of Devonshire” are two of these gemstones, which describe a necklace of parks in Boston designed by Frederick Law Olmstead.

ANSWER: **emeralds**

20. Auxins have important physiological effects on plants. For 10 points each:

[10] They promote the dominance of this direction of growth for a plant. The central plant stem grows in this direction from a namesake meristem, and competes with lateral growth for light and nutrients.

ANSWER: **apical** dominance [or **apical** direction; or **apical** meristem]

[10] Auxins work by pumping these particles outside the cell, decreasing the pH and forcing expansin protein to enlarge the cell wall. These particles diffuse through ATP synthase in the electron-transport chain during respiration.

ANSWER: **protons**

[10] Auxins promote tropisms, in which plants move toward stimuli such as light. The analog in the animal kingdom is this phenomenon, the directional response to a stimulus, in contrast to a *kinesis*.

ANSWER: **taxis**

**The Round is Now Over.**

21. Little Johnny is in chemistry lab and desperately, desperately, needs your help. For 10 points each:

[10] He knows that he should mix his chemicals in one of these flasks, which have a conical base but straighten near the top. They should be less prone to spillage than round-bottom flasks.

ANSWER: **Erlenmeyer** flasks

[10] Unfortunately for Johnny, he spills the product in the Erlenmeyer flask into a 500 mL beaker filled with water. The organic compound immediately appears yellow as one of these insoluble solids.

ANSWER: **precipitates**

[10] Johnny then mistakes his organic product for an ionic compound containing this polyatomic ion, which is yellow in color. The acid of these anions oxidizes alcohols, since they have a transition metal in a +6 oxidation state.

ANSWER: **chromates** [or **CrO4** 2-; do not accept or prompt on “dichromates”]