

Bulldog High School Academic Tournament XXI (2012): Oh God, Not the Spider Cows!

Written by Yale Student Academic Competitions

Edited by Matt Jackson, with John Lawrence, Ashvin Srivatsa, and Sam Spaulding

Round 11 Tossups

1. The first twelve chapters of this work attempt to axiomatize human nature, beginning with Sense and Imagination, after a preface which describes life as a “motion of limbs” and coined the term “body politic.” Its second section writes that differences of strength and craft make men equally able to kill each other; that section, “Of the Commonwealth,” describes the “war of all against all,” a pre-covenant state of nature in which life is “solitary, poor, nasty, brutish, and short.” For 10 points, name this work of political philosophy advocating for a single absolute sovereign, by Thomas Hobbes.

ANSWER: Leviathan: *Or, the Matter, Forme, and Power of a Commonwealth Ecclesiastical and Civil* <SSp>

2. In the final movement of this composition, a central melody returns as a shrill solo for E-flat clarinet. A loud G-minor chord in this piece represents the blow of guillotine, after which pizzicato strings depict the protagonist’s severed head falling. That occurs at the end of an opium-induced dream depicted by this work’s movement “March to the Scaffold,” and the finale is a “Dream of a Witches’ Sabbath.” A melody that represents the protagonist’s beloved appears in every movement and is known as the *idée fixe*. For 10 points, name this programmatic symphony depicting an “episode in the life of an artist,” the best-known work of Hector Berlioz.

ANSWER: Symphonie fantastique: *Épisode de la vie d'un Artiste...en cinq parties* <KK>

3. This man’s character was based on John Nettleship, a chemistry professor at Wyedean School. Mary GrandPré gave this man a goatee, and he helps Katie Bell recover from the effects of a cursed necklace. At Spinner’s End, this son of Eileen Prince agrees to an Unbreakable Vow, and two of this man’s positions are taken over by Horace Slughorn. He teaches one student Occlumency, and brews the Wolfsbane Potion for Professor Lupin. For 10 points, name this man portrayed by Alan Rickman, the killer of Albus Dumbledore, and an antagonistic Hogwarts professor in the *Harry Potter* series.

ANSWER: Professor Severus Snape <MHH>

4. One character in this work is a nobleman who became an art collector for appearances but hates art, Count Pococurante. Vanderdendur steals the sheep that Cacambo and the protagonist of this work got while in Eldorado. The protagonist of this work meets an old woman with one buttock who helps him pursue the daughter of the baron of Thunder-ten-tronckh after his tutor is hanged by the Spanish Inquisition. For 10 points, the title character loves Cunegonde and believes Pangloss’ motto that this is “the best of all possible worlds” in what satirical novella by Voltaire?

ANSWER: Candide, or *Optimism* [or Candide, or the *Optimist*; or Candide, ou l’*Optimisme*] <JL>

5. A quantity named “delta-18” *this* measures the ratio of two isotopes of it. Due to the development of bubble overpotential, this substance, rather than chlorine, evolves at the anode in the electrolysis of a salt solution. Its molecular variety usually exists in a triplet state which is paramagnetic. It may be converted into an unusual two-atom reactive species with oxidation number minus one-half described by the term “super”. A triatomic allotrope of this element is depleted by stratospheric CFCs. For 10 points, name this strongly electron-accepting element whose diatomic form is the second most common gas in the atmosphere, and whose atomic number is 8.

ANSWER: oxygen [or dioxygen; or trioxygen; or O; or O₂; or O₃; accept superoxide; prompt on “ozone”]
<DStobierski/AS>

6. In the Confederate States of America, this practice was modified by the “twenty-negro law”. In *Cohen v. California*, an obscene message about this practice was protected by the First Amendment. General John Wool put down one demonstration against this practice, in which Irish laborers killed at least a dozen black men in a New York riot during the Civil War. A century later, protestors against this program would burn cards handed out to young adult men by the federal government. For 10 points, name this means, ended in 1973, by which the US obtained enough troops for the Civil War and the Vietnam War.

ANSWER: the draft [or conscription of soldiers; prompt “Selective Service”; accept appropriate word forms]
<MJ>

7. In Cornish folklore these creatures include Cormoran and Gogmagog, who died in early Britain. Two of these creatures floated in a hollow tree trunk to survive a flood of blood in Norse myth. Artemis killed twin beings of this type who attempted to climb a stack of mountains to Olympus. Angrboda was a female one who bore Fenrir. The cow-fed Ymir is a primal one of these creatures, and Jotunheim is home to the "frost" type which antagonizes the Norse gods. For 10 points, name these beings which, in a folktale, live above the magic beanstalk planted by Jack. ANSWER: giants [or frost giants; prompt "jotunn" or "jotnar"; do not accept "humans" or the like at any point] <MJ>

8. This figure is homeomorphic to the one-point compactification of the real numbers. One of these figures that intersects the midpoints of all the sides and the feet of all the altitudes of a triangle is called the "nine-point" one. Because the roots of unity fall on this figure, it can be parametrized by the sine and cosine functions. This figure maximizes the ratio of area to perimeter. In polar coordinates, it can be defined by the equation r equals a constant. The ability to draw one of these with any center and any size was one of Euclid's postulates. For 10 points, name this conic section with zero eccentricity, in which all points on it are equidistant from its center. ANSWER: circle [accept nine-point circle] <BH/AS>

9. Along with a bass, this instrument plays in the introduction to Miles Davis's "So What." That introduction was written by a player of this instrument, Gil Evans, and played by Bill Evans. James P. Johnson developed the "stride" style of playing this instrument. One musician on this instrument fronted a group that featured alto saxophonist Paul Desmond. That group's best-known piece, titled after its unusual time signature, is "Take Five." Another player of this instrument wrote "Straight, No Chaser" and "Round Midnight." For 10 points, name this instrument played by Dave Brubeck, Herbie Hancock, Art Tatum, and Thelonius Monk. ANSWER: piano [or pianoforte] <KK>

10. This ruler purchased Queen's House, which later became Buckingham Palace, and forced the passage of the Royal Marriages Act. One of this ruler's Prime Ministers, Spencer Perceval, was assassinated. This king's men put down the anti-Catholic Gordon riots, and his reign contained the Peterloo Massacre and the passage of the Corn Laws under his son's Regency. Britain won at Trafalgar under this king, who was served by Prime Minister Lord North and died while suffering porphyria, which caused him to go mad. For 10 points, name this British king fought against by the Marquis de Lafayette, who lost the American colonies. ANSWER: George III Hanover [or George William Frederick III] <SJW>

11. Drag modeled by this function of velocity arises from the energy need to move the medium, and is not analytically solvable in general. Potential energy extrema are all locally approximated by this type of function. The power dissipated by a resistor equals resistance times this function of current. This type of function is the potential of a system which is used to model diatomic molecules as harmonic oscillators. The denominator of the expression for gravitational force contains this function of distance. An object moving in uniform gravity follows this type of trajectory. For 10 points, identify this function, which is applied to velocity in the expression for kinetic energy. ANSWER: quadratic [or word forms; or parabolic or word forms; accept x squared; accept x to the second power (or "n" or anything instead of "x" in that answer); prompt on "polynomial"] <AS>

12. This poem is set in a place where "each separate dying ember wrought its ghost", and its speaker hears the footfalls of Seraphim who swing an "unseen censer". The speaker of this poem asks one figure in this poem whether "within the distant Aidenn" he shall clasp a certain "sainted maiden", and later tells his interlocutor to go back to "night's Plutonian shore". The speaker of this poem, who mourns his lost Lenore, hears a tapping at his chamber door at the opening of this poem, before the title creature perches on a bust of Pallas in, for 10 points, what poem about a bird that croaks "Nevermore", by Edgar Allan Poe? ANSWER: "The Raven" <JL>

13. This campaign ended after the Treaty of Ramla, and during it, Conrad of Montferrat was elected as king days before his assassination. This campaign avenged a loss at the Horns of Hattin, and during it the foreign armies won the Battle of Arsuf against Ayyubid forces. Leopold V of Austria and Philip II Augustus of France both left this enterprise after the successful siege of Acre. Drowning in a river killed its prospective leader, Holy Roman Emperor Frederick Barbarossa. For 10 points, name this military undertaking, in which leaders like Richard the Lionheart clashed with Saladin in the Holy Land. ANSWER: The Third Crusade [Accept The Kings' Crusade, prompt "The Crusades"] <SJW>

14. This artist did a series of paintings of dark streets illuminated by single street lamps standing at their centers. Another series of paintings by him show canvases standing in front of windows that show identical landscapes. This painter of *The Empire of Lights* and *The Human Condition* depicted a train coming out from above a mantelpiece in his *Time Transfixed*. One of his paintings has the caption “this is not a pipe”, while another depicts a man in a bowler hat with an apple obscuring his face. For 10 points, name this Belgian surrealist of *The Treachery of Images* and *The Son of Man*.

ANSWER: Rene Francois Ghislain **Magritte** <JL>

15. Christina Maslach’s objections helped conclude this event, and Gordon Bower raised concerns about the independent variables tracked by it. Its developer used eighteen coin flips at this experiment’s outset and reflected on it in his 2007 book *The Lucifer Effect*. One participant in reflective sunglasses began to use the name “John Wayne,” and it began with a “superintendent’s briefing” from Philip Zimbardo. For 10 points, name this 1971 psychology study, whose participants stayed in a converted classroom building where they internalized roles as guards and inmates at a California university.

ANSWER: **Stanford prison** experiment <SSp>

16. This city once had a shrine to the pagan god Hubal, a chief god among 360 idols. One sacred building in this city has brooms dipped in rosewater used to clean its interior twice a year. This city, once home to the Quraysh tribe, contains a sacred spring at the well of Zamzam near a building housing the Black Stone. A lunar calendar counting years after a flight from this city is now at year 1433 after the *hejira*. The Ka’aba is a boxlike shrine in, for 10 points, what city faced five times a day during prayer, the site of the *hajj* pilgrimage and holiest city in Islam?

ANSWER: **Mecca** [or **Makkah**] <MPG>

17. One work by this author follows the romance novelist Joan Foster’s affair with The Royal Porcupine and her career as a poet. This author of *Lady Oracle* retold the story of *The Odyssey* from the perspective of Odysseus’ wife in *The Penelopiad*, and described the trivia game Extinctathon, as played by Snowman, in *Oryx and Crake*. This writer’s most famous novel describes the dictatorial theocracy of Gilead, which oppresses women like Serena Joy, Moira, and Offred. For 10 points, name this Canadian author of *The Handmaid’s Tale*.

ANSWER: Margaret Eleanor **Atwood** <SJW>

18. Efforts against this condition were set back when the Jama’atu Nasril Islam group persuaded three Nigerian states to boycott efforts fighting it. This was the first condition for which a line of immortal tumor cells from Henrietta Lacks was used for research. This disease’s cause was isolated by the discoverer of blood types, Karl Landsteiner, and it was endemic in India until February 2012. Its attenuated form was used by Albert Sabin after Jonas Salk developed the first vaccine for it. The most common use of the “iron lung” was to help sufferers of this disease breathe. For 10 points, name this not-yet-eradicated virus which paralyzed Franklin Delano Roosevelt.

ANSWER: **poliomyelitis** <MJ>

[Editors’ note – this is a question on the history of science and is thus classified as history.]

19. These landforms are biogeographically analogous to biodiverse mountain peaks, which are known as the “sky” type of this landform. A severe bottleneck in the human population may have been caused by a volcanic eruption on one of these landforms about 70,000 years ago. The body size of *Homo floresiensis* is believed to be an example of the dwarfism that characteristically occurs in these landforms. Coral atolls may develop after these landforms subside. Allopatric speciation, and hence adaptive radiation, is frequently observed on collections of these landforms, as in the case of Darwin’s finches. For 10 points each, identify these landforms surrounded by water.

ANSWER: **islands** [accept **island chains** or obvious equivalents; accept **Galapagos Islands**; accept **sky islands**; prompt on “Galapagos”; prompt on “Toba”; prompt on “Sumatra”; prompt on “Indonesia”] <Ashvin>

20. One character in this play describes another as the “most original moralist in England” leading to him inheriting a fortune from a wealthy American. At the beginning of the final act of this play, one character bemoans “What have you left me fit for” while throwing slippers at a character based on the playwright’s friend, Henry Sweet. In this play, the housekeeper Mrs. Pearce looks after a character who later leaves the protagonist to marry Freddy Eynsford-Hill after abandoning her career selling flowers. For 10 points, Eliza Doolittle is taught to speak like a lady by phonetics professor Henry Higgins in what Shaw play that was the basis for the musical *My Fair Lady*?

ANSWER: **Pygmalion** <JL>

[STOP HERE]

[You have reached the end of the round. Do not continue reading unless the game is tied or a tossup was thrown out earlier in the round.]

21. Landmarks in this city include the De Young museum, the Palace of the Legion of Honor, and the Embarcadero. Cars in this city can make eight turns down one steep block along Lombard Street. The connection between this city and Marin County is continuously repainted all year long, and this home of Fisherman's Wharf and the gay-friendly Castro district also contains the tall Transamerica pyramid, which was built to resist earthquakes. For 10 points, name this foggy West Coast city next to a namesake Bay spanned by the Golden Gate Bridge.

ANSWER: San Francisco, California <MJ>

Round 11 Bonuses

1. Changes in this quantity are the subject of the second law of thermodynamics. For 10 points each:

[10] Name this quantity, a measure of a system's disorder, which may be measured in units of Boltzmann's constant.

ANSWER: **entropy**

[10] For a process to have this property, it must act only by infinitesimal steps, thus not generating entropy. The Carnot cycle has this property. The arrow of time may be explained by macroscopic processes lacking this property.

ANSWER: time **reversibility** [accept word forms]

[10] The time-irreversibility of certain processes mediated by this force results from a CP-violating term in the CKM matrix, a quark mixing matrix which measures the strength of flavor-changing interactions caused by this force.

ANSWER: **weak** interaction [or **weak force**; or **weak nuclear force**] <AS>

2. This taxonomic group of eukaryotes is characterized by chitinous cell walls. For 10 points each:

[10] Name this kingdom closely related to Animalia, whose members include the ascomycotes and yeasts.

ANSWER: **Fungi** [or **fungus**]

[10] These heavily-branched filaments collectively form mycelia. Most fungi grow by enlarging or extending these structures, and they are internally divided by septae.

ANSWER: **hyphae** ("high-fee" or "high-fah")

[10] The cells of aseptate hyphae have this property, defined by an atypical number of organelles, owing to their failure to undergo cytokinesis. Skeletal muscle cells also have this property.

ANSWER: **multinucleated** [or **polynuclear**; or having **multiple nuclei**; or obvious equivalents; accept **coenocytic** or word forms; accept **syncytic** or word forms] <AS>

3. Baby Suggs leads a prayer meeting in this work, while another character thinks of his heart as a tobacco tin with the lid sealed shut. For 10 points each:

[10] Name this novel, in which the runaway slave Sethe, pursued by the sadistic Schoolteacher, kills her infant daughter.

ANSWER: ***Beloved***

[10] This surviving daughter of Sethe finds herself displaced by the revenant ghost of her murdered sister. This character eventually emerges from isolation and becomes part of the black community in her town.

ANSWER: **Denver**

[10] This author of *Beloved* also penned *The Bluest Eye* and *Jazz*.

ANSWER: Toni **Morrison** [or Chloe Anthony **Wofford**] <JL>

4. The Wade-Giles system of writing this language in Roman letters is widely disliked. For 10 points each:

[10] Name this tonal language whose pictographic characters underwent simplification in the mid-20th century. Its dominant dialect is the most commonly-spoken language in the world.

ANSWER: Mandarin **Chinese** [or **Zhōngwén** or **Hànyǔ**; prompt "Mandarin"; prompt "Putonghua"]

[10] Thousands of Chinese characters are made up of these smaller units, of which there are only about two hundred. They can help inform semantic meaning of the whole character.

ANSWER: **radicals** [or **bùshǒu**]

[10] This is the Japanese name for Chinese characters used in certain contexts, though Japanese has syllabaries of phonetic characters as well.

ANSWER: **kanji** <SSp>

5. This military leader anecdotally cut an intractable knot with his sword before capturing the kingdom of Gordius. For 10 points each:

[10] Name this Macedonian king who founded at least sixteen cities which bear his name while conquering the known world in the 300s BC. He died after turning back from India at age 33.

ANSWER: **Alexander the Great** [or **Alexander III** of Macedon]

[10] This Persian king was beaten at Issus and Gaugamela by Alexander the Great. This last Achaemenid ruler was killed by a subordinate before Alexander could capture him.

ANSWER: **Darius III** of Persia

[10] Alexander laid siege to this island during his Persian campaign by building a land bridge to storm it after seven months of ineffective naval bombardment. This island's main export was an expensive dye for cloth.

ANSWER: **Tyre** <MPG>

6. The two title characters of this piece are represented by the strings and by a trio of horns, respectively. For 10 points each:

[10] Name this piece for narrator and orchestra in which a duck, a bird, and a cat are represented by an oboe, a flute, and a clarinet. The second title character is caught and taken to a zoo.

ANSWER: Peter and the Wolf [or Petr i volk]

[10] *Peter and the Wolf* was written by this Russian composer of the ballet *Romeo and Juliet*, a symphony nicknamed “Classical,” and the scores for the films *Lieutenant Kijé* and *Alexander Nevsky*.

ANSWER: Sergei Prokofiev

[10] Prokofiev wrote nine compositions of this type, of which numbers six through eight are known as the “War” ones. Alexander Scriabin wrote ten, including ones called the “White Mass” and “Black Mass.”

ANSWER: piano sonatas <KK>

7. This collection of writings is found on a double scroll in almost every synagogue, and consists of the books from Genesis to Deuteronomy. For 10 points each:

[10] Give the collective name for the first five books of the Hebrew Bible, which Jews believe to have been revealed to Moses on Mount Sinai.

ANSWER: Torah [or Pentateuch; prompt “Five Books of Moses;” prompt “chumash”]

[10] This other central Jewish text is separated into the Mishnah and the Gemara. It consists largely of rabbinic law and interpretations of the Torah.

ANSWER: Talmud [prompt “Shas” or “shisha sedarim”]

[10] These rabbinical stories, analyses, and popular mythologies based on the Hebrew Bible can be divided into halakhic and aggadic types. In a common one, Moses developed his stutter because he ate a hot coal as a baby.

ANSWER: midrashim <MHH>

8. When these structures were first designed, they outdid a type of flat rectangular building called the mastaba. For 10 points each:

[10] Name this type of burial structure whose most famous examples contain the sarcophagi of Menkaure, Khafre, and Khufu and are found in a row at Giza.

ANSWER: Egyptian pyramids [accept Great pyramids of Giza]

[10] The Egyptian New Kingdom instead hid royal tombs in this geographical region of the Nile’s west bank, across from Luxor-Thebes. Howard Carter made his post-World War I discoveries here.

ANSWER: Valley of the Kings [or Wadi Abwab al-Muluk]

[10] Prior to the Great Pyramid’s construction, this Third Dynasty ruler was buried at Saqqara in a step pyramid designed by his deified chancellor Imhotep.

ANSWER: Djoser [or Zoser; or Dsr-it ; or Tosarthros; or Horus Netjerikhet] <MJ>

9. The title character of this novel vies with Master Blifil for the hand of Sophia Western. For 10 points each:

[10] Name this 1749 novel about the title foundling, adopted by Squire Allworthy.

ANSWER: *The History of* Tom Jones, *a Foundling*

[10] *Tom Jones* is by this English satirist who wrote about the wife of William Booth in *Amelia*.

ANSWER: Henry Fielding

[10] Henry Fielding satirized this novel by Samuel Richardson in two separate novels of his own, in which the title heroine resists the attempted seductions of Mr. B until he proposes to her properly.

ANSWER: Pamela; or, *Virtue Rewarded* <JL>

10. This data structure consists of a root and a non-negative number of nodes. For 10 points each:

[10] Name this hierarchical structure, examples of which are the B and AVL varieties. The pruning operation removes a section of it.

ANSWER: tree

[10] This term describes a tree in which each node has at most two child nodes. This term also describes a number system which is used by computers for internal representations of numbers.

ANSWER: binary [accept binary tree; accept binary numbers or obvious equivalents; prompt on “base-two”]

[10] This procedure entails systematically visiting every node on a tree exactly once. A depth-first implementation of this procedure may be done either pre-order, in-order, or post-order on a binary tree.

ANSWER: tree traversal [or word forms] <SS/AS>

11. This man referred to Mao Zedong as an “old boot,” which didn’t help matters when this man’s nation split with China over matters of Communist ideology. For 10 points each,

[10] Name this Soviet Premier, who clashed with JFK during the Cuban Missile Crisis and presided over a “thaw” in the cold war while rolling back Stalinism.

ANSWER: Nikita Sergeyevich Khrushchev

[10] Khrushchev’s “Secret Speech” to his Party condemned Stalin for fostering one of these systems, in which massive propaganda campaigns venerate a single leader.

ANSWER: personality cult [or cult of personality]

[10] Khrushchev used this four-word phrase, addressed to Western dignitaries at the Polish Embassy in Moscow, to assert the eventual victory of communism over capitalism.

ANSWER: “We will bury you!” [Accept We will dig you in! or My vas pokhoronim!] <SJW>

12. One member of the central family in this novel is nearly seduced by Anatole Kuragin, while another is financially ruined by Dolokhov. For 10 points each:

[10] Name this epic novel, in which the fates of Pierre Bezukhov and the Rostovs intertwine with Russia’s war with Napoleon.

ANSWER: War and Peace [or Voyna I Mir]

[10] War and Peace is by this Russian author of a novel about the title lover of Count Vronsky, *Anna Karenina*.

ANSWER: Leo Tolstoy

[10] In this Tolstoy work, Pozdnyshev relates the story of his disastrous marriage to a woman who committed adultery with a violinist with whom she played the title piece of music.

ANSWER: *The* Kreutzer Sonata [or Kreitzerova Sonata] <JL>

13. She was chained to a rock to appease a sea monster after her mother, Cassiopeia, boasted of her beauty. For 10 points each:

[10] Name this Ethiopian princess.

ANSWER: Andromeda

[10] This hero rescued Andromeda by taking out the sea monster. To marry her, he then turned her suitors into stone using the head of Medusa, which he cut off on a previous quest.

ANSWER: Perseus

[10] Perseus fulfilled the prophecy that he’d kill his grandfather by accidentally killing Acrisius with one of these objects. Another of them killed Hyacinthus when Zephyrus got jealous.

ANSWER: a discus <SSp>

14. The first weekend of 2012 March Madness was indeed mad. For 10 points each:

[10] This team from Durham, North Carolina coached by Mike Krzyzewski (SHUH-SHEV-SKI) was defeated in their first game by the fifteenth seeded Lehigh Mountain Hawks.

ANSWER: Duke Blue Devils (accept either underlined part)

[10] This defending national champion coached by Jim Calhoun was bounced by the Iowa State Cyclones despite Jeremy Lamb’s 19 points.

ANSWER: University of Connecticut Huskies (accept either underlined part)

[10] This team from Virginia shot 10 of 19 from beyond the arc to upset 2-seed Missouri in the final minutes, but was defeated by Florida 84 to 50 in the Round of 32.

ANSWER: Norfolk State Spartans [accept either underlined part] <MPG>

15. Answer these questions about the parts of an SLR camera, for 10 points each:

[10] Light first passes through this object, usually composed of multiple glass elements. Depending on its focal length, it may be described as wide-angle, normal, or telephoto.

ANSWER: Lens

[10] The lens aperture is important in determining this, the distance between the nearest and farthest sharply-defined objects in a scene.

ANSWER: depth of field [do not accept or prompt on merely “depth” or “field”]

[10] The image on the focusing screen is upside down, so it is flipped by this silvered piece of glass with five-sided cross sections in the viewfinder. It forms the characteristic “hump” on top of the SLR camera.

ANSWER: Roof Pentaprism [do not accept “Pentamirror”] <JG/JL>

16. A Tolstoy essay argues that examples of this thing should “infect” the observer with powerful emotion. For 10 points each:

[10] Name this creative human activity which is often subjected to aesthetic philosophy or judged by taste.

Examples of it include paintings, symphonies, and sculptures.

ANSWER: artistry [or works of art; or fine arts]

[10] This follower of Kant offered artistic experiences as one way out of the endless misery of unfulfilled desires in his magnum opus, *The World as Will and Idea*.

ANSWER: Arthur Schopenhauer

[10] Schopenhauer was inspired by a Latin translation of these Indian texts, which include the *Chandogya* and sometimes interpret the more sacred Vedas.

ANSWER: Upanishads [or Oupnekhat] <MJ>

17. Name some Dutch artists, for 10 points each:

[10] This Dutch artist depicted a really ugly witch in *Malle Babbe*. He is more famous for a portrait of a smirking man with red facial hair, his *Laughing Cavalier*.

ANSWER: Franz Hals

[10] Many of this painter’s later works, including *Broadway Boogie-Woogie*, are composed exclusively of blue, yellow, red, and white rectangles, and often intersecting perpendicular black lines.

ANSWER: Piet Mondrian

[10] This artist combined action painting, including violent, slashing brushstrokes, with Venus-like fertility figures in his *Woman* series.

ANSWER: Willem de Kooning <JG>

18. This colony’s military forces were led by the real-life Myles Standish, about whom Henry Wadsworth Longfellow later wrote. For 10 points each:

[10] Name this colony which merged into the Massachusetts Bay Colony in 1693. It was founded near a namesake “rock” after the separatist Puritans aboard the *Mayflower* signed a compact.

ANSWER: Plymouth colony

[10] Roger Williams split off from Plymouth over church-state separation issues to found this colony, into which he welcomed fellow dissenter Anne Hutchinson.

ANSWER: Rhode Island and Providence Plantations [prompt “Providence Plantations”]

[10] James II reorganized the northern colonies into this unpopular political structure run from the top down by Sir Edmund Andros. It reverted to its constituent colonies after uprisings at the time of the Glorious Revolution.

ANSWER: Dominion of New England <MJ>

19. The fractional form of this process relies on cycles called theoretical plates. For 10 points each:

[10] Name this method of separating liquids that relies on differences in boiling points.

ANSWER: distillation [accept fractional distillation]

[10] This device, consisting of an inner and outer tube and cooled by air or water, is used to improve the efficiency of distillations. This device is also used in refluxing to allow extended boiling by recollecting solvent vapors.

ANSWER: condenser [accept air-cooled condenser; accept water-cooled condenser]

[10] This law states that the vapor pressure of a solution is equal to the vapor pressure of each component multiplied by the mole fraction of that component in the solution.

ANSWER: Raoult’s law <IP>

20. It is debated by scholars whether this novel was written by Luo Guanzhong or Shi Nai’an. For 10 points each:

[10] Name this novel in which 108 bandits gather on Mount Lian to challenge the Song government.

ANSWER: Water Margin [or Shuihu Zhuan; or Outlaws of the Marsh; or All Men Are Brothers; or Men of the Marshes; or The Marshes of Mount Liang]

[10] *Water Margin* like Luo Guanzhong’s *Romance of the Three Kingdoms* is one of the Four Great Classical Novels of this nation.

ANSWER: China

[10] In *The Romance of the Three Kingdoms*, this character swears the Oath of the Peach Garden with his brothers Guan Yu and Zhang Fei. He is the founder of the kingdom of Shu.

ANSWER: Liu Bei <JL>

21. This country's parliament is currently controlled by the Congress Party, and consists of two houses called the Lok Sabha and the Rajya Sabha. For 10 points each:

[10] Name this most populous parliamentary democracy in the world. In March 2012, voter turnout in its states of Uttar Pradesh and Punjab was recorded at its highest ever.

ANSWER: Republic of **India** [or **Bharat** Gaṇarājya]

[10] This Congress Party member was re-elected in 2009 as Prime Minister of India.

ANSWER: Manmohan **Singh**

[10] In August 2011 and December 2011, this Indian activist went on long hunger strikes to protest rampant corruption in the country's rural politics.

ANSWER: Anna **Hazare** [or Kisan Baburao **Hazare**] <MJ>