## BHSAT XX (2011): This One Doesn't Bilow, We Promise! Written by Y. Student Academic Competitions

## **Round 9 Tossups**

- 1. A play from this country ends when the denizens of the title village refuse to say which of them murdered Commander Guzman, and get pardoned by the king; that play is *The Sheep Well*. Rafael Alberti and Pedro Salinas helped formed a literary group on the 300th anniversary of the death of this country's poet Luis de Góngora, the Generation of '27. That group also included the author of a "rural trilogy" that includes *Blood Wedding* and *The House of Bernarda Alba*. For 10 points, name this country of origin of Lope de Vega and Federico Garcia Lorca, as well as Tirso de Molina, who introduced the character of Don Juan to written literature in *The Trickster of Seville*. ANSWER: **Spain** [accept **España**]
- 2. This man's odd beliefs included that one of his arms was longer than the other. The leader of the Romney expedition, his brigade lost at Kernstown, but he won at Cross Keys and Port Republic as part of his Valley Campaign. A former instructor at the Virginia Military Institute, he got one arm amputated, contracted pneumonia, and died after being shot by his own troops at Chancellorsville. For 10 points, name this Confederate general whose performance at First Manassas, or Bull Run, earned him his bulwark-like nickname.

  ANSWER: Thomas Jonathan "Stonewall" **Jackson**
- 3. The Tale of Two Brothers revolves around this figure and his younger brother, Bet. One story suggests that this god branded Set with a hot iron when Set took on the form of a leopard to attack this deity's father, thus giving the leopard its spots. In some versions, when that father, Osiris, was slain and dismembered, this male deity reassembled and embalmed the body, making him the patron deity of mummification. He encourages Ammit, a crocodile-like beast, to devour hearts found to weigh less than the feather of Ma'at in the Book of the Dead. For 10 points, what Egyptian god of the dead is often depicted with a jackal's head?

ANSWER: Anubis [or Inpu; or Anup]

- 4. The tondo above the central portion of this painting contains putti with banners bearing phrases such as "Divine Inspiration" and "To Each What is Due". This painting hangs in the *Stanza della Segnatura* opposite another work by its artist, *La Disputa*. Bramante was a possible model for a figure on the right who bends down on the right to teach children math with a compass. A figure at the bottom in purple writing at a desk is thought to be a portrait of Michelangelo as Heraclitus. For 10 points, this what fresco by Raphael featuring figures like Plato and Aristotle? ANSWER: *The School of Athens* [or *Scuola d'Atene*]
- 5. For large numbers, it's often estimated by n log n minus n, or by the square root of 2 pi n times quantity n over e to the n; those approximations are named for Stirling. Its value at one-half is the square root of pi when extended to complex numbers by the gamma function. It gives the number of permutations, or ways to order a list of n elements, and its additive analogue is the nth triangular number. For 10 points, name this function which gives the product of all integers from 1 to a given number, and is symbolized by an exclamation mark.

ANSWER: n <u>factorial</u> [accept <u>gamma</u> function until "gamma" is read; prompt "exclamation mark" until read; hope that no one attempts to say <u>!</u> using a palatal click or a surprised expression or something]

6. This man's showed that people who have seen each other, but never interacted, are more likely to introduce themselves in unfamiliar situations, known as the "familiar stranger" effect. He also dropped letters addressed to "Friends of the Nazi Party" and Children's Hospitals on the ground to see which would be mailed. In addition to the Lost Letter experiment and the Small World experiment, he may be better known for an experiment presented as a learning task between "teachers" and "students" that required subjects to deliver electric shocks. For 10 points, name this psychologist best known for his namesake experiment on obedience to authority.

ANSWER: Stanley Milgram

- 7. At one point, the protagonist of this movie states that garlic bread is his favorite food, but is shocked to hear that "bread makes you fat." After this conversation, he reminisces about his ex-girlfriend Natalie. Later in the film, he is saved by the Vegan Police after engaging in a "Bass Battle" with Natalie's new boyfriend, Todd. In addition to Todd, the titular protagonist fights characters such as Roxanne Richter, Matthew Patel, and Gideon Graves during his quest to win the heart of Ramona Flowers. For 10 points, name this 2010 film featuring the Seven Evil Exes, based on graphic novels about the videogame-addled title character played by Michael Cera.

  ANSWER: Scott Pilgrim Versus the World [Do not prompt on partial title "Scott Pilgrim"]
- 8. One speaker in this work claims "You gave me hyacinths first a year ago/they called me the hyacinth girl" which precedes a section that repeats the phrase "Hurry Up Please, Its Time" which appears in the section *A Game of Chess*. Other sections in this work include *What the Thunder Said* and *The Fire Sermon*, and the epigraph acknowledges the influence of Ezra Pound on the author. Ending with a quote from the Upanishads, "Shantih, Shantih," and beginning with the line "April is the cruelest month", this is, for 10 points, what long poem by T.S. Eliot

ANSWER: The Waste Land

- 9. Germaine of Foix [FWAH] succeeded one of these two monarchs; the other signed the second and third treaties of Blois. One agreement between these two monarchs was known by the phrase "tanto monta, monta tanto." They restructured the Holy Brotherhood, and ended a long era initiated by Pelayo when they forced the Nasrid ruler Boabdil to surrender to them. The parents of Joanna the Mad, these rulers hired Tomas de Torquemada and issued the Alhambra Decree after Granada surrendered to them. For 10 points, name this king-queen pair of Catholics who expelled Muslims and Jews during the Spanish Inquisition, the sponsors of Christopher Columbus.

  ANSWER: Ferdinand and Isabella of Spain [accept Ferdinand II of Aragon and Isabella I of Castille, accept Ferdinand V of Castille and León, or Ferdinand the Catholic, or Fernando for Ferdinand; prompt "the Catholic Monarchs/Kings" or "Los Reyes Católicos;" accept Isabella alone until "two monarchs" is read]
- 10. This artist painted a mural wall that stands by the swimming pool of Marcel Breuer's Stillman House. One of his sculptures simultaneously protrudes from the floor of and hangs from the ceiling of the Hart Senate Building; that work is *Mountains and Clouds*. A fifty-three foot tall depiction of the title bird, in this artist's namesake shade of red, stands in Chicago's Federal Plaza. Liquid metal flows from his sculpture protesting Franco's seizure of the Almaden mines. Those works are *Flamingo* and *Mercury Fountain*. For 10 points, name this American sculptor of *Lobster Trap and Fish Tail*, known for his "stabiles" and "mobiles".

  ANSWER: Alexander Calder
- 11. One type of this compound is found in osteoid trabeculae, and a derivative of this compound found in porifera is called spongin. Deficient synthesis of Type IV of this compound can cause Alport syndrome, and absence of types I and III can lead to Ehlers-Danlos syndrome. Rich in proline and hydroxyproline, every third amino acid in this protein is glycine, and it's typically found in a coiled-coil triple-helix configuration. One cofactor in its synthesis is vitamin C, and transparent versions of its "fibers" make up the cornea. For 10 points, identify this most abundant protein in mammals, found in tendons and cartilage.

ANSWER: collagen

- 12. This man claimed "subjectivity is truth, and truth subjectivity" in his *Concluding Unscientific Postscript to Philosophical Fragments*, and another work prescribies "reconciling the finite with the infinite." to resolve three types of despair; that book, written under the pseudonym Anti-Climacus, is *The Sickness Unto Death.*. He contrasted the knights of infinite resignation and of faith in a work analyzing Abraham's sacrifice of Isaac. For 10 points, name this early existentialist, a philosopher and author of *Fear and Trembling* and *Either-Or* who hailed from Denmark. ANSWER: Søren Aabye Kierkegaard
- 13. One character in this work pays his way through college with humiliating janitorial work. Ewing Klipspringer lives at that character's house, and is known as "the boarder." One character in this work shows the narrator that none of the title character's books have been cut yet. That character, "owl eyes", is one of only three to attend a funeral at the end of the book. Other appearances of eyes in this work include those of Dr. T. J. Eckleburg, who looks out over the Valley of Ashes. Jordan Baker may have cheated in a golf tournament, and Myrtle Wilson is killed in a car driven by Daisy Buchanan. For 10 points, Nick Carraway narrates what novel by F. Scott Fitzgerald? ANSWER: *The Great Gatsby*

14. A sideshow to this conflict involved one party supporting Henry of Trastámara against Peter of Castille in the War of Two Peters. One monarch married Catherine after the Treaty of Troyes was signed during this conflict. It included a naval battle at Sluys, and another battle during it included the use of wooden stakes to trip horses and a muddy battlefield. Starting due to the extinction of the direct Capetian line, it included the siege of Orléans, the battle of Crecy, and the use of longbowmen at Agincourt. For 10 points, name this set of conflicts whose heroes included Henry V, Edward the Black Prince and Joan of Arc, lasting from 1337 to 1453.

ANSWER: <u>Hundred Years' War</u> [accept <u>Guerre de cent ans</u>; accept <u>War of Two Peters</u> until it's read]

15. Though not New York or any city in Montana or Antarctica, this city features a foot bridge to Theodore Roosevelt Island. This city's Lambda Rising bookstore recently closed near its gay-friendly neighborhood of Dupont Circle. Benjamin Latrobe designed the building at the center of this city, whose other important buildings include Dumbarton Oaks. It is located right next to the site of military funerals at Arlington Cemetery. Its four divisions include Northwest and Southeast and the Tidal Basin is near its Watergate Hotel. For 10 points, name this city on the Potomac and Anacostia rivers between Maryland and Virginia.

ANSWER: Washington, District of Columbia [accept either underlined part; prompt "DC"]

16. Leon Chua theorized this property's current-dependent analogue in 1971; in 2008, scientists at HP used thin films of titanium dioxide to make a two-terminal device governed by that "memory" variety of it. Devices named for Carey Foster or Kelvin can accurately measure small values of it using a setup like the Wheatstone bridge. This real analogue of reactance and real part of impedance quantifies thermal dissipation of energy, and equals the quotient of voltage and current. For 10 points, identify this quantity in circuit elements governed by Ohm's Law and measured in ohms, the inverse of electrical conductance.

ANSWER: electrical <u>resistance</u> [prompt "R;" prompt "memristance" or "memory resistance" until "memory variety" is read]

17. Huike was the second patriarch of this subdiscipline, which claims its origins lie in a wordless event during which the disciple Mahakasyapa attained nirvana, the Flower Sermon. The founder of this movement was a Persian or Tamil monk named Bodhidharma, who travelled to China along the Silk Road. Unlike esoteric schools such as Shingon, this movement downplays scriptural study in favor of shocking its practitioners into brief enlightenment called *satori*. It also uses statements such as "What is the sound of one hand clapping," koans. For 10 points, name this branch of Buddhism popular in Japan.

ANSWER: Zen Buddhism [accept Chan or Thien or Seon]

18. He wrote a string quartet in E-flat that derives its nickname from the starting and stopping at the end of its rondo finale, so that listeners don't realize when the piece actually finishes. In addition to the string quartet "The Joke," he wrote a choral work whose overture depicts Chaos. That piece also features a sudden C major chord on the words "and there was light." In one of his symphonies, a quiet C-major theme is punctuated by a sudden fortissimo chord in the whole orchestra, including timpani. For 10 points, name this Austrian composer of *The Creation* and the "Surprise" Symphony, sometimes called the "Father of the Symphony."

ANSWER: Franz Joseph Haydn

19. This war included the low-casualty battle of Motien Pass and the battle of Ulsan, at which the cruiser *Gromoboi* suffered heavy damage. Its early battles included one at the Yalu River, and its late campaign at Mukden followed a siege of the warm water port of Port Arthur. Revolting civilians of this war's loser suffered Bloody Sunday. Resolved by the Treaty of Portsmouth, for which Theodore Roosevelt won the Nobel Peace Prize, it included the battle of Tsushima Strait, a huge victory for Admiral Heihachiro Togo. For 10 points, name this 1904-5 war in which the navy of the *tsar* was decimated by the Land of the Rising Sun.

ANSWER Russo-Japanese war

20. Organic compounds containing these materials include the horribly toxic PCBs and PFCAs. The heaviest one, the rarest element in Earth's crust, is produced by decay of radium and polonium. A detector which turns starches blue, Lugol's reagent, is a potassium salt of one of these elements; that element, when bonded to silver, can be used in cloud seeding. The lightest member of this group was the first discovered to form bonds with xenon, and it is the only group to include solid, liquid, and gas elements at standard temperature and pressure. As free radicals, they deplete the ozone layer. For 10 points, name this group of elements including astatine, iodine, and chlorine, the column to the left of noble gases on the periodic table.

ANSWER: <u>halogens</u> [accept <u>group 17</u> or <u>family 17</u>; prompt "group 7A" or "family 7A"]

TB. In one novel by this author, Henry Morton aids the Covenanters, whose tombs are engraved by the title character. In another, Jeanie travels to London to try to clear the name of her sister, Effie Deans. Those novels are both entries in his series, *Tales of My Landlord - Old Mortality* and *The Heart of Midlothian*. The title character of another of his novels is a highwayman with real name MacGregor Campbell, while the title character of yet another fights with Bois-Guilbert on behalf of Rebecca and wins the hand of Lady Rowena. For 10 points, name this author of *Rob Roy* and *Ivanhoe*.

ANSWER: Walter Scott

## **Round 9 Bonuses**

1. Sections of this novel are titled "Winter Memories" and "The White Mulberry Tree". For 10 points each:

[10] This is what novel about the marriage between two Swedish immigrants in Nebraska: Alexandra Bergson and Carl Lindstrum.

ANSWER: O Pioneers!

[10] *O Pioneers!* is by this American author of *Death Comes for the Archbishop* and a novel about Jim Burden's relationship with the title Bohemian immigrant, *My Antonia*.

ANSWER: Willa Cather

[10] Thea Kronborg, a native of the fictional Moonstone, Colorado, attempts to start an operatic career in this Willa Cather novel.

ANSWER: The Song of the Lark

2. Answer some questions about the presidency of Dwight D. Eisenhower, for 10 points each.

[10] While campaigning, Eisenhower pledged to end this war, which included MacArthur's landing at Inchon.

ANSWER: The Korean War

[10] This Californian gave the "Checkers" speech about his dog before becoming Eisenhower's vice-president. His sweaty appearance helped John F. Kennedy look better during their 1960 debates.

ANSWER: Richard Nixon

[10] This man opposed the 1956 invasions of Egypt during the Suez crisis, and helped his brother's CIA overthrow governments in Iran and Guatemala as Eisenhower's first Secretary of State.

ANSWER: **J**ohn Foster **Dulles** [do not accept "Allen Dulles," his brother]

3. His highly dissonant *Piano Variations* are based on the four-note cell E-C-D-sharp-C-sharp. For 10 points each:

[10] Name this American composer better known for a ballet that was choreographed by Martha Graham and features the Shaker melody "The Gift to Be Simple," *Appalachian Spring*.

ANSWER: Aaron Copland

[10] This ballet by Copland ends with a section based on the folk tune "Bonaparte's Retreat," the "Hoe-Down."

ANSWER: <u>Rodeo</u>

[10] Copland wrote this piece for brass and percussion at the request of Eugene Goossens and the Cincinnati Symphony Orchestra, as part of a series of commissions intended to foster patriotism during World War II.

ANSWER: Fanfare for the Common Man

4. Name the following mythological birds for 10 points each.

[10] The Russian zhar-ptitsa, the Egyptian bennu bird, the Chinese fenghuang, and the Persian simurgh are all similar to this Greek bird, which is associated with fire and shares its name with Achilles' tutor from the *Iliad*.

ANSWER: phoenix

[10] In Buddhism, this word refers to a race of intelligent bird creatures that battle snakelike creatures called nagas. In Hinduism, it refers in particular to the winged mount of Vishnu, who attempted to steal amrita from the gods.

ANSWER: garuda

[10] According to many Pacific Northwest Native American tribes, this large bird battled an evil whale, dropping it into the water from the sky. It was often depicted with horns and teeth, and is frequently found on totem poles.

ANSWER: thunderbird

5. This stochastic phenomenon is characterized by a uniform power density. For 10 points each:

[10] Identify this type of noise often produced by electronic equipment during thermal fluctuations.

ANSWER: white noise

[10] Red noise, also known as random walk noise, is produced by this process. First observed in pollen grains by its namesake, it is the jittery movement of particles suspended in fluid.

ANSWER: **Brownian** motion [accept "pedesis"]

[10] Feynman's "Brownian ratchet," an impossible devic that extracts energy from random processes, updates this thought experiment whose title entity separates molecules of a gas into hot and cold chambers.

ANSWER: Maxwell's demon

- 6. This movie's characters include the grey-skinned scary guy Shan Yu and an army captain named Li Shang. For 10 points each:
- [10] Name this animated film in which the title girl is accompanied by the little red dragon Mushu and dresses up like a boy so she can get to down business and defeat...the Huns.

ANSWER: Mulan

[10] This pop star's singles include a cover of the *Mulan* song "Reflection," "Dirrty," and "Ain't No Other Man." According to other songs, she is "a genie in a bottle" and is "beautiful no matter what they say".

ANSWER: Christina María Aguilera

[10] Christina Aguilera, like Britney Spears and Justin Timberlake, is a veteran of this Disney children's program. Its theme song was a march written by Jimmie Dodd, and several teenagers performed as part of it or something. ANSWER: [The All-New] Mickey Mouse Club [accept Mouseketeers]

7. Home to the Al Khalifa royal family, it connects to the mainland by the King Fahd Causeway. For 10 points each: [10] Name this Persian Gulf state where discrimination towards the religious majority has led to recent violence.

ANSWER: Kingdom of Bahrain

[10] This other member of the Gulf Cooperation Council is located at the eastern end of the Arabian Peninsula. It is generally considered the most politically stable gulf state, and protesters here carried signs supporting the Sultan, rather than calling for his ouster. It is not to be confused with its neighbor, Yemen.

ANSWER: Sultanate of Oman

[10] Oman possesses the Musandam Governorate on one side of this strategically important strait that separates the Persian Gulf from the Arabian Sea. Over twenty percent of the world's oil is transported through this strait.

ANSWER: Strait of Hormuz

- 8. Answer some questions about nineteenth-century American poetry, for 10 points each.
- [10] This "meditation on death" by William Cullen Bryant instructs the reader to "join the innumerable caravan that moves to that mysterious realm."

ANSWER: "Thanatopsis"

[10] This reclusive female poet wrote "Because I Could Not Stop for Death," "A Narrow Fellow in the Grass," and "Success Is Counted Sweetest."

ANSWER: Emily Dickinson

[10] Walt Whitman writes that "the armies that I love engirth me, and I engirth them" in this poem that also claims with respect to the title entity "that of the male is perfect, and that of the female is perfect."

ANSWER: "I Sing the Body Electric"

- 9. It may be found in the Contarelli Chapel alongside paintings of the "inspiration" and "martyrdom" of the title character. For 10 points each:
- [10] A ray of light falls on the title character, who is busy counting coins, as Jesus points to him in this painting. ANSWER: *The Calling of St. Matthew*
- [10] *The Calling of St. Matthew* is by this Italian Baroque painter who showed blood spewing from one title character's neck as an old woman looks on in his *Judith Beheading Holofernes*.

ANSWER: Michelangelo Merisi da Caravaggio

[10] There are two versions of this Caravaggio painting of a man in tan holding out the palm of his hand to the title white-bonneted woman.

ANSWER: The Fortune Teller

- 10. Ezra and Nehemiah helped construct it. For 10 points each:
- [10] Name this building whose only standing remnant is the Western Wall, modeled after a previously-destroyed construction of Solomon in which Kohens and Levites made sacrifices.

ANSWER: Second Temple

[10] Hidden by a veil, this inner, gold-decked chamber of the Temple was the most sacred Jewish site. The only one allowed to enter this chamber was the High Priest of the Kohanim, who could himself enter only on Yom Kippur.

ANSWER: Holy of Holies [accept Kodesh haKodashim]

[10] The First and Second Temples were both destroyed on this Hebrew calendar date, the "saddest day in Jewish history." Observant Jews fast and undertake traditional mourning customs in remembrance of tragedy on this day. ANSWER: **Tisha b'Av** [or the **Ninth of Av**]

- 11. Answer these questions about South American leaders, for 10 points each:
- [10] This Argentine president of the mid-20th century formulated the "Third Way" foreign policy. Succeeded by his third wife Isabel, he was supported by the working-class "descamisados" and his second wife Eva.

ANSWER: Juan [Domingo] Perón

[10] The CIA helped Augusto Pinochet's military overthrow the democratically-elected Salvador Allende in this South American country. It won the War of the Pacific and got independence under Bernardo O'Higgins.

ANSWER: Chile

[10] This suicidal Brazilian president called himself "Father of the Poor" despite reinforcing the power of landed sugar and coffee barons during his anti-communist authoritarian regime, the Estado Novo.

ANSWER: Getúlio [Dornelles] Vargas

12. Eta Aquilae was the first of these stars to be discovered, and Polaris is the closest one to us. For 10 points each:

[10] Identify this type of variable stars whose luminosity changes are periodic, allowing them to be used as highly precise standard candles.

ANSWER: Cepheid variables

[10] Observations of Cepheids in distant galaxies can be used to determine the namesake constant in this law, which shows that more distant galaxies recede faster than closer ones as the universe expands.

ANSWER: Hubble's law

[10] One explanation of the Cepheids' period-luminosity relation is this British physicist's namesake "valve". He also studied a 1919 eclipse to help validate general relativity and names an upper limit on a stable star's luminosity.

ANSWER: Sir Arthur Stanley **Eddington** 

- 13. One character in this novel, Syme, is vaporized for being too intelligent. For 10 points each:
- [10] Name this novel, which takes place in Oceania, sees the protagonist tricked by Charrington, who poses as an antiques-shop keeper. The novel opens on "a bright cold day in April."

ANSWER: Nineteen Eighty-Four

[10] This British author wrote 1984, along with other works such as "Shooting an Elephant" and Animal Farm.

ANSWER: George Orwell or Eric Arthur Blair

[10] This essay written by Orwell criticizes the flaws of overly technical or melodramatic writing, advocating plain English prose and offering six general guidelines for writing.

ANSWER: "Politics and the English Language"

14. The word "quiz" is itself a free one, while "bowling" contains a free one and a bound one. For 10 points each:

[10] Identify these smallest meaningful linguistic units of words, which are themselves composed of phonemes.

ANSWER: morphemes

[10] Languages in this family tend to extensively agglutinate morphemes. This language family is mostly distributed across southern India and includes members such as Tamil, Telugu, and Kannada.

ANSWER: <u>Dravidian</u> languages [or <u>Dravida</u> languages]

[10] Most Dravidian languages have three of these, while French has two, and English has none. By this feature of nouns in some language, some are classified as feminine, others as masculine, and others still possibly as neuter.

ANSWER: grammatical gender

- 15. Daniel Dennett wrote a book on this man's "Dangerous Idea," and Herbert Spencer espoused a "social" version of his theories. For 10 points each,
- [10] Name this thinker, whose refutation of William Paley's watchmaker analogy was crucial to philosophy according to a recent book titled *The Blind Watchmaker*. He wrote *The Descent of Man*.

ANSWER: Charles Darwin

[10] *The Blind Watchmaker* is a work by this author of *The God Delusion* and *The Selfish Gene*. Most famous as an evolutionary biologist, he also developed the idea of the meme, a unit of cultural evolution.

ANSWER: Richard Dawkins

[10] Paley's watchmaker analogy is an example of this type of argument for the existence of God, which claims that the universe has an end or purpose that could not arise without an intelligent creator.

ANSWER: **teleological** argument [or argument from **design**]

16. For 10 points each, answer these questions about Germany's role in World War I:

[10] In August 1914, Germany defeated the Russian Second Army at this battle on the same site as a 1410 defeat for the Teutonic Knights also known as the Battle of Grunwald.

ANSWER: [Second] Battle of **Tannenberg** 

[10] This winner at Tannenberg became joint commander of the German forces with Erich von Ludendorff, and appointed Adolf Hitler to succeed him as Chancellor after the war. He names a zeppelin.

ANSWER: Paul von Hindenburg

[10] This decades-old grand strategy involved sweeping into France through Belgium on the event of a two-front war with France and Russia. Its breakdown under Moltke's command at the Marne led to trench warfare.

ANSWER: The Schlieffen plan

17. He collaborated with the composer and arranger Gil Evans on an album that includes a track based on Rodrigo's *Concierto de Aranjuez*. For 10 points each:

[10] Name this jazz trumpeter and bandleader who released the albums Birth of the Cool and Sketches of Spain.

ANSWER: Miles Davis

[10] Davis helped develop modal jazz in this 1959 album that features Cannonball Adderley and John Coltrane on saxophone. Its tracks include "So What" and "Flamenco Sketches."

ANSWER: Kind of Blue

[10] This pianist and member of Davis's so-called "second great quintet" wrote the funky "Cantaloupe Island" in addition to "Watermelon Man" and "Maiden Voyage."

ANSWER: Herbie Hancock

18. For 10 points each, answer some questions about equipment found in science labs.

[10] This cylindrical metal device produces a gas flame with inner and outer cones.

**ANSWER: Bunsen burner** 

[10] Often as simple as two Styrofoam cups and a thermometer, these devices, whose strong-walled "bomb" type are used for combustion reactions, often measure a reaction's change in temperature or enthalpy.

ANSWER: reaction calorimeters

[10] This well-ventilated chamber, with a glass wall covering the majority of its window, ensures that vaporizing gases in an open container escape up into the device instead of out into the room.

ANSWER: fume **hood** [accept fume **cupboard**]

19. In one novel by this author, Giambattista Bodoni cannot remember any of his life, but can remember every book that he has read. That is *The Mysterious Flame of Queen Loana*. For 10 points each:

[10] Name this Italian semiotician and author who wrote about William of Baskerville's investigation of a murder in a monastery in *The Name of the Rose*.

ANSWER: Umberto Eco

[10] This other living Italian author wrote of The Reader and The Other Reader in If on a winter's night, a traveler.

ANSWER: Italo Calvino

[10] Diomira and Isidora are among the title entities described by Marco Polo to Kubla Khan in this Calvino novel.

ANSWER: Invisible Cities

20. For 10 points each, name these ancient law-givers.

[10] This Mesopotamian king included the lex talionis on the stone stele promulgating his law code in the 1700s BC.

ANSWER: **Hammurabi** [accept **'Ammurapi**]

[10] This Athenian archon's constitutional reforms, followed up by Cleisthenes, overturned the Draconian system.

ANSWER: Solon

[10] Machiavelli and Rousseau both admired this eighth-century B.C. Spartan, who established the *agoge* and two kings as part of his militaristic legal reforms.

ANSWER: Lycurgus [accept Lukoûrgos]

- TB. This substance is produced in the choroid plexus, and it is removed for medical testing by a needle during a lumbar puncture, or "spinal tap." For 10 points each:
- [10] First, name this fluid that surrounds the central nervous system and cushions the brain.

ANSWER: cerebrospinal fluid [accept CSF]

- [10] Though usually clear, CSF can turn yellow from this family of cerebral membrane infections. Vaccines for its meningococcal form, which causes a dark red rash, are recommended before you go live in barracks or dormitories. ANSWER: meningitis
- [10] Andrew Wakefield's claims that vaccines might lead to this social developmental condition are wholly fraudulent. It can involve repetitive motions or delayed speech learning, and Asperger's syndrome is one type. ANSWER: <a href="mailto:autism"><u>autism</u></a> [accept <u>autistic</u> spectrum disorder; prompt "Pervasive development disorder Not Otherwise Specified" or "PDD"]