

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

Round 10 Tossups

1. The protagonist of this opera teases an admirer in an aria in which she tells him of her plans to visit her friend Lillas Pastia and drink manzanilla. Before getting into a knife fight with another woman, she throws that lead tenor a flower, who sings about it in his “La fleur que tu m’avais jetée,” or his Flower Song. The two best-known arias from this opera, “Votre toast” and “L’amour est un oiseau rebelle,” are commonly known as the Toreador Song and the Habanera. The title character spurns Don José for the bullfighter Escamillo in, for 10 points, what opera about a Spanish gypsy girl by Georges Bizet?

ANSWER: Carmen

2. Members of this religion are encouraged to maintain a year’s supply of food in homes known as “the Lord’s storehouse,” and their dietary restrictions follow those outlined in the Word of Wisdom. Auxiliary texts central to this religion include *The Doctrine and Covenants* and the *Pearl of Great Price*. After a riot in Illinois, which killed their founder, this religious group underwent a “pioneer” phase. Believing that their namesake book was transcribed from gold tablets buried in upstate New York, for 10 points, name this offshoot of Christianity, founded by Joseph Smith, whose most famous members include Ken Jennings and Brigham Young.

ANSWER: Mormonism (accept Latter-Day Saints movement)

3. This NBA team reached the playoffs in 1992, led by then-head coach Kevin Loughery and stars Steve Smith, Glen Rice, and Rony Seikaly, but was swept 3-0 in the first round by Michael Jordan and the Chicago Bulls. In 1995, this team jettisoned Rice, Smith, and Seikaly, and over the next three years added to its roster such key players as Dan Majerle, Voshon Lenard, Jamal Mashburn, Tim Hardaway, and Alonzo Mourning. Later winning its first championship in 2006 under then-head coach Pat Riley and star center Shaquille O’Neal, for 10 points, name this Florida team now led by Chris Bosh, Dwyane Wade, and noted ex-Cleveland player LeBron James.

ANSWER: Miami Heat [prompt “Miami”]

4. Buryats are the people who are indigenous to this body’s largest island. Dauria is a mountainous region to the east of this body of water. Golomyankas are species of fish endemic to this body of water, and another species here is the nerpa. The aforementioned largest island is Olkhon; the first European to reach this body of water was Kurbat Ivanov. The rivers that drain into this lake include the Selenga and Barguzin Rivers, while the Angara River is this lake’s sole outlet. For 10 points, name the world’s second most voluminous lake after the Caspian Sea, which is also the world’s deepest lake, and is located in Siberia.

ANSWER: Lake Baikal

5. Unlike the older *iroha* ordering, the modern “fifty sounds” ordering of this language’s syllabary is based on Sanskrit, to which it is unrelated. All nouns in this language have neither gender nor true grammatical number. It uses three classes of relative honorifics, including *kenjogo*. Together with languages such as Amami, this language is considered to be an isolate. It uses two *manyogana*-derived syllabaries and a logography; they are *katakana* and *hiragana*, and *kanji*, respectively. For 10 points, identify this language mostly spoken on an archipelago that includes Hokkaido and Honshu, from which English has borrowed “tycoon” and “sushi.”

ANSWER: Japanese language [or Nihongo; or Nippongo]

6. It was recently shown that eight, and not four, atoms of it make up its solid “red” allotrope; that solid, and this element’s liquid form, are highly paramagnetic. The only non-carbon atom in the rings of furan, one form of it absorbs ultraviolet light and is depleted by free radicals. This element is the primary nonmetallic component of rust. For 10 points, name this element discovered by Priestley, whose triatomic form is called ozone and which makes up 20% of the atmosphere.

ANSWER: oxygen [prompt “O”; do not prompt “O2” or “O3” or silly things like that]

7. This man was a secretary to his father when that father wrote a namesake report opposing the Simon Commission. He described a “tryst with destiny” in his inaugural address; in a speech about five pillars of his country’s relationship with China, this man coined the term “non-alignment”. He opposed the Muslim League led by Muhammad Ali Jinnah, which obtained its goal one day into this man’s most prominent office with his country’s partition by religion. For 10 points, name this father of Indira Gandhi and associate of the unrelated Mohandas Gandhi, the first prime minister of India.

ANSWER: Jawaharlal Nehru

8. This author wrote a travelogue of his experiences in the title country, including his time spent with the painter Johann Tischbein, in *Italian Journey*. A trilogy of bildungsroman about a character who adopts Mignon pertains to that title character’s “theatrical calling”, “journeyman years”, and “apprenticeship”; that character is Wilhelm Meister. The title character of his most famous novel commits suicide over his unrequited love for Lotte, spawning suicides around Europe. The title character of his most famous play impregnates Gretchen after making a deal with Mephistopheles. For 10 points, name this German Romantic author of *The Sorrows of Young Werther* and *Faust*.

ANSWER: Johann Wolfgang von Goethe

9. In one thought experiment, this substance has a different chemical formula from, but the exact same empirical properties as, the substance XYZ; that is Hillary Putnam’s Twin Earth argument. In Plato’s *Timaeus*, Socrates equates particles of this substance with icosahedra, and it was proposed as the first principle by a pre-Socratic philosopher from Miletus named Thales. The phlegmatic humor is associated with this element. For 10 points, name this member of the four classical elements into which, according to Socrates, Atlantis sank.

ANSWER: water [accept H₂O; do not accept “XYZ” at any point]

10. Three oranges sit on the table to the left of one figure in this painting. Hanging from a bedpost on the right is a small broom, and a pair of clogs sit at the feet of the figure on the left. In between the two central figures, stands a small, brown dog. The entire scene of this painting can be seen reflected back in a mirror hanging on the back-center of the wall. The figure on the right is dressed in green and visibly pregnant. Her hand is held by the figure on the left, who sports a large black hat. For 10 points, this is what painting celebrating the marriage of the title Italian merchant by Jan Van Eyck?

ANSWER: *The* Arnolfini Wedding [or Arnolfini Marriage; or Arnolfini Double Portrait; or Portrait of Giovanni Arnolfini and his Wife]

11. This property’s invariance for objects deformed along an axis is governed by the stretch rule. This property’s value at the center of mass is used with the square of perpendicular distance to determine it at other points via the parallel axis theorem. Found by integrating the distance from the axis of rotation squared times the mass density, it is equal to torque divided by angular momentum squared. Symbolized I, for 10 points, identify this rotational analogue of mass, which determines how much an object resists changes in its rotation.

ANSWER: mass moment of inertia

12. This civilization’s earliest known ruler was Pithana, and it adopted the Hurrian religion’s storm god, variously called Tarhunt or Teshub. This non-Egyptian people with Old, Middle, and New Kingdoms had rulers such as Mursili II and Suppiluliuma I; the state of Carchemish was called neo-THIS after the Sea People aided their collapse in the 11th century BCE. Centered around the capital city of Hattusa, they signed the oldest-known written treaty after their ruler Hattusili II led several thousand chariots into battle against Rameses II of Egypt at Kadesh. For 10 points, name this Bronze Age civilization of modern-day Turkey, which is distinct from the Hyksos.

ANSWER: Hittites

13. One rowdy twin in this work dresses up in a tiger suit during a carnival and is accidentally buried in his brother’s grave. Another character spends his last days making little ruby-eyed golden fish, and remembers his father taking him to discover ice. After machine-gun fire kills 3000 people in this book, a rainstorm lasts for almost five years. Its main family includes Remedios the Beauty, who floats to heaven, and Ursula, the wife of patriarch José Arcadio Buendía. For 10 points, name this work of magical realism set in Macondo, written by Gabriel García Márquez.

ANSWER: One Hundred Years of Solitude [or Cien años de soledad]

14. A book of spells named for this deity was supposedly buried in the tomb of Prince Neferkaptah. The creator of the Ogdoad cosmology, his consort, depicted in a leopard skin, was named Seshat, and the Greeks fused him with Hermes, making his cult center Hermopolis. Originally a lunar deity, he gave Isis the magic word needed to revive Osiris and he arbitrated between Horus and Set. This god also protected Ra from the serpent Apep and weighed the hearts of the dead against the feather of Ma'at. Responsible for astronomy and math, he was occasionally portrayed as a baboon. For 10 points, name this Egyptian god of wisdom, usually depicted with the head of an ibis.

ANSWER: **Thoth** of **Djehuty** [accept either]

15. This composer wrote a piece for piano and orchestra based on a plainchant melody also found in Berlioz's *Symphonie fantastique*. That piece, a "paraphrase on 'Dies Irae,'" is entitled *Totentanz*. One of his orchestral pieces was inspired by a poem by Alphonse de Lamartine. That piece, *Les préludes*, is his third example of a genre that he is often credited with inventing, the symphonic poem. His virtuosic piano pieces include twelve *Transcendental Etudes*, as well as a set of pieces whose *lassan* and *friska* sections are inspired by gypsy music. For 10 points, name this nineteenth-century piano virtuoso and composer of nineteen *Hungarian Rhapsodies*.

ANSWER: Franz **Liszt**

16. One process affecting this substance uses the Pasha and Droscha proteins, creates a complex called RISC, and uses the Argonaute and Dicer enzymes for the cleavage and bypass pathways. That namesake "interference" silences this substance which makes up the hammerhead enzyme. Its introns are removed by splicing, two subunits of it exist in the ribosome, and it makes up a cloverleaf-shaped molecule with an anticodon region. It always contains uracil rather than thymine in its nucleotides. For 10 points, name this usually single-stranded molecule whose "messenger" form, from which proteins are synthesized, is transcribed from and similar to DNA.

ANSWER: **RNA** [accept **ribonucleic acid**; accept **messenger RNA** or **mRNA** until "hammerhead" is read]

17. During this war, a ship named *Java* was destroyed off the coast of Brazil, three months after the *Guerriere* and the *HMS Macedonian* were beaten. The invaded country lost to a force situated on Tangier Island which used rockets at Bladensburg. Its bloodiest battle was Lundy's Lane, and Oliver Hazard Perry's ships won at its Battle of Lake Erie. Agitated for by "War Hawks" dissatisfied with naval impressment, during it Pakenham lost at New Orleans three weeks after its technical end via the Treaty of Ghent. For 10 points, name this conflict during which Francis Scott Key wrote "The Star-Spangled Banner" and Washington DC was burnt by the British under James Madison's tenure.

ANSWER: War of **1812**

18. One of his novels begins in 1949 soon after the death of the protagonist's grandfather when the protagonist chooses to leave the recently sold ranch instead of move into town. Another one of his novels begins with the unnamed protagonist meeting an enormous, hairless man inciting a mob to kill a preacher at a religious revival in east Texas. Another of this author's novel begins with Llewellyn Moss finding \$2.4 million in cash at a drug deal gone bad, while Sheriff Ed Tom Bell tries to protect him from hitman Anton Chigurh. For 10 points, those novels, *All the Pretty Horses*, *Blood Meridian*, and *No Country for Old Men*, were written by what author?

ANSWER: Cormac **McCarthy**

19. One victim in this event was Philip Fabricius. Instigated by Count Jindrich Thurn after a cessation order violated the Letter of Majesty from Rudolph II, its participants opposed the replacement of Matthias with the elected monarch Ferdinand II in their country. It almost killed Vilem Slavata and Jaroslav Martinitz, who claimed the Virgin Mary interceded for them and were saved from death by a pile of cow manure. For 10 points, name this incident which helped spark the Thirty Years' War, in which Protestants threw three Bohemian Catholic nobles out of a window.

ANSWER: Second **Defenestration of Prague**

20. The "mu" type of this property contains all examples of the "primitive" subtype; one non-primitive entity which cannot be expressed without this property is the Ackermann function. In computer science, tail calls can create one form of it, and divide-and-conquer algorithms such as the quicksort use it on large problems. Relying on a base case, examples of it in math include solutions to the Tower of Hanoi problem, the factorial, and the adding of two Fibonacci numbers to get the next one in sequence. For 10 points, name this form of iteration, by which a function calls back prior values of itself to generate new ones.

ANSWER: **recursion** [or **recursive** function; prompt **recursion** or **recursive** function]

TB. One character in this work throws a book at the protagonist, who is unjustly punished by being locked in the red room. The protagonist later receives an overly harsh punishment from the hypocritical Mr. Brocklehurst in another scene in this work. One character uses a game of charades to make the protagonist envious of Blanche Ingram. And at the end of the second book of this novel, it is revealed that Grace Poole is caretaker of the main male character's first wife, Bertha Mason. For 10 points, name this Romantic bildungsroman about the titular governess who falls in love with Edward Rochester, a work by Charlotte Brontë.

ANSWER: ***Jane Eyre***

Round 10 Bonuses

1. For 10 points each, answer these questions about Germanic invaders in late antiquity.

[10] This people sacked Rome in 455 AD and migrated through Gaul and Hispania into North Africa. Renaissance writers overhyped their destruction of culturally-valuable property and art.

ANSWER: **Vandals**

[10] Another Germanic group, the Alamanni, lost at Tolbiac to this Frankish king whose wife Clotilde persuaded him to convert to Catholicism. He founded the Merovingian dynasty.

ANSWER: **Clovis I**

[10] Sometimes believed to be the Eotenas or Frisians in the Finnesburg story within *Beowulf*, this people invaded Britain with two other groups. They settled in Kent, but likely assimilated into the Saxons on the Isle of Wight.

ANSWER: **Jutes** [accept **Iuti** or **Iutae**; prompt “Eucii”, “Eudoses,” or “Euthiones”]

2. Isomerism occurs when two different compounds have a common molecular formula. For 10 points each, answer some questions about it.

[10] Dextrose is an isomer of this common sugar, which bonds to fructose to form sucrose. It has formula C₆H₁₂O₆.

ANSWER: **D-glucose**

[10] In one type of isomerism, enantiomers have different values of this property, informally called “handedness,” since they are non-superimposable mirror images.

ANSWER: **chirality**

[10] This type of isomerism involves compounds whose atoms are bonded in a different sequence, unlike stereoisomers. In hydrocarbons, it often manifests as skeletal isomerism.

ANSWER: **structural** isomerism [accept “isomers” for “isomerism,” accept **constitutional** isomerism]

3. Name some characters from Don Quixote, for 10 points each.

[10] This farmer is lured by the promise of an *insula* to become Don Quixote’s squire.

ANSWER: **Sancho Panza** [accept either name alone]

[10] Don Quixote believes this woman to be his beloved lady, Dulcinea del Toboso. In fact, she is a simple peasant from his hometown.

ANSWER: **Aldonza Lorenzo** [accept either name alone]

[10] Don Quixote and Sancho Panza find this deranged nobleman in the Sierra Morena; the duke’s son Don Fernando fell in love with and stole his love, Lucinda. They are all eventually reunited at an inn.

ANSWER: **Cardenio**

4. They were formed during the Ordovician Period and were the tallest mountains on earth at the time. For 10 points each:

[10] Name this Eastern American mountain chain stretching from Alabama to Maine.

ANSWER: **Appalachian** Mountains

[10] This mountain is the highest point in Maine and is the center point of Baxter State Park. It is often considered the northern terminus of the Appalachian Mountains.

ANSWER: Mount **Katahdin**

[10] This Appalachian mountain is the tallest mountain east of the Mississippi. It is named after a University of North Carolina professor who measured its height accurately before falling off a nearby waterfall.

ANSWER: Mount **Mitchell**

5. Its four lowest layers include physiological, safety, and esteem types of the titular concept, for 10 points each:

[10] Name this system describing human motivations formulated by Abraham Maslow, primitive levels include food, water, and shelter, while higher up levels include respect, love, and confidence.

ANSWER: **hierarchy of needs**

[10] At the top of Maslow’s Hierarchy of needs is this level, Maslow studied “exemplary people” like Albert Einstein, and Frederick Douglass, and he described it as “becoming everything one is capable of becoming.”

ANSWER: **self-actualization**

[10] Maslow also investigated occurrences of these events, which he wrote about in *Religions, Values, and* them. Described as a transpersonal, uplifting event, a 2006 experiment induced them in a lab using psilocybin.

ANSWER: **peak experiences**

6. For 10 points each, answer some questions about an early modern war pitting France against basically everyone.
[10] This 1701 to 1713 war included the battles of Maplaquet and Blenheim after the insane Charles II died childless in the namesake country. Its North American theater is sometimes called Queen Anne's War.

ANSWER: **War of the Spanish Succession**

[10] Ceding Gibraltar and the *asiento* slave trade contract to Britain, this treaty established that Phillip V Bourbon would rule Spain but forever give up claims to France, ending the War of Spanish Succession.

ANSWER: Treaty [or Peace] of **Utrecht**

[10] A general with this surname became the Duke of Marlborough after winning at Blenheim. One of that man's descendants mismanaged the Gallipoli campaign and led the Conservative Party.

ANSWER: **Churchill** [John and Winston]

7. Answer the following about an Indian religion, for 10 points each.

[10] This religion's most sacred text is the Kalpa sutra, which relates the lives of its founders. This religion stresses that every living thing has a soul, causing its adherents to practice vegetarianism and ahimsa, or nonviolence.

ANSWER: **Jainism**

[10] The most important figure in Jainism is this 24th and last tirthankara, who formulated its central tenets. He was a prince who rejected wealth in favor of a life of asceticism.

ANSWER: **Mahavira** or **Vardhamana** or **Arugan**

[10] Like Hindus, Jains strive to attain this state of release from samsara, or the cycle of reincarnation. In Jain texts, it is used interchangeably with nirvana.

ANSWER: **Moksha**

8. A woman in the bottom left is covering her eyes with her hands and sits near a man with white sideburns and blood-stained hands. For 10 points each:

[10] Name this painting that depicts the title figure delivering a lecture on surgery at Jefferson Medical College.

ANSWER: *The* **Gross Clinic**

[10] *The Gross Clinic* is by this American artist who depicted the title sculptor creating his work "Water Nymph and Bittern" in *William Rush and His Model*.

ANSWER: Thomas **Eakins**

[10] Several nude men recline or stand on a rock and bathe in the water of the titular lake location of this Thomas Eakins painting.

ANSWER: *The* **Swimming Hole**

9. It has predicted gravitational lensing and precession of orbits. For 10 points each:

[10] Name this theory that describes curved space-time, proposed in 1916 by Einstein.

ANSWER: **general relativity** [prompt "relativity," do not prompt or accept "special relativity"]

[10] According to general relativity, this force causes space-time to curve. Its attraction between two masses is proportional to their distance squared, and its acceleration towards Earth's surface is 9.8 meters per second squared.

ANSWER: **gravity** [accept **gravitational** acceleration]

[10] This mathematical relation, often solved by metric tensors and written as one equation featuring the Ricci and stress-energy tensors, is a set of ten partial differential equations at the heart of general relativity.

ANSWER: **Einstein's field equations**

10. Aaron Diaz's "Dresden Codak" is written in this form, as is Zach Weiner's Saturday Morning Breakfast Cereal and Kate Beaton's "Hark: a Vagrant". For 10 points each:

[10] Name these serially-updated online creations.

ANSWER: **webcomics** [accept **Internet comic** strips or **online comic** strips]

[10] In this Randall Munroe webcomic of romance, sarcasm, math, and language, stick figures often discuss scientific problems or how the author gets rejected by Megan.

ANSWER: **xkcd**

[10] In one formulaic class of Internet comics, stick figures with this face perform impossible feats of physics, then ask "u mad?" or "problem?" It has an unnaturally wide smile and often leads Rageguy to say "FFFFFFFUUUUUUUUUUUUU".

ANSWER: **trollface** [accept **coolface**]

11. It concerns the Schlegels, the Wilcoxes, and the Basts. For 10 points each:

[10] Name this novel in which the title property is bequeathed to Margaret even though Henry burns the note his wife writes bequeathing it to her.

ANSWER: Howard's End

[10] Name the author of that novel, who used its most famous line, *Only connect!*, as the epitaph of his headstone. He also wrote *A Passage to India*.

ANSWER: E. M. Forster

[10] In this first Forster novel, Lilia Herriton falls in love with Gion Carella, who is much younger, while she is in Tuscany.

ANSWER: Where Angels Fear to Tread

12. Quine wrote a paper rejecting the analytic/synthetic distinction titled "Two Dogmas of" this concept, while Locke advocated this approach. For 10 points each,

[10] Name this school of epistemology, which claims that knowledge comes from sensory perception or experience, and is often contrasted with rationalism. It places emphasis on making *a posteriori* judgments.

ANSWER: empiricism or empirical reasoning

[10] The biggest anti-empiricist was this idealist Irish bishop who claimed that "to be is to be perceived." He expounded his crackpottery in *A Treatise Concerning the Principles of Human Knowledge* and *Three Dialogues Between Hylas and Philonous*.

ANSWER: Bishop George Berkeley (pronounced "Barklee")

[10] Berkeley shares the idealism label with this 19th century German, who discussed the "master/slave dialectic" in his *Phenomenology of Spirit*. His so-called "Young" followers included Ludwig Feuerbach and Marx.

ANSWER: Georg Wilhelm Friedrich Hegel

13. During this non-Chinese region's Three Kingdoms period, the Silla, Baekje, and Goguryeo kingdoms ruled it. For 10 points each:

[10] Name this peninsula annexed by the Japanese empire from 1910 to 1945, currently divided along the 38th Parallel demilitarized zone between Kim Jong-Il and Lee Myung-Bak.

ANSWER: Korean Peninsula [accept Hanguk; prompt "Joseon" but don't let teams know it's promptable unless they say it]

[10] This dynasty, whose kings included Sejong the Great, ruled a unified Korea from 1392 until shortly before Japan's annexation.

ANSWER: Joseon dynasty [or Kingdom of Great Joseon; accept Choson or Chosun]

[10] The Joseon admiral Yi Sun-Sin resisted a 1598 Japanese invasion with help from a few of these craft at Noryang Point. These bulky, roofed vehicles were decorated with a dragon head which could release smoke.

ANSWER: turtle ships [accept turtle boats; accept kobukson or gobukseon]

14. This composition contains a movement that represents science with a fugue whose subject uses all twelve chromatic pitches. For 10 points each:

[10] Name this tone poem inspired by a text by Nietzsche, which opens with a famous C-G-C trumpet call.

ANSWER: Also sprach Zarathustra, op. 30 [or Thus Spake Zarathustra]

[10] This German composed *Also sprach Zarathustra*, as well as *Death and Transfiguration*, *Ein Heldenleben*, and the operas *Elektra* and *Der Rosenkavalier*.

ANSWER: Richard Strauss

[10] Strauss also wrote a tone poem depicting the "Merry Pranks" and eventual execution of this German folk hero.

ANSWER: Till Eulenspiegel

15. Everyone loves stats. Answer these questions about measurements of variability in statistics, for 10 points each.

[10] In a set of data points, this measure of central tendency is the value that occurs most frequently.

ANSWER: mode

[10] This common measure of variability is the square root of the variance. Symbolized sigma, it shows how far data points tend to fall from the mean. About 68 percent of the normal distribution is within one of them from the mean.

ANSWER: standard deviation

[10] This quantity is a measure of how asymmetric a distribution is. For a distribution whose mean is smaller than its median, this quantity is negative, often described as the "right" type of this quantity.

ANSWER: skewness

16. Characters in this novel include the murderous Cathy Ames and the Chinese servant, Lee. For 10 points each:
[10] Name this novel which chronicles the lives of the Trask and Hamilton families in the Salinas Valley.

ANSWER: **East of Eden**

[10] This author of *In Dubious Battle*, *Cannery Row*, and *Grapes of Wrath* wrote *East of Eden*.

ANSWER: John **Steinbeck**

[10] In another Steinbeck novel, *Of Mice and Men*, this former boxer constantly wears a glove filled with vaseline. His flirtatious wife befriends Lennie and is accidentally killed by him.

ANSWER: **Curley**

17. It lived in the swamps of Lerna, and was only slain with the help of Iolaus, for 10 points each:

[10] Name this multi-headed beast, who grew two heads for each one cut off and possessed poisonous breath.

ANSWER: Lernaean **Hydra**

[10] The Lernaean Hydra was slain by this hero for his second labor. Other notable feats include killing the Nemean Lion, capturing Cerberus, and cleaning the Augean stables.

ANSWER: **Herakles** (accept **Hercules**)

[10] While fighting the Hydra, a wild type of this animal appears to antagonize Herakles. Herakles bashes it with his club until it dies, though Hera turned it into a constellation.

ANSWER: a **crab** [accept **Cancer**]

18. He escalated US involvement in Vietnam after claiming falsely that a second Gulf of Tonkin incident occurred. For 10 points each:

[10] Name this Texan who signed the Civil Rights Act of 1964 after succeeding John F. Kennedy.

ANSWER: Lyndon B. **Johnson**

[10] President Johnson's included the National Endowment for the Arts and Head Start in this domestic policy program aimed at eliminating poverty, renewing urban areas, and preventing crime.

ANSWER: the **Great Society**

[10] The Great Society included this program that provides health coverage to low-income families. In 2010 the FBI found an organized crime ring that defrauded this organization of 100 million dollars.

ANSWER: **Medicaid** [do not accept "Medicare"]

19. Identify some Alfred Hitchcock films, for 10 points each.

[10] Marion Crane stays in the Bates motel in this Hitchcock film, in which she is killed while taking a shower.

ANSWER: **Psycho**

[10] Cary Grant plays Roger Thornhill, who is mistaken for the secret agent George Kaplan in this film. It ends with a famous chase atop Mount Rushmore.

ANSWER: **North by Northwest**

[10] Hitchcock's personal favorite among his own films, this movie sees Charlie Newton suspect that her favorite uncle is actually a notorious serial killer, The Merry Widow Murderer. It was co-written by Thornton Wilder.

ANSWER: **Shadow of a Doubt**

20. Answer some questions about Czech novels and novelists, for 10 points each.

[10] This Czech playwright added a new word to all of our vocabulary with his play, *R.U.R.*, which introduced the word "robot". Captain van Toch discovers and exploits the title creatures in his *War with the Newts*.

ANSWER: Karel **Capek**

[10] This author of *The Book of Laughter and Forgetting* wrote about the neurosurgeon Tomas in *The Unbearable Lightness of Being*.

ANSWER: Milan **Kundera**

[10] Jaroslav Hasek wrote about one of these named Svejek in a twentieth-century picaresque. Edward Ashburnham is the title "good" one of these in a novel by Ford Madox Ford.

ANSWER: a good **soldier**

TB. Their somas, or cell bodies, have many extensions called dendrites, and the synapses between two of these cells use molecules such as acetylcholine and serotonin as transmitters. For 10 points each:

[10] Name these cells whose long axons transfer electrical signals through the brain and body.

ANSWER: neurons

[10] Schwann cells can surround axons with this fatty sheath whose gaps are called nodes of Ranvier. It allows for saltatory conduction of electrical impulses down the axon.

ANSWER: myelin sheath

[10] Sodium-potassium pumps and other voltage gates generate these excitations transmitted by neurons. They take the cell from negative 70 to positive 50 millivolts in a millisecond.

ANSWER: action potentials [do not prompt "potential" or "resting potential"]