

**ICCS 2014
Packet 10**

TOSSUPS

1. This country's central bank issued large numbers of US dollar-denominated bonds called Tesobonos, which were central to one of its economic crises. Its "miracle" started with the ISI policies pursued by Miguel de Aleman. This country's inability to pay interests on its bonds in the 1990s led President Ernesto Zedillo to announce a fifteen percent devaluation in its currency, which prompted the "tequila crisis." Its oil industry was nationalized to create Pemex. For 10 points, identify this country that dropped 3 zeros from the peso before joining NAFTA.

ANSWER: Mexico [or United Mexican States; or Estados Unidos Mexicanos]

2. This thinker argued that logical statements starting with an existential quantifier underlie "definite descriptions" such as "Scott is the author of *Waverley*." This man's argument against putting the burden of proof on skeptics concerned a hypothetical claim that the sun was orbited by a teapot. This author of "On Denoting" lectured against organized religion in "Why I Am Not a Christian." For 10 points, name this British analytic philosopher and anti-nuclear advocate who worked with Alfred North Whitehead to axiomatize arithmetic in *Principia Mathematica*.

ANSWER: Bertrand Russell

3. A poem by this man describes a time when "the majestic roll of circling centuries begins anew" and the world enters a new Golden Age with the birth of a child. In another of his works, the protagonist is enraged when he sees his enemy wearing Pallas's belt. Some early Christians believed this man's fourth *Eclogue* to be a prophecy of Christ's coming. In a long poem by this author of the *Georgics*, the protagonist meets the Carthaginian queen Dido after his escape from Troy. For 10 points, name this ancient Roman who wrote the *Aeneid*.

ANSWER: Virgil [or Publius Vergilius Maro]

4. He's not a pianist, but this musician commissioned Aaron Copland's concerto for his instrument, as well as Bela Bartok's *Contrasts*. One of this man's live recordings ends with an unplanned piano solo by Jess Stacy. This man's namesake quartet included pianist Teddy Wilson, vibraphonist Lionel Hampton, and drummer Gene Krupa. In 1938, this clarinetist and his orchestra played the first jazz concert in Carnegie Hall. For 10 points, name this "King of Swing" who famously recorded an instrumental version of "Sing, Sing, Sing."

ANSWER: Benny Goodman

5. Signaling in these cells typically obeys Dale's principle. Sakmann and Neher developed a technique commonly used to monitor these cells; that technique uses a pipet with a gigaohm seal and is called patch clamping. The Nissl substance is the rough ER of these cells, which can also be visualized using the Golgi stain. The hillock is the site of summation in these cells. One part of these cells ends in a bouton, which contains vesicles filled with neurotransmitters. For 10 points, name these cells that contain long projections called axons and that are responsible for conducting impulses in the nervous system.

ANSWER: neurons [prompt on "brain cells"]

6. One of these objects, along with the Yasakani no Magatama, was hung from a tree in order to lure Amaterasu out of a cave and was known as the "eight hand" one. After losing a foot to the monster Cipactli, Tezcatlipoca replaced the foot with one of these items that emitted smoke and was made of obsidian. In order to approach and slay Medusa, Perseus used his shield as one of these items. In a fairy tale, one of these items was asked the question "Who's the fairest of them all?" by the wicked stepmother of Snow White. For 10 points, name these reflective objects.

ANSWER: magic mirrors [or looking glasses; or other logical equivalents]

7. The ballad “The Fields of Athenry” is about a man driven to take desperate measures by this crisis. Catholics who accepted Protestant religious instruction in order to get help during this crisis were nicknamed “souters.” This situation was worsened by the system of absentee landlords as well as by the Corn Laws. Support for home rule grew as a result of this situation, which caused the deaths of a million people and the emigration of a million more. For 10 points, name this crisis in Ireland caused by a blight affecting a staple food.

ANSWER: Irish potato famine [or the Great Famine; or *an Gorta Mór*]

8. An author from this country fictionalized the life of Jimmy Governor in *The Chant of Jimmie Blacksmith*. Another author from this nation wrote about the painter Hurtle Duffield in *The Vivisector*. In another novel from this country, Mr. Judd and Laura Trevelyan travel with the explorer Voss. A glass church is transported within this country in the novel *Oscar and Lucinda*. For 10 points, name this home of Thomas Keneally, Peter Carey, and Patrick White where literature often deals with Aborigines or bushrangers in the Outback.

ANSWER: Commonwealth of Australia

9. An algorithm to solve this problem in local area networks is implemented in IEEE 802.1aq. A heuristic approach to this problem popular in video games is called A* [“A-Star”]. One of the most popular algorithms for solving this problem does not work on graphs with negative edge weights and can be implemented by taking a node out of a queue and seeing if any neighbor of that node has a better alternative cost to traverse to it. For 10 points, name this problem solved by Dijkstra's algorithm, which finds the minimal distance between two points on a graph.

ANSWER: finding the all-pairs shortest path [or shortest path problem; prompt on “search algorithms”]

10. This painter's portrait of Dante Alighieri shows the author wearing a red shirt and cap with a plant along the side of his head. A wagon is pushed over a man dressed in black on the left side of his painting *The Last Miracle and the Death of St. Zenobius*. He painted a scene in an orange grove with three women dancing and a putto flying over a woman holding a red drape in his *Primavera*. His best known painting features a woman in an open seashell that is being blown to shore by Zephyr. For 10 points, name this artist of *The Birth of Venus*.

ANSWER: Sandro Botticelli [or Alessandro di Mariano di Vanni Filipepi]

11. One method of doing this in nineteenth-century Prussia was based on three namesake “classes.” The Gallagher Index measures whether or not the results of this action are proportional to the wishes of its participants. Ethnic Italians and Hungarians in Slovenia benefit from one method of doing this known as a Borda count. The independence of irrelevant alternatives is one criterion that may fail under Arrow's impossibility theorem for this action. For 10 points, name this action, the act of officially submitting one's preferences in an election.

ANSWER: voting [accept word forms and equivalents such as casting a ballot, exercising suffrage, participating in an election (before read), etc; accept enfranchisement until “Gallagher”]

12. When one character in this novel suggests that it might rain tomorrow, her husband's troubling response is “damn you.” That husband reads Walter Scott's *The Antiquary* to prove Charles Tansley wrong. Another character, who is described as having a puckered face and Chinese eyes, is interrupted while painting a portrait by recitations of *The Charge of the Light Brigade*. Andrew dies in war and Prue dies in childbirth in this novel, but Cam and James sail with their father as Lily Briscoe finishes her painting. For 10 points, name this novel about the Ramsay family by Virginia Woolf.

ANSWER: To the Lighthouse

13. This man's wife Sarah died very young and was the daughter of his commanding officer, Zachary Taylor. Cartoonists depicted him in a dress because he wore his wife's overcoat when he was being arrested. This man was freed from jail after his bail was ironically posted by men such as Horace Greeley. This president is depicted on a giant carving on the face of Stone Mountain. He ordered P.G.T. Beauregard to take Fort Sumter, and his capital was located in Richmond, Virginia. For 10 points, name this first and only president of the Confederate States.

ANSWER: Jefferson **Davis**

14. This procedure is done on air-sensitive material using a Perkin triangle. The number of stages involved in one kind of this procedure can be derived from a VLE plot using the McCabe-Thiele method, which is used in designing binary columns. Most versions of this procedure do not work on azeotropes. The Fenske equation can be used to calculate the number of theoretical plates in its fractional variety. For 10 points, name this procedure that separates components of a liquid mixture using differences in their boiling points.

ANSWER: **distillation**

15. This composer's *Piano Sonata in B Minor* is played without movement breaks and was dedicated to Robert Schumann. His orchestral work *Les Preludes* is a piece in a genre that he devised, the symphonic poem. "Mazeppa" and "Feux Follets" are among his twelve *Transcendental Etudes*. Paganini's second violin concerto inspired this composer of the "Mephisto Waltzes" to write a piano piece depicting a small bell; that piece is "La Campanella." For 10 points, name this composer of the *Hungarian Rhapsodies*.

ANSWER: Franz **Liszt**

16. This nation and its northern neighbor dispute the sovereignty of the uninhabited Perejil Island. This nation borders the Spanish exclaves Ceuta and Melilla. The Kasbah of the Udayas is located along the Bou Regreg River in this nation's capital city. This nation is the only one in Africa that is not a member of the African Union. The only home of the Dipper bird is in this nation's Atlas Mountains, and this nation has claimed Western Sahara since 1975. For 10 points, Casablanca is the largest city in which African nation with a capital at Rabat?

ANSWER: Kingdom of **Morocco** [or Al-**Mamlakah al-Maghribiyyah**]

17. This character sees no advantage in praying because it can only bring "spiritual gifts," though he later observes that "you can't pray a lie." While hiding in a tree, this character witnesses the shooting of Buck. At one point, he tears up a letter and declares, "Alright then, I'll go to hell." This son of the town drunk Pap is cared for by Miss Watson and the Widow Douglas before leading an older man on a search for the Ohio River. For 10 points, name this character who travels with the slave Jim on a raft down the Mississippi in a novel by Mark Twain.

ANSWER: **Huckleberry** Finn

18. This text's twenty-fourth section features the parable of a lamp in a niche, lit from an olive tree of neither the east nor the west. Exorcisms are sometimes aided by reciting this text's "Throne Verse." Adherents believe that this text was first heard on the Night of Power in a cave on Mount Nur, as delivered by the angel Gabriel. "The Cow" is the longest section of this text, which is holier than the *hadith*. Almost all of its 114 suras begin with the word "Bismillah." For 10 points, name this set of revelations to the prophet Muhammad, the holiest book of Islam.

ANSWER: the **Qur'an** [or **Koran**]

19. Integrating this expression over all frequencies and solid angles gives an expression for power as proportional to the temperature raised to the fourth, a result known as the Stefan-Boltzmann equation. This equation can be derived by assuming the quantization of photon energy and it reproduces both the Rayleigh-Jeans low-frequency limit and the Wien high frequency limit. For 10 points, identify this law

that gives the energy distribution of radiation from a perfect blackbody and was named for a German physicist whose namesake constant figures prominently in it.

ANSWER: Planck's law

20. This group's early symbols included the *labarum* battle standard. Pliny's ninety-sixth letter to Trajan questioned whether torturing these people was acceptable. In third-century North Africa, some of these people became *traditores* and others became Donatists. The emperors Decius and Diocletian ordered roundups of these people, who buried their dead in underground vaults called catacombs. These people's practices were tolerated after the Edict of Milan was issued by Constantine. For 10 points, name this once-persecuted religious group led by bishops.

ANSWER: Roman Christians [or Roman Catholics]

21. According to Harold Bloom, this character is "lovable, loving, and greatly loved." This character claims to have been betrayed by the little dogs Tray, Blanch, and Sweetheart. He claims he is "more sinned against than sinning" and commands winds to blow harder against himself. This character says "Nothing will come of nothing" while soliciting a declaration of love from his youngest child. For 10 points, name this Shakespeare character who is attended by Kent and a Fool as he goes mad on a heath, and who is the father of Regan, Goneril, and Cordelia.

ANSWER: King Lear

22. In this series, Loretta briefly takes a job at the diner to escape her abusive husband. The Steelers are spoofed as the Ironmen in this series set in Pittsburgh. A character in this series from Hazlehurst, Mississippi, becomes an adult film star named Fetch. The late Uncle Vic appears in Brian's hallucinations in Babylon. Season 1 of this series ended with Justin's gay bashing. For 10 points, name this Showtime series about the lives of gay and lesbian residents of Liberty Avenue, starring Hal Sparks as Michael Novotny and based on a UK series of the same name.

ANSWER: Queer as Folk

23. During this calendar year, a naval evacuation mission called Operation Hannibal was ruined by the sinking of the cruise ship MV *Wilhelm Gustloff*. Escape networks called "ratlines" began to operate in this year, during which the Oder-Neisse line was established as a border and the Flensburg government briefly held power. Clement Attlee became Britain's Prime Minister in this year between the Yalta Conference and the Potsdam Conference. For 10 points, name this calendar year in which Adolf Hitler committed suicide and World War II ended.

ANSWER: 1945

24. In the MK classification, this group is represented by luminosity class V ["five"]. The turnoff point, which can be used to date clusters, is where a star exits this region. It runs from upper-left to lower-right on the diagram where it appears, and white dwarfs appear below it. Larger stars spend less time here; the Sun is expected to remain in this region for a total of ten billion years, after which it will become a red giant. For 10 points, name this diagonal band on the H-R diagram where stars spend most of their lifetime.

ANSWER: main sequence

BONUSES

1. This novel's protagonist first encounters the title characters when he is racing to confront the Comte de Rochefort. For 10 points each:

[10] Name this novel by Alexandre Dumas in which Athos, Porthos, and Aramis join d'Artagnan in foiling the plans of Cardinal Richelieu.

ANSWER: The **Three Musketeers** [or Les **Trois Mousquetaires**]

[10] D'Artagnan suggests this phrase as the motto of the Musketeers. It alludes to the fact that the musketeers look out for each other in any circumstance.

ANSWER: "**one for all** and **all for one**" [accept variants like "**one for all, all for one**"; accept conjuncts in either order]

[10] D'Artagnan is constantly attempting to thwart this woman's plans. She is a spy for Cardinal Richelieu and is eventually revealed to have once been married to Athos.

ANSWER: **Milady** [or Lady **de Winter**]

2. Alfred Young wrote a book about a shoemaker's participation in this event. For 10 points each:

[10] Name this 1773 event in which American colonists, dressed as Native Americans, raided a ship in a New England harbor and threw chests of a food substance into the water.

ANSWER: **Boston Tea Party**

[10] This patriot helped organize the Boston Tea Party and was a leader of the Sons of Liberty. This Massachusetts statesman was a cousin of a future President.

ANSWER: **Samuel "Sam" Adams** [prompt on **Adams**]

[10] The governor in Boston at the time had this last name. A woman named Anne with this surname was a religious leader who was expelled by the Puritans and settled in Portsmouth.

ANSWER: **Hutchinson** [or Thomas **Hutchinson**; or Anne **Hutchinson**]

3. Homer's mention of "Potnia Theron," a goddess of animals, is believed to be a reference to this deity. For 10 points each:

[10] Name this Greek goddess of virginity and the hunt who was the equivalent of the Roman Diana. She and her twin brother Apollo were the children of Leto.

ANSWER: **Artemis**

[10] Apollo and Artemis killed the children of this woman in response to her boast that her twelve children were superior to Leto's two.

ANSWER: **Niobe**

[10] Artemis tricked the giants Otus and Ephialtes into killing each other by turning into one of these animals and running between them. In another story, she turned Actaeon into one.

ANSWER: **deer** [accept **stag**]

4. The mnemonic "some lovers try positions that they can't handle" is used to remember these bones. For 10 points each:

[10] Name this set of eight bones found in the wrist. The median nerve becomes entrapped in a space between these bones in their namesake "tunnel syndrome."

ANSWER: **carpal**

[10] The carpals articulate with the two bones of the forearm. Name both.

ANSWER: **radius** and **ulna**

[10] A rare cause of carpal tunnel syndrome is acromegaly, which results from overproduction of this hormone. An absence of this hormone causes Laron's syndrome.

ANSWER: **GH** [or **Growth Hormone** or **Somatotropin**]

5. A melody from one movement of this piece became part of the hymn "I Vow to Thee, My Country." For 10 points each:

[10] Name this seven-movement orchestral suite whose movements include the aforementioned “Jupiter, the Bringer of Jollity” as well as “Mars, the Bringer of War.”

ANSWER: The **Planets**

[10] *The Planets* is the most famous composition by this English composer, whose other works include *Hammersmith* and *A Somerset Rhapsody*.

ANSWER: Gustav **Holst**

[10] Holst also composed this suite for string orchestra named for the girls’ school at which he taught. This piece’s last movement quotes the “Dargason” and “Greensleeves.”

ANSWER: **St. Paul’s Suite**

6. This poem was given its name by the author’s friend Siegfried Sassoon. For 10 points each:

[10] Identify this sonnet written during World War I that begins by asking “What passing-bells for these who die as cattle?” and describes the “shrill, demented choirs of wailing shells.”

ANSWER: “**Anthem for Doomed Youth**”

[10] “Anthem for Doomed Youth” was written by this British poet, who described a gas attack in the poem “Dulce et Decorum Est.”

ANSWER: Wilfred **Owen**

[10] This other British author wrote “it is not for us to make them an anthem” in his war poem *Antwerp*. He also wrote about Captain Edward Ashburnham in the novel *The Good Soldier*.

ANSWER: Ford Madox **Ford**

7. This landmark experiment provided disturbing insights into people’s willingness to submit to a figure of authority. For 10 points each:

[10] Name this experiment in which participants were asked to administer increasingly painful shocks to a confederate, despite the confederate’s pleas for mercy.

ANSWER: Stanley **Milgram**’s **obedience** experiment [accept either]

[10] Stanley Milgram was mentored by Solomon Asch, who worked on this psychological concept. This term refers to the act of matching one’s behavior and attitudes to that of a group.

ANSWER: **conformity**

[10] In Asch’s conformity experiment, subjects were tasked with comparing this type of geometric quantity.

ANSWER: **length of a line** [accept equivalents like “how long a line is”; prompt on just “length”]

8. If this is your first quizbowl tournament ever, you will soon learn that this painting features a billboard advertising Phillies cigars for five cents. For 10 points each:

[10] Name this painting of a nighttime scene with four people sitting in a café.

ANSWER: **Nighthawks**

[10] *Nighthawks* is a painting by this artist, who also painted *Chop Suey* and *Early Sunday Morning*.

ANSWER: Edward **Hopper**

[10] This other Hopper painting shows a lone man working on a fuel pump near a desolate road; above him and to his right is a sign advertising Mobil.

ANSWER: **Gas**

9. The Burji clique of these people was of Circassian origin, and an army of these people defeated the Mongols at the Battle of Ayn Jalut. For 10 points each:

[10] Identify these slaves who received extensive military training and thus formed much of the armies of Islamic empires such as the Ayyubids.

ANSWER: **Mamluks** [or **Mamluqs** or **Mamlukes** or **Mameluks** or **Mamelukes** or **Mamalukes** or **Marmelukes**]

[10] The Mamluks established a sultanate with this city as a capital. Saladin constructed a magnificent citadel in this city, which lies in the Nile Delta.

ANSWER: Cairo

[10] Mamluks led by Qutb-ud-din Aybak also formed one of the ruling dynasties of a sultanate in this city. That sultanate in this city was later ruled by the Khiljis, the Tughluqs, and the Lodis.

ANSWER: Delhi [Do not accept “New Delhi”]

10. These numbers can be constructed from the rationals by Dedekind cuts. For 10 points each:

[10] Identify this set of numbers that vary continuously along the number line. In 2D representations of the complex plane, they form the x-axis while imaginary numbers form the y-axis.

ANSWER: real numbers

[10] Real numbers can be thought of as a completion of the rational numbers because they have this property. This property requires that a set of numbers with an upper bound has a supremum.

ANSWER: least upper bound property [prompt on “bounded”]

[10] Because the real numbers are complete, all sequences named after this man converge. He names an inequality with Hermann Schwarz.

ANSWER: Augustin-Louis Cauchy

11. Prime Minister Manuel Valls recently had to replace his entire cabinet in this country. For 10 points each:

[10] Name this European country whose former presidents include Valéry Giscard d’Estaing and Nicolas Sarkozy.

ANSWER: France [or French Republic; or République Française]

[10] Name this Socialist politician who defeated Sarkozy in 2012 and is currently the president of France.

ANSWER: Francois Hollande

[10] Hollande and Sarkozy were the top two vote getters in the 2012 Presidential election, but nearly eighteen percent of the vote in the first round went to this leader of the far-right National Front party.

ANSWER: Marine Le Pen

12. This war began after the death of the feeble-minded and childless Charles II. For 10 points each:

[10] Name this early 1700s war that ended when the Treaty of Utrecht recognized Louis XIV’s grandson as Philip V, on the condition that Philip renounce his claim to the French throne.

ANSWER: War of the Spanish Succession

[10] One provision of the Treaty of Utrecht gave the British this concession, which allowed British merchants to transport slaves from Africa to New World colonies.

ANSWER asiento

[10] This British General won many victories with Eugene of Savoy, including at the Battle of Blenheim, a victory he commemorated by naming his palace after it.

ANSWER: John Churchill, Duke of Marlborough [or John Churchill, prompt on just “Churchill”]

13. This character studies the marginal scientific research of Cornelius Agrippa and is nursed back to health by Henry Clerval. For 10 points each:

[10] Name this character who is rescued by Robert Walton’s ship from an Arctic ice floe.

ANSWER: Doctor Victor Frankenstein [do not accept “Frankenstein's monster”]

[10] Doctor Frankenstein’s dying mother insists that he marry this orphan cousin of his, who writes some deferential letters and looks after Justine Moritz.

ANSWER: Elizabeth Lavenza

[10] Doctor Frankenstein says “breathless horror and disgust filled my heart” following this event, which causes him to run away and spend a night outdoors in the courtyard.

ANSWER: bringing the monster to life [accept animating and other synonyms and word forms; prompt on “creating the monster”]

14. Answer the following about public housing projects in the United States, for 10 points each.

[10] The Minoru Yamasaki-designed Pruitt-Igoe project in this city became a symbol of poor public planning policies. This city is also home to the Eero Saarinen-designed Gateway Arch.

ANSWER: **St. Louis**, Missouri

[10] Hip hop DJ Afrika Bambaataa grew up in the River Houses project in this New York City borough, which is also home to Yankee Stadium.

ANSWER: the **Bronx**

[10] This Northern California city is home to the Acorn and Cypress Village projects, close to where Huey Newton was killed in 1989. This city's International Boulevard is near Lake Merritt.

ANSWER: **Oakland**, California

15. These drawings represent shared electrons involved in bonds as line segments. For 10 points each:

[10] Name these two-dimensional constructs, used to visualize the bond structures of molecules, which show lone pairs of electrons as dots.

ANSWER: **Lewis** dot structures

[10] If a species cannot be represented by a single Lewis dot structure, it can be thought of as a hybrid of two or more of these kinds of structures. Two-headed arrows are placed between them.

ANSWER: **resonance** forms or **resonance** structures

[10] Likely resonance structures have a low value of this quantity, the difference between the number of valence electrons in an atom and the number it "controls" while bonded.

ANSWER: **formal charge** [prompt on "charge"]

16. Oft-excerpted portions of this opera are the Prelude to Act III and the "Bridal Chorus." For 10 points each:

[10] Name this opera in which the title knight appears on a boat pulled by a swan to defend Elsa.

ANSWER: **Lohengrin**

[10] *Lohengrin* was written by this German composer, whose works are performed in the Bayreuth Festival. His other operas include *Parsifal* as well as the four-part *Ring* cycle.

ANSWER: Richard **Wagner**

[10] In this third opera of the *Ring* cycle, the title character falls in love with the Valkyrie Brunnhilde and is slain by Hagen.

ANSWER: **Siegfried**

17. Some forms of the Nicene Creed include the Latin word *filioque*, which means "and [this figure] too." For 10 points each:

[10] Name this aspect of God that, along with the Father and the Holy Ghost, composes the Holy Trinity.

ANSWER: The **Son**

[10] The Nicene Creed rejected this heresy, which held that the Son was subordinate to the Father. The bishop Ulphilas converted the Goths to a form of this heresy in the early fourth century.

ANSWER: **Arianism**

[10] This other heretical position holds that the Son represents only the pure divine nature of God. The Armenian Orthodox Church formally rejects this position but holds similar views to it.

ANSWER: **Monophysitism** [or **Monophysite** Christology, etc.]

18. This equation gives the heat flux as proportional to the temperature gradient. For 10 points each:

[10] Identify this basic equation of heat conduction named for the French scientist who postulated it.

ANSWER: **Fourier**'s law or equation

[10] Fourier's law is a particular example of Fick's law, which models this process by relating a flux current to a concentration gradient via the constant of proportionality. This process occurs for particles suspended in a fluid via Brownian motion.

ANSWER: **diffusion**

[10] Fourier's law can be used to derive the heat equation, which sets the time derivative of the temperature proportional to its Laplacian; that makes the heat equation this type of partial differential equation named after a conic section.

ANSWER: parabolic partial differential equation

19. Answer the following about the end of the Napoleonic Wars, for 10 points each.

[10] Napoleon's Hundred Days campaign began when he escaped this island off the coast of Italy.

ANSWER: Elba

[10] Napoleon was finally defeated for good at this 1815 battle by a coalition of British forces under Wellington and Prussian forces under Blücher.

ANSWER: Battle of Waterloo

[10] Before his exile to Elba, Napoleon's Confederation of the Rhine collapsed after his defeat by Alexander I at this 1813 battle, which was the largest in Europe until World War I.

ANSWER: Battle of Leipzig

20. This work is part of a series called the Leatherstocking Tales. For ten points:

[10] Name this work in which the title character, Uncas, hunts down Magua with the protagonist, Natty Bumppo.

ANSWER: *The Last of the Mohicans*

[10] *The Last of the Mohicans* was written by this author whose lesser-known works include *The Deerslayer* and the non-fiction *The American Democrat*.

ANSWER: James Fenimore Cooper

[10] In *The Last of the Mohicans*, Alice and Cora have this surname. The Canadian author of *Dance of the Happy Shades* and *Lives of Girls and Women*, also named Alice, shares this last name.

ANSWER: Munro [accept Alice Munro]

21. Gardasil is a vaccination against this virus, which can also cause recurrent respiratory papillomatosis.

For 10 points each:

[10] Name this virus which is responsible for most cases of cervical cancer.

ANSWER: human papilloma virus [or HPV]

[10] The HPV virus' E6 protein is responsible for inhibiting this tumor-suppressor gene, which is responsible for activating the transcription of p21 and arresting the cell cycle in response to DNA damage. It is named for its weight.

ANSWER: p53

[10] p53's weight was originally determined using this variety of gel electrophoresis, in which proteins are denatured and forced through a polyacrylamide matrix.

ANSWER: SDS-PAGE [or Sodium Dodecyl Sulfate- Polyacrylamide Gel Electrophoresis]

22. John Stuart Mill's *Principles of Political Economy* argues that state interventions can be justified on the grounds of this principle. For 10 points each:

[10] Name this ethical principle, which essentially holds that the greatest amount of benefits should be maximized for the greatest number of people if possible.

ANSWER: utilitarianism [accept other forms]

[10] This British philosopher is considered the founder of modern utilitarianism, which he discussed in his *Introduction to the Principles of Morals and Legislation*.

ANSWER: Jeremy Bentham

[10] Bentham described this prison design where a watchman could observe every inmate without the inmates knowing. Michel Foucault discussed it in *Discipline and Punish*.

ANSWER: panopticon

23. Answer the following about the French Revolution, for 10 points each.

[10] This three-word motto of France has its origins in the French Revolution, and it is also used as the motto of Haiti.

ANSWER: **Liberté, Egalité, Fraternité** [or “**freedom, equality, brotherhood**”; or “**liberty, equality, fraternity**”]

[10] The 1789 storming of this prison, provoked partially by the dismissal of Jacques Necker, is commemorated on July 14.

ANSWER: **Bastille** Saint-Antoine

[10] This Jacobin and member of the Committee of Public Safety led the Reign of Terror, and was toppled in the Thermidorian reaction.

ANSWER: Maximilien (François Marie Isidore de) **Robespierre**

24. The prologue of this work is titled “The Book of the Grotesque”. For 10 points each:

[10] Name this collection of short stories titled after a Midwestern town. Its story “Hands” concerns the suspected child molester Wing Biddlebaum.

ANSWER: **Winesburg, Ohio**

[10] *Winesburg, Ohio* was written by this author, whose novel *Dark Laughter* was parodied by the Hemingway story “Torrents of Spring.”

ANSWER: Sherwood **Anderson**

[10] This newspaper reporter appears in many of the stories in *Winesburg, Ohio*, and leaves the town in “Departure.”

ANSWER: George **Willard**