

PACE NSC 2011

Edited by Mike Bentley, Matt Bollinger, Rob Carson, Kyle Haddad-Fonda, Hannah Kirsch, Trygve Meade, Bernadette Spencer, Guy Tabachnick, and Andy Watkins

Packet 2

Tossups

1. **In one painting by this artist, two women prepare a meal of fish while, through a window, Jesus talks to two sisters. Besides *Christ in the House of Martha and Mary*, he painted a god dressed in orange with a wreath on his head giving bad news to a shirtless god working with metal. In a historical work by this artist, Justinus of Nassau hands a (*) key to a man with a lot of upright spears behind him. This artist of *The Forge of Vulcan* and *The Surrender of Breda* painted Cupid holding a mirror for a reclining nude in his *Rokeby Venus*. He is seen wearing a black outfit with a red cross on it behind an easel in another work, which features a midget and a dog in the foreground next to a princess. For 10 points, name this Spanish Baroque artist of *Las Meninas*.**

ANSWER: Diego Velázquez

<Bentley>

2. **One dissent in this case argued that the majority’s approach would have extended constitutional protections to the broadcasts of Tokyo Rose. The Supreme Court invalidated section 441b in this case and took issue with the anti-distortion rationale of *Austin v. Michigan Chamber of Commerce*. Holding later precedents to be inconsistent with *Buckley v. Valeo*, Justice Kennedy’s majority opinion in this case overruled portions of (*) *McConnell v. FEC* and vindicated the creators of *Hillary: The Movie*. For 10 points, name this 2010 case that struck down limitations on independent corporate expenditures in political campaigns in the McCain-Feingold Act.**

ANSWER: *Citizens United* v. *Federal Election Commission* [or *FEC*]

<Hallowell>

3. **One character in this novel, a former pirate who wears bells at his waist, meets his end at the hands of the barbarian king Shamohe. At another battle in this work, a general sends straw boats manned by dummies to “borrow” the enemy’s arrows. The protagonist of this novel is lured into a trap by the promise of marrying the beautiful Lady Sun. Near the beginning of this novel, three friends swear brotherhood in the Oath of the (*) Peach Garden. This novel climaxes with the battle of Red Cliffs, where Liu Bei wards off the invasion of Cao Cao. For 10 points, identify this historical novel by Luo Guanzhong, one of the Four Great Classics of Chinese literature.**

ANSWER: *Romance of the Three Kingdoms* [or *Sānguó Yǎnyì*]

<Gupta>

4. **One theorem about these numbers states that every natural number can be represented uniquely as the sum of nonconsecutive ones of them; that statement is named for Zeckendorf. This sequence appears on the outer edges of Hosoya's triangle, and its n^{th} element gives the number of ways for dominoes to cover a two-by- $(n$ minus one) checkerboard. This sequence is generated by a formula named for (*) Binet, as well as by the function x over the quantity one minus x minus x -squared. It is a specific type of Lucas sequence, and the ratio of consecutive elements of this sequence approaches the golden ratio. First proposed in *Liber Abaci*, for 10 points, name this recursively-defined sequence whose elements are the sum of the previous two elements, beginning 0, 1, 1, 2, 3, 5, 8.**

ANSWER: Fibonacci sequence/numbers/series [prompt on Lucas sequence before it is mentioned; prompt on pine cone sequence/numbers/series; do not prompt on "Lucas numbers"]
<Greenthal>

5. **Only one of these texts includes the notion that its central figure's relatives doubted his sanity, and another describes that figure's parents searching for him when he stayed with teachers rather than join a caravan. The documentary theory explaining the similarities of these texts includes the possibility of a (*) Q source. Instances recorded by all of these texts include the calling of Levi and the healing of a leper. Only of these texts describe the marriage at Cana, one omits the Sermon on the Mount, and two of these texts include a genealogy of Christ. For 10 points, identify this grouping of the books of Matthew, Mark, Luke, and John, which describe the life of Christ.**

ANSWER: The Four Gospels [prompt on books of the Bible or New Testament before "documentary theory" is read]
<Angelo>

6. **The losing vice presidential candidate in this election was an Arkansas senator who with John Patman sponsored a piece of legislation prohibiting price discrimination; that man was Joseph Taylor Robinson. The man elected in this campaign set up the Reconstruction Finance Corporation and appointed Andrew Mellon as Treasury Secretary. It saw the first of Norman Thomas's six attempts to run for office as a Socialist and the defeat of a man known as the (*) "Happy Warrior". Charles Curtis became vice president in this election, and the winning candidate was a former Secretary of Commerce who oversaw aid to Europe. For 10 points, name this election in which the Catholic Democrat Al Smith lost to Herbert Hoover.**

ANSWER: United States Presidential Election of 1928
<Cohen>

7. **Clayton Alderfer adapted this man's most famous theory into the ERG paradigm. In one of his works, he acknowledged that applying his most famous theory to children was much more likely to induce terror in them than happiness, comparing it to separating them from the herd. He criticized other psychologists for writing lists of psychological drives, instead of a unified system, in *A Theory of Human* (*) *Motivation*. In *Motivation and Personality*, he described transcendental experiences that fundamentally alter their subjects, which he termed peak experiences, as part of a theory that culminates in self-actualization. For 10 points, name this psychologist who wrote *Towards a New Psychology* and created the hierarchy of needs.**

ANSWER: Abraham Harold Maslow
<Meade>

8. This country was briefly ruled in the 1960s by ‘Abd al-Salam ‘Arif and from 1968 to 1979 by the military regime of Ahmad Hasan al-Bakr. Rashid ‘Ali took over this country in a coup during World War II, and it is home to the Da’wa Party. The mutilated corpse of this country’s frequent prime minister Nuri al-Sa’id was dragged through the streets after the 1958 revolution of ‘Abd al-Karim Qasim, which overthrew the monarchy of (*) Faysal II. During the Anfal Campaign in this nation, a 1987 gas attack was launched against Halabja. In 1991 the United States encouraged this nation's Shi’i citizens to revolt against the government after winning a brief war here. For 10 points, name this country that is home to Muqtada al-Sadr, Nuri al-Maliki, and, formerly, Saddam Hussein.

ANSWER: Iraq
<Haddad-Fonda>

9. Cato the Younger schooled one man of this last name in Stoicism, and Plutarch contrasts that figure with Dion of Syracuse in *Parallel Lives*. While serving as consul, another man with this last name is reported to have put his own sons Junius and Tiberius to death for an early plot against the Republic. That man with this last name legendarily grabbed the dagger Lucretia used to kill herself and subsequently overthrew (*) Tarquin the Proud, the last King of Rome. His descendant, also with this last name, was taken prisoner at the Battle of Pharsalus and ultimately killed at the Second Battle of Philippi. For 10 points, give this last name of the man who, on the Ides of March, caused Julius Caesar to ask “et tu?” during his assassination.

ANSWER: Junius Brutus [prompt on Junius]

10. Rare examples can contain hyperons, while those with radii substantially larger than predicted by the liquid drop model are called “halo” examples. The interaction between their components can be modeled by a screened Coulomb potential named for Yukawa. Their composition is defined by certain (*) “magic numbers” that deviate from the semi-empirical mass formula by having unusually large average binding energy. The existence of this entity was demonstrated by the gold foil experiment. For 10 points, name this dense region at the center of an atom composed of protons and neutrons.

ANSWER: nucleus
<Watkins>

11. In the fourth section of this work, Xenomanes describes the dim-witted monster Quaresmeprenant. In another section, the first title character fails to learn from his instructor, Holofernes, but has more success with the humanist Ponocrates. One character in this series founds an abbey whose motto is “Do what thou wilt,” the Abbey of Thélème. In one book in this series, Picrochole wages war with King (*) Grandgousier. The second title character has an entire country living inside his mouth, and also has a multilingual companion named Panurge. For 10 points, name this series of novels about a pair of giants written by François Rabelais.

ANSWER: *The Life of Gargantua and of Pantagruel* [or *La vie de Gargantua et de Pantagruel*]
<Nediger>

12. This deity rescued Aurvandil, or Earendil, from the frozen waste and made a star out of his toe; by reporting this, he disrupted the concentration of Aurvandil's wife, the witch Groa, in the middle of her incantations. This deity has a whetstone lodged in his head from his duel against the Mist Calf and the giant Hrungrir. This god kept the dwarf (*) Alvis awake until the sun turned him to stone. He took Thialfi as his servant after Thialfi ate one of the marrows of the goats that drive his chariot. This husband of Sif will kill and be killed by the World Serpent at Ragnarok. For 10 points, name this wielder of Mjollnir, the Norse god of thunder.

ANSWER: Thor [or Donar]

<Bollinger>

13. After he drafted the constitution for the colony of Carolina, this philosopher wrote an epistolary work urging acceptance of all religions, because he believed that belief could not be compelled by violence, but nevertheless advocating the harshest punishment for atheists; that work is his *Letter Concerning* (*) *Toleration*. In another of his works, he defined property as natural resources added to labor, and that work also contained a phrase nearly quoted in the Declaration of Independence, namely, that people have the right to "life, liberty, and Property." For 10 points, name this philosopher who collected his political ideas in the *Two Treatises on Government*.

ANSWER: John Locke

<Meade>

14. This composer's piano concerto features a solo for the cellos in its middle *Intermezzo* movement; that concerto in A minor was originally written as a one-movement *Phantasie*. One of his collections of piano works includes the often-omitted movement *Sphinxes* and two movements that depict contrasting aspects of the composer's personality, (*) *Florestan* and *Eusebius*. This composer of *Carnaval* wrote a symphony named for poems by Adolph Boettger. Another of his symphonies features three trombones in the fourth movement depicting a ceremony in the Cologne Cathedral near the namesake river. For 10 points, name this composer of the *Spring* and *Rhenish* symphonies, husband of Clara.

ANSWER: Robert Schumann

<Kirsch>

15. In one short story by this man, a traveling tinker mends two of Eliza's pans, but breaks her heart by discarding the flowers she gives him. This author of "Chrysanthemums" also wrote a novella in which an old man named Gitano arrives at the protagonist's farm and Gabilan is cared for by Jody. This man wrote a novel in which the Chinese housekeeper (*) Lee tries to warn Adam not to name his sons Caleb and Aron. Another novella by this author of *The Red Pony* sees one character reveal his dreams to Crooks and Candy. In that work by this author of *East of Eden*, George is forced to shoot Lennie. For 10 points, name this author of *Of Mice and Men*.

ANSWER: John Steinbeck

<Angelo>

16. One important structure in these objects is a “sandwich” held together by cysteine bonds between two beta sheets. They are diversified through VDJ recombination and contain three key amino acid sequences called CDRs. These structures have Fv and Fc regions, and interconversion among the types of these produced by a cell is called (*) class switching. Only one type of these proteins can cross the placenta from mother to fetus, the G type, and the E type triggers mast cells’ release of histamines. They are composed of two heavy and two light chains, and their variable regions participate in antigen binding. For 10 points, name these proteins also known as immunoglobulins.

ANSWER: antibodies [accept immunoglobulins or Ig before mentioned]

<Kirsch>

17. This ruler worked with the Chosen Council, which included lower-class men like Alexis Adashev and a Metropolitan of his capital named Macarius. Antonio Possevion was sent by Pope Gregory XII to resolve a war this man fought with Stephen Báthory of Poland. While unsuccessfully waging the Livonian War, this monarch created a political police force dressed in black known as the (*) *oprichniki*. Earlier, this conqueror of Kazan and Astrakhan had called forth the first “Assembly of the Lands,” or *zemskii sobor*. He was succeeded by his son Feodor I after killing his more capable heir. For 10 points, name this first tsar of a united Russia.

ANSWER: Ivan IV Vasilyevich [or Ivan the Terrible; or Ivan Groznvi]

<Austin>

18. One of this composer’s overtures calls for the second violins to tap the music stands with their bows. This composer of *Il Signor Bruschino* wrote a work in which one character helps Elvira regain the love of her husband; that work ends with Isabella sailing away with Lindoro. A character in another opera by this man sings of plans to drive his rival out of town in *La calunnia è un venticello*; that character is the music-master Basilio. He wrote *L’italiani in algieri*, and his last opera (*) features a *galop* in the overture reminiscent of a cavalry charge. The title character of his most famous opera enters with *Largo al factotum* and helps Count Almaviva win the love of Rosina. For 10 points, name this Italian composer of *William Tell* and *The Barber of Seville*.

ANSWER: Gioacchino Rossini

<Rosenberg>

19. This man lives at an estate where a bridge symbolically crosses the place where “a stream of some natural importance was swelled into greater.” This man brings his cousin with him to Rosings to visit Lady Catherine. At the Meryton ball, he describes a different character as “tolerable but not handsome,” and later, his presence keeps his rival from attending the ball at Netherfield, the home of his friend, Charles (*) Bingley. This owner of Pemberley is accepted on his second proposal, after he stops insulting his love’s lower social status. For 10 points, name this suitor to Elizabeth Bennet.

ANSWER: Mr. Fitzwilliam Darcy

<Weiner>

20. **The ends of this tissue are capped by scalariform plates, and it can develop in either endarch or exarch fashion. Most gymnosperms lack one of this tissue's cell types, vessel elements; both vessel elements and this tissue's tapered, elongated cells called (*) tracheids have thick, lignified cell walls. Monocots lack the type of this tissue that grows inward from the vascular cambium, the secondary type. This tissue functions by negative back pressure and evaporation in the mesophyll cells of leaves, creating, respectively, root pressure and transpirational pull.** For 10 points, name this plant tissue that carries water and dissolved nutrients from the roots upward.

ANSWER: xylem

<Kirsch>

21. **Maikala proposed modifications to this law to account for phenomena unique to human tissue. Adherence to this law is a prerequisite to the analysis of the binding of two species by a Job plot. This equation is often applied to find the bilirubin level in a plasma sample. This equation contains a particularly large (*) sigma when applied to a solution of a charge-transfer complex. For 10 points, name this result often invoked in analysis of UV/visual spectra, which places in direct proportion the product of path length, concentration, and molar absorptivity with the absorption of light.**

ANSWER: Beer's law [or Beer-Lambert-Bouguer law]

<Watkins>

22. **Davies convinces himself that he caused the central event at the end of this novel, and Gerard and his father Tetley both commit suicide in the final chapter. Donald Martin insists that he had recently moved to the town of Pike's Hole when accused of a crime, and Judge Tyler declares that every member of the central group of this work be tried for murder, though (*) Sheriff Risley argues against trying them. It opens with the narrator Art Croft and Gil Carter arriving the town of Bridger Wells, where they get hear about the disappearance of cattle. For 10 points, name this novel centering on the lynching of three innocent men in the titular valley, by Walter van Tilburg Clark.**

ANSWER: *The Ox Bow Incident*

<Gaurav Kandlikar>

23. **The portions of the Bibliotheca Palatina that were not destroyed during this conflict were given as a gift to Pope Gregory XV. One theatre of this war stalled when a fleet couldn't be secured to invade Zealand. Theatres in this conflict included the Emperor's War, and the Rohan Wars, which included the Siege of La Rochelle. Early in this war, a man known as the (*) Winter King was deposed following the Battle of White Mountain. One battle in it began when Count Pappenheim became engaged in a cavalry skirmish rather than stay in Magdeburg for the winter. That battle was a significant defeat for Pappenheim's commander, Baron von Tilly, at Breitenfeld. Formally ended through the Peace of Westphalia, for 10 points, name this long religious conflict in Germany.**

ANSWER: The Thirty Years' War

<Bentley>

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Packet 2

Bonuses

1. This layer of the earth extends from about 10 to 2900 kilometers below the Earth's surface. For 10 points each:

[10] Name this layer of the earth between the outer core and the crust.

ANSWER: **mantle**

[10] The upper part of the mantle is largely composed of pyroxene and this other silicate, with formula $(\text{Mg,Fe})_2\text{SiO}_4$, which has a gemstone-quality variant known as peridot.

ANSWER: **olivine**

[10] The name of this transitional layer between the core and the mantle is one of the few leftovers from Keith Bullen's nomenclature of the layers of the Earth.

ANSWER: **D**" ("dee double prime")

<Wynne>

2. In January 2011, Chinese leaders announced plans to build a high-speed rail link with this city on the Johor Strait. For 10 points each:

[10] Name this city, whose population is nearly three-quarters ethnic Chinese.

ANSWER: **Singapore**

[10] The first stage of construction on the rail line will connect southern China to this Vietnamese capital city.

ANSWER: **Hanoi**

[10] The rail line will originate in Nanning, the capital of this Chinese autonomous region that also includes Guilin. One minority from this autonomous region is the Hakka, some of whom began the Taiping Rebellion there.

ANSWER: **Guangxi**

<Haddad-Fonda>

3. In this opera, Escamillo sings of life in the ring in "Votre toast, je peux vous le rendre." For 10 points each:

[10] Name this opera centering on the corporal Don Jose and his love for the title cigarette girl.

ANSWER: **Carmen**

[10] This Frenchman composed *The Pearl Fishers* and *Carmen*.

ANSWER: Georges **Bizet**

[10] In Act II, Don Jose pulls from his tunic one of these objects which Carmen had given him after singing the habanera, then sings an aria often called the "Song" of this object.

ANSWER: a **flower**

<Rosenberg>

4. This empire got its start when its founder defeated the Nanda Dynasty, as well as satraps of Alexander the Great's retreating armies like Seleucus Nicator. For 10 points each:

[10] Identify this ancient Indian dynasty founded by Chandragupta.

ANSWER: **Maurya** Empire [or **Mauryan** Dynasty]

[10] This man helped Chandragupta overthrow the Nanda Dynasty. He advised Chandragupta to do things like set up a spy network in his Machiavellian philosophical tract, *Artha-shastra*.

ANSWER: **Kautilya** [or **Chanakya**; or **Vishnugupta**]

[10] The Maurya Empire reached its greatest size under this son of Bindusara, who eventually became a Buddhist and a pacifist after launching a campaign against Kalinga.

ANSWER: **Ashoka** the Great [or **Asoka** the Great; or **Ashoka** Bindusara Maurya]

<Haddad-Fonda>

5. This religion's supreme being is the aloof Bondye. For 10 points each:

[10] Name this religion whose priests are known as houngans and mambos. This religion's Haitian and Louisiana forms have both been syncretized with Catholicism.

ANSWER: **voodoo**

[10] Because Bondye is unreachable, practitioners of voodoo address their prayers to these intermediate beings, of whom Simbi and Baron Samedi are examples.

ANSWER: **loa**

[10] This loa knows all languages and presides over crossroads as well as communication between humans and other loa.

ANSWER: Papa **Legba**

<Angelo>

6. This man's fifth symphony features an Adagietto for strings and harp, which according to legend was sent to his lover Alma as a marriage proposal. For 10 points each:

[10] Name this composer and conductor noted for massive symphonies and *The Song of the Earth*.

ANSWER: Gustav **Mahler**

[10] This Mahler symphony, modeled after Beethoven's Ninth, started out as a tone poem called "Funeral Rites." In the finale, based on a Klopstock poem, the chorus sings of eternal life to come.

ANSWER: Symphony No. **2** [or **Resurrection** Symphony; or **Auferstehungs**sinfonie]

[10] This Mahler work's first movement uses the text of the Latin hymn "Veni Creator Spiritus," while its second closes with a setting of the final scene from Goethe's *Faust Part II*.

ANSWER: **Symphony** No. **8** in E-flat major [or **Symphony of a Thousand**]

<Rosenberg>

7. He wrote commentaries on Boethius's version of the logic textbook *Isagoge*, along with over 250 other works written in his native Arabic. For 10 points each:

[10] Name this Andalusian Muslim philosopher who refuted al-Ghazali's criticisms in *The Incoherence of the Philosophers* with his own *The Incoherence of the Incoherence*.

ANSWER: Averroes [or 'Abū l-Walīd Muhammad bin 'Ahmad bin Rušd; or Ibn Rushd]

[10] Averroes defended and promoted this Greek philosopher whose influential works included *Poetics*, *Metaphysics*, and a work defining the four causes, *Physics*.

ANSWER: Aristotle [or Aristoteles]

[10] An earlier Islamic philosopher, the Persian Avicenna, created a fourteen-volume "canon" of this non-philosophical discipline actually unrelated to the subject matter of *The Book of Healing*.

ANSWER: medicine [or al-Tibb; do not accept "al-Shifa"]

<Jackson>

8. Early evidence for it came from fine structure splitting. For 10 points each:

[10] Identify this quantity which for electrons can only take on values $+1/2$ or $-1/2$.

ANSWER: spin

[10] In this doubly eponymous experiment, atoms of silver were fired through a magnetic field and onto a photographic plate. Instead of producing a smear, the beam produced two spots on the plate, indicating that electrons could only possess one of two spin values.

ANSWER: Stern-Gerlach experiment

[10] The three spin operators for the three coordinate directions are given by these three Hermitian matrices named after an Austrian.

ANSWER: Pauli matrices

<Rosenberg>

9. For 10 points each, answer the following about some horse tales.

[10] This figure chucked a flayed horse at his sister, who hid out in a cave afterward. This storm deity also killed an eight-headed dragon.

ANSWER: Susanoo no Mikoto [or Susanowa; or Susanoto]

[10] Following the death of Baldr, this son of Odin took Sleipnir to Helheim to beg and plead for Hel to return Baldr.

ANSWER: Hermodr

[10] The horses Balius and Xanthus were owned by this hero, whose rage is the subject of the *Iliad* and who was slain by Paris.

ANSWER: Achilles

<Taylor>

10. This man wrote “strange now to think of you, gone” in a poem written for his mother called *Kaddish*. For 10 points each:

[10] Name this Beat poet who is “with [Carl Solomon] in Rockland” and wrote that he “saw the best minds of [his] generation destroyed by madness” in *Howl*.

ANSWER: Allen Ginsberg

[10] The speaker of this Ginsberg poem asks Walt Whitman, “Which way does your beard point tonight?” as he follows him through the title grocery store.

ANSWER: “A Supermarket in California”

[10] This Beat poet who opened the City Lights Books Shop in San Francisco with Peter Martin wrote such collections as *A Coney Island of the Mind*.

ANSWER: Lawrence Ferlinghetti

<Angelo>

11. The creation of this system led to Tiffin’s dilemma, which stated that the United States would be forced to continue to run deficits or this system would lose its inequality. For 10 points each:

[10] Name this international monetary system that eroded in the 1970s. It created the IMF and the World Bank and used the U.S. dollar as an “anchor” currency.

ANSWER: Bretton Woods system

[10] The Bretton Woods system was created in part to stabilize these economic quantities, which represent how much the currency of one country is worth in another.

ANSWER: currency exchange rates

[10] The Bretton Woods system partially stabilized exchange rates using this system, in which the value of a certain currency is made dependent on an agreed-upon stable currency. For example, a US dollar is always worth 5.65 Hong Kong dollars.

ANSWER: pegged currency

<Meade>

12. Prior to one battle, Barton Mitchell discovered this man’s plans to split his forces in a document later dubbed the Lost Order. For 10 points each:

[10] Identify this general, who was nicknamed “Granny” following an early defeat of his forces at Cheat Mountain.

ANSWER: Robert Edward Lee

[10] The Lost Order was found prior to this September 17, 1862 battle fought in Maryland, the bloodiest single-day battle in American history.

ANSWER: Battle of Antietam [or Battle of Sharpsburg]

[10] Although Antietam was a stalemate, it was viewed as a tactical victory for this Union general, who was replaced by Ambrose Burnside less than two months later.

ANSWER: George Brinton McClellan

<Wynne>

13. Answer these questions about dead bodies in art, for 10 points each.

[10] In order to create this historical painting, Theodore Géricault studied real corpses, painting them amidst a man waving a flag by a windswept sail.

ANSWER: *The Raft of the Medusa* [or *Le Radeau de la Méduse*]

[10] This artist showed a daughter clutching her head while her dead mother lies behind her in one of the paintings in the Death section of his *Frieze of Life*.

ANSWER: Edvard Munch

[10] This Belgian artist of *The Vile Vivisectors* made many paintings of skeletons, placing one in a top hat in his most famous painting, which features a banner that reads *VIVE LA SOCIALE*.

ANSWER: James Sidney Edouard, Baron Ensor

<Jackson>

14. A six-subunit toxic protein causes this disease's symptoms by binding to intestinal epithelial cells. For 10 points each:

[10] Name this disease caused by a water-borne bacterium of the *Vibrio* genus whose deadliest symptoms are uncontrollable vomiting and diarrhea.

ANSWER: cholera

[10] Death by cholera usually results from massive secretion of water, potassium, and the two ions of this compound into the lumen of the intestine, after which they are excreted. Too much of this compound can contribute to high blood pressure.

ANSWER: sodium chloride [or NaCl; or table salt]

[10] Scientists have hypothesized that this disease characterized by respiratory problems has persisted in the human genome because it confers some resistance to cholera, since cholera cannot thrive in the presence of this disease's mutant chloride ion channel protein.

ANSWER: cystic fibrosis

<Kirsch>

15. This country's independence movement was resisted by a man nicknamed the Iron Duke, the Duke of Alba. For 10 points each:

[10] Identify this region that gained its independence in the Eighty Years' War.

ANSWER: The Spanish Netherlands [or United Provinces; or Republic of the Seven United Netherlands; or the Dutch Republic; prompt on Holland or the Low Countries]

[10] A man of this name, known as the Silent, was a stadtholder of Holland during the Eighty Years' War. His grandson of this name would take the throne of England with his wife, Mary, in the Glorious Revolution.

ANSWER: William [or Willem]

[10] This court, established by the Duke of Alba, introduced the Tenth Penny tax and was responsible for executing Dutch Protestants like Count Egmond and Count Hoorne.

ANSWER: Council of Troubles [or Council of Blood; or Raad van Beroerten; or Tribunal de los Tumultos; or Bloedraad; or Conseil de Sang]

<Austin>

16. The protagonists of this play argue over such mundane things as the proper use of the expressions “put the kettle on” and “light the kettle.” For 10 points each:

[10] Name this play in which the hitmen Ben and Gus receive messages through the title conveyance.

ANSWER: *The Dumb Waiter*

[10] This absurdist playwright of *The Dumb Waiter* also wrote a play in which Goldberg and McCann take Stanley away after the title birthday party.

ANSWER: Harold Pinter

[10] In this Pinter play, the brothers Mick and Aston take in the elderly curmudgeon Davies, who wants to go to Sidcup so that he can stop living as Bernard Jenkins.

ANSWER: *The Caretaker*

<Angelo>

17. The first prime minister of this country, Sir John A. Macdonald, had to deal with the Red River Rebellion. For 10 points each:

[10] Identify this country whose prime ministers have included William Lyon Mackenzie King and a bunch of leaders who had trouble dealing with the Manitoba Schools Question.

ANSWER: Canada

[10] This Liberal prime minister of Canada had to deal with French separatists during the October Crisis in 1970 and sought to establish a Just Society.

ANSWER: Joseph Philippe Pierre Yves Elliot Trudeau

[10] Trudeau was succeeded as prime minister by John Turner, who himself was succeeded by this Progressive Conservative. He was unsuccessful in enacting constitutional change with either the Meech Lake or Charlottetown Accords.

ANSWER: Martin Brian Mulroney

<Bentley>

18. The fifth section of this work, “The Sand Betrayed,” includes a poem condemning the Standard Oil Company. For 10 points each:

[10] Name this poetry collection, which also contains sections entitled “Let the Woodcutter Awaken” and “The Heights of Macchu Picchu.”

ANSWER: Canto General [or General Song]

[10] *Canto General* was written by this Chilean poet of *Twenty Love Poems and a Song of Despair*.

ANSWER: Pablo Neruda [or Neftalí Ricardo Reyes Basoalto]

[10] This poetry collection by Neruda, which spawned two sequels, includes poems dedicated to wine, the artichoke, and the atom.

ANSWER: Elemental Odes [or Odas Elementales]

<Nediger>

19. This quantity is equal to the energy added divided by the quantity mass times change in temperature. For 10 points each:

[10] Name this quantity equal to the amount of energy needed to raise one mass unit by one degree Celsius.

ANSWER: **specific heat**

[10] This law uses the equipartition theorem to derive that the molar specific heat of any solid in joules per kilogram Kelvin is equal to three times the gas constant over the molar mass.

ANSWER: law of **Dulong** and **Petit**

[10] Peter Debye found that at low temperatures, the specific heat of a solid can be taken as proportional to this power of temperature.

ANSWER: **3** [or **cubic**; or **T cubed**; accept equivalents]

<Wynne>

20. The main character of this novel steals an Iron Cross from a U-boat captain, but later ends up receiving an Iron Cross himself. For 10 points each:

[10] Name this novel about Joachim Mahlke, narrated by Pilez.

ANSWER: **Cat and Mouse** [or **Katz und Maus**]

[10] *Cat and Mouse* is a novel by this German, who also wrote a novel in which Eduard Amsel creates a bunch of scarecrows, *Dog Years*.

ANSWER: Günter **Grass**

[10] The first book in Gunter Grass's *Danzig Trilogy* is this novel about Oskar Matzerath, who likes to play the title instrument and can shatter glass with his voice.

ANSWER: *The* **Tin Drum** [or *Die* **Blechtrommel**]

<Nediger>

21. Answer these questions about Dante's *Divine Comedy*, for 10 points each.

[10] This woman, who inspired *La Vita Nuova*, acts as Dante's guide in Heaven.

ANSWER: **Beatrice** Portinari

[10] The *Divine Comedy* is written in this interlocking rhyme scheme, which follows the pattern ABA BCB CDC.

ANSWER: **terza rima**

[10] This character is buried in ice up to his neck, where he chews on Ruggieri's skull. He tells Dante a story that can be interpreted as implying that he ate his own children.

ANSWER: Count **Ugolino** della Gherardesca

<Nediger>

22. Identify the following about the U.S. Census, for 10 points each.

[10] The three-fifths compromise that applied to early censuses in the United States was abolished by this first of the Civil War amendments. This amendment also abolished slavery.

ANSWER: **Thirteenth** Amendment to the United States Constitution

[10] The Census Bureau paid for the development of this early computer, which was later used to predict the results of the presidential election of 1952. A successor to ENIAC, it holds the distinction of being the first commercial computer used in the US.

ANSWER: **UNIVAC**

[10] The Census of 1890 led Frederick Jackson Turner to put forth this famous thesis, outlined in a work about the importance of this entity in American history. It stresses the importance of the experience of its namesake ever-changing region to the American character.

ANSWER: **Frontier** thesis

<Bentley>

23. Signed forms of these numbers are often represented in memory on a computer using two's complement notation. For 10 points each:

[10] Identify this set of numbers that can be declared using the "long" keyword in C.

ANSWER: **integers** [or **ints** or **Z**]

[10] Computer systems with this type of memory addressing require that the most significant byte in a word have the lowest address. The name for this addressing system derives from *Gulliver's Travels*.

ANSWER: **big-endian** [or **big-endianness**; prompt on **endian**]

[10] The IEEE ["eye-triple-e"] standard for these type of numbers contains special values for infinity and "not a number" and use subnormal numbers to help reduce underflow. They can be doubly precise.

ANSWER: **floating point** numbers [or **floats**; prompt on **decimal** numbers]

<Bentley>