

1. This island's Samaria National Park is the last refuge of the agrimi, a type of goat once thought to be wild but was in fact introduced by Bronze Age colonists. Spinalonga, a small artificial island near this larger island, was used as a Venetian outpost after this island's government, known as the "Kingdom of Candia," was overthrown by the (\*) Ottomans. Heraklion is the largest city on this island, where Duncan Mackenzie and Arthur Evans excavated a palace containing tablets written in Linear A. That city, Knossos, was located on, for 10 points, what island in the Mediterranean that was once the center of the Minoan civilization?

ANSWER: Crete [or Kriti]

<Hoppes>

2. This opera's intermezzo plays when Michael Corleone screams while clutching his daughter Mary's dead body in *The Godfather, Part Three*. In its first scene, a church choir sings the Easter hymn *Regina Coeli* before a woman outside the church describes how she was seduced in the aria "Voi lo sapete." It made its composer instantly famous after it won Edoardo Sonzogno's (\*) one-act opera competition in 1890. Often performed on a double bill with *Pagliacci*, this opera ends with Santuzza's lover Turiddu being killed in a duel by Alfio. Based on a short story by Giovanni Verga, for 10 points, name this verismo opera by Pietro Mascagni.

ANSWER: Cavalleria Rusticana [or Rustic Chivalry]

<Magin>

3. One time period in this region was called the Great Darkness and featured the Padlock Law and the Asbestos Strike. One politician here blamed "money and the ethnic vote" after a loss by one percentage point during a referendum in 1995. This place, which reformed during the (\*) Quiet Revolution, was the home of the Unione Nationale of Maurice Duplessis and the Liberals of Jean Lesage. Two kidnappings in this province sparked the use of the War Measures Act by Pierre Trudeau. For 10 points, name this Canadian province that had two independence referenda and has historically spoken French.

ANSWER: Province of Quebec [or Province de Québec; prompt on La "Belle Province"; prompt on Central "Canada" before "Canadian" is read]

<Liao>

4. One phenomenon in these materials is explained by a non-zero effective photon mass within them, and one type loses its properties at an upper critical field. One model of them gives free energy in terms of an order parameter. Another theory of them reproduces the isotope effect and gives the relationship between the energy gap and temperature. In that model, phonons mediate the combination of electrons into (\*) Cooper pairs. These materials expel magnetic fields in the Meissner effect, and are divided into Type I and Type II varieties depending on the temperature of their phase transition. Their uses include maglev trains and lossless power transmission. For 10 points, name these materials described by BCS theory, which have zero electrical resistance.

ANSWER: superconductors [or word forms like superconductivity; accept Type I superconductivity, Type II superconductivity, or high-temperature superconductivity throughout]

<Mukherjee>

5. **This man is aroused when his lover wears leather sandals and a red-and-white striped dress. This character, who rereads a news article about a Czech crime to pass time, narrates in short present-perfect sentences until he shouts down a chaplain who waves a silver crucifix at him and calls him the Antichrist. This patron of Céleste's café, a lover of Marie Cardona, often hears his neighbor (\*) Salamano beating his mangy dog. Early in the novel he appears in, this man smokes and drinks cafe au lait instead of crying at his mother's funeral. Later, after leaving Raymond Sintès's house, he rashly shoots and kills an Arab. For 10 points, name this emotionally-detached Algerian narrator of Albert Camus's *The Stranger*.**

ANSWER: Meursault [prompt on "The Stranger" or "The Outsider" before the former is read]

<Jackson>

6. **This tradition uses genealogical charts called Merit Fields or Refuge Trees. A key text of this faith lays out six states of consciousness called bardos. This tradition slowly merged with Bön and some believers etch words into mani stones to praise the compassionate entity Chenrezig. One honorific in this tradition is (\*) "Rinpoche." Devotional tasks in this faith include making detailed circular artwork with colored sand. Many devotees follow the Gelug-pa, or Yellow Hat, sect of this tradition, which uses a non-Egyptian Book of the Dead, makes *mandalas*, and follows a leader who fled Potala Palace in 1959. For 10 points, name this monastic tradition derived from Vajrayana and Mahayana, whose reincarnated leader is the fourteenth Dalai Lama.**

ANSWER: Tibetan Buddhism [or Lamaism; prompt on "Vajrayana" until mention; prompt on "Buddhism" or "Mahayana"]

<Jackson>

7. **The synthesis of this hormone relies on a nitrilase, and its actions are mediated by the actions of the SCF-TIR1 ubiquitination complex. It moves through the organism via PIN proteins in a process called polar transport, and its action was discovered by Fritz Went using agar blocks. This hormone triggers the activity of expansins, which loosen the cross-linking between cellulose fibrils, a mechanism known as (\*) acid growth. Indole-3-acetic acid is the principle type of this hormone, which is synthesized in shoot tips and controls apical dominance. Among its actions are regulating gravitropism and phototropism, and it stimulates the production of ethylene in order to suppress lateral growth. For 10 points, name this class of plant hormones.**

ANSWER: auxin

<Mukherjee>

8. **In one book, this thinker argued that priests compiled peoples' darkest secrets into a quasi-scientific study of the title phenomenon. This thinker described how nosology enabled the mortician and physician to expand the scope of their gaze. He claimed that by reducing the human body to a machine, a nation-state could control its population by exercising (\*) bio-power. Besides critically examining the "repressive hypothesis," this thinker argued that Bentham's model where a central warden can monitor all prisoners at once influenced the reform of penal systems. For 10 points, name this author of *The Birth of the Clinic* and *The History of Sexuality*, a French thinker who discussed the Panopticon in *Discipline and Punish*.**

ANSWER: Michel Foucault

<Neithalath>

9. The winning vice presidential candidate in this election defeated "The Lion of White Hall," Cassius Clay, for the nomination. A candidate in this election was mocked in the cartoon "Three to One You Don't Get It" which showed him carrying pieces of wood. A group of delegates led by William Yancey's "fire-eaters" walked out of the Democratic convention in this election, in which the (\*) Constitutional Union party nominated John Bell. Two years before this election, events in Galesburg, Alton, and Jones saw one candidate articulate the Freeport Doctrine. Hannibal Hamlin won the vice presidency in this election, whose losing candidate supported popular sovereignty. For 10 points, name this election in which two Democrats lost to Abraham Lincoln.

ANSWER: Presidential Election of 1860

<Foster>

10. Late in this story, the narrator is asked if he knew the forger Monroe Edwards. Its narrator owns a plaster bust of Cicero and opens this story by describing himself as "an elderly man", recently promoted to Master of the Chancery. Its narrator returns from church one day to find that his key no longer works, which sparks a series of events ending in the title character being sent to the (\*) Tombs for vagrancy and sleeping "with kings and counselors". The title character, a former employee of the Dead Letter Office, is hired to supplement the work done by Nippers and Turkey, but eventually stops working entirely. For 10 points, identify this entry from the *Piazza Tales*, a story by Herman Melville about a clerk whose mantra is "I would prefer not to".

ANSWER: "Bartleby, the Scrivener: A Story of Wall Street"

<Carson>

11. This composer's many pieces for violin and guitar include his Duetto amoroso in C and his Cantabile in D. This composer's Opus 11 Moto perpetuo for violin consists of one hundred and eighty-seven measures of uninterrupted sixteenth notes. His second violin concerto ends with a movement nicknamed "La Campanella." This composer's most performed works are his twenty-four (\*) caprices, the last of which became the theme of a rhapsody written by Rachmaninoff. As a performer, he dazzled early 19th century audiences with his astonishing technique playing the violin, which sparked rumors that he had made a deal with the devil. For 10 points, name this legendary Italian violin virtuoso.

ANSWER: Niccolò Paganini

<Magin>

12. One leader of this empire got his name from the drop of poison that fell on his head during his birth by C-section. Its final ruler fought an invasion by Demetrius I and was assassinated by his general Pusyamitra. Its first ruler signed the Epigamia, created his empire at Magadha after overthrowing Dhana Nanda, and was advised by the author of the *Arthashastra*, Chanakya. Another ruler of this dynasty imposed a fine for deer hunting and mandated (\*) fair treatment of prisoners as part of a set of laws he created after conquering Kalinga and converting to Buddhism. That ruler created pillars capped with lions with those edicts inscribed on them and succeeded Bindusara. For 10 points, name this Indian Empire ruled by Chandragupta and Ashoka.

ANSWER: Mauryan empire [or Mauryan dynasty]

<Mukherjee>

13. The sum of the first  $n$  of these numbers is equal to  $n$  times quantity  $n$  plus 1 times quantity  $2n$  plus 1 all over 6. The cannonball problem asks whether one of these numbers of spheres can be arranged into a pyramid. Lagrange showed that every number can be written as the sum of at most four of these numbers, and the sum of the reciprocals of these numbers is equal to  $\pi$  squared over 6. They are congruent to zero or one modulo four, which is the basis of (\*) quadratic reciprocity. The sum of the first  $n$  odd numbers is equal to the  $n$ th of these numbers. Taking one of these numbers to the one-half power returns an integer. For 10 points, identify these numbers beginning 1, 4, 9, 16, which are equal to some number multiplied by itself.

ANSWER: square numbers [or perfect squares]

<Mukherjee>

14. Simone Weil argued that the true hero of this work is force. Sections of it were rewritten for public performance by Alessandro Baricco. Many scholars of this work assert the illegitimacy of a section of it called the "doloneia". This work, which begins with the word "rage", includes a scene in which the wolf-skin-wearing spy Dolon is decapitated and describes the refusal of an embassy led by (\*) Phoenix in which women and riches are offered to a recalcitrant warrior. The Achaean contingent is exhaustively described in the "Catalogue of Ships", found in Book 2 of this work, which opens *in medias res* by describing a feud over Briseis and Chryseis. For 10 points, identify this epic poem about the Trojan War, a work of Homer.

ANSWER: *The Iliad* [or *The Song of Ilion*; or *The Song of Ilium*; also accept *An Iliad*, Baricco's version]

<Jose>

15. The mound containing this object lies in the marketplace of Argos next to the body of the first widow to remarry. An army of two hundred led by Agenor was decimated with this object. The person who owned this object was tasked with obtaining it as a present for Polydectes's wedding with Hippodamia. Another use of this object enabled the fisherman Dictys to succeed his brother to the throne. After this item was obtained, Chrysaor and (\*) Pegasus were born and it was mounted on the Aegis shield. Kept in a magic wallet, it was used to save Andromeda from a sea monster. A mirrored shield was used to turn this object against its original owner. For 10 points, name this snake-haired body part with a stone gaze, which Perseus got by decapitating a Gorgon.

ANSWER: Medusa's head [or other phrases that mean the same, like head of Medusa; do NOT prompt on or accept "Medusa" alone; prompt on "Aegis" until mentioned]

<Mukherjee>

16. Mernissi's examination of male-female dynamics within this belief system posited that the mother-in-law acts as the key enforcer for unspoken *hudud* boundaries. Cultures characterized by this belief system sit on one side of the central "fault line" according to Huntington's *Clash of Civilizations*. Clifford Geertz posited a form of "societal common sense" to explain how this system evolved in tandem with two geographically distinct civilizations in his text on "[this] (\*) Observed." This belief system traditionally takes a very negative view of *zina*, or extramarital sex, which like other taboos is considered *haraam*. The hijab is an article of clothing worn by some female practitioners of, for 10 points, what belief system that includes major Sunni and Shi'a divisions?

ANSWER: Islam [accept equivalents]

<Ray>

17. This man was once nearly killed by a bayonet that was thrust upon him by a disciple of Marcel Lefebvre. The Mitrokhin Commission investigated an earlier attempt by a Grey Wolves member to kill this man. This man controversially kissed a Quran after visiting the Umayyad Mosque in Damascus. His predecessor and namesake died six weeks after assuming office, and he established the World Youth Day gatherings. He was almost killed by (\*) Mehmet Ali Agca. The bank controlled by this man likely funded a trade-union in his home country called Solidarity. He was the first non-Italian to hold his office since Adrian VI. For 10 points, name this Polish-born pope, the predecessor of Benedict XVI.

ANSWER: Blessed Pope John Paul II [or Ioannes Paulus II; or Giovanni Paolo II; or Jan Pawel II; or Karol Jozef Wojtyla]

<Bentley>

18. This equation can be obtained by removing the exponential from Margules' equation. It is derived by equating the chemical potentials of two components and rearranging until the fugacities remain. This law applies to systems for which the enthalpy of solvation is zero, and common systems used to illustrate it are mixes of isomers like 1-propanol and 2-propanol. For real systems this law usually applies to the (\*) solvent while Henry's law applies to the solute. This law applies to ideal solutions only, and positive or negative deviations from this law create difficult-to-break systems called azeotropes. For 10 points, name this law which states that the partial pressure of a component of a solution is equal to its mole fraction times its vapor pressure.

ANSWER: Raoult's Law

<Mukherjee>

19. This poem describes a "golden Cupidon" who peeped out from a glass and "doubled the flames of sevenbranched candelabra" and contains a request "in demotic French / to luncheon" by Eugenides of Smyrna. Its first section asks "What are the roots that clutch, what branches grow / out of this stony rubbish?" This poem features the corpse of Stetson and a pearl-eyed figure who is spotted in a "wicked (\*) pack of cards" by Madame Sosostiris. It includes the drowned Phoenician sailor Phlebas and a section that repeats the line "HURRY UP PLEASE IT'S TIME". Narrated by Tiresias, it opens with an epigraph about the Cumaean Sibyl and ends with the line "Shantih shantih shantih". For 10 points, name this poem beginning "April is the cruellest month", a work of T.S. Eliot.

ANSWER: "The Waste Land"

<Jackson>

20. A color theorist from this country never finished a series on *The Four Times of the Day*. Another artist from this country painted the *Departure Triptych* and showed the horrors of war in his 1918 canvas, *The Night*. A ship is wrecked in a sea of ice in *The Polar Sea*, a painting by an artist from here. Home to the Nazarenes, one of the best known artists from this country created the *Cross in the* (\*) *Mountains* altarpiece and depicted a man with his back to the viewer and holding a walking stick as he gazed out into the fog in his *Wanderer Above the Clouds*. In the 1930s, its government classified many artists as "degenerate". For 10 points, name this country home to Caspar David Friedrich and Otto Dix.

ANSWER: Germany [or Federal Republic of Germany; or Bundesrepublik Deutschland]

<Bentley>

21. This event was triggered because of an intercepted memorandum addressed to Maximilian von Schwartzkoppen. During this event, a secret dossier was compiled by the suicidal Hubert-Joseph Henry and the bizarre Armande Mercier Du Paty De Clam. The supposed perpetrator of this event was pardoned by Rene Waldeck-Rousseau as a result of Georges Picquart's discovery that documents were forged to protect Ferdinand Walsin (\*) Esterhazy. The second trial in this event happened after the namesake man was retrieved from Devil's Island. The army was attacked for this event in the newspaper *L'Aurore* containing a letter entitled *J'accuse* written by Emile Zola. For 10 points, name this French political scandal in which a Jewish officer was charged with treason.

ANSWER: Dreyfus Affair

<Huang>

22. The tendency of these particles to follow super-Poisson statistics rather than Poisson statistics manifests in their namesake bunching. QED predicts that all interactions between charged particles are due to exchange of these. These particles decoupled from baryonic matter during the recombination era, and their bouncing off of the surface of last scattering created the CMB. These particles are emitted when charged particles change (\*) trajectory in brehmsstrahlung. They decrease in energy when interacting with matter in Compton scattering, and they interfere with each other when passing through an aperture, which shows their dual nature. For 10 points, name this spin-1 massless gauge boson, the carrier of the electromagnetic force and a particle of light.

ANSWER: photon

<Mukherjee>

23. A poem by this author describes "a king in exile, uncrowned in the underworld" who visits the speaker's water trough. In a short story by this author, the protagonist partners with Oscar Cresswell and the gardener Bassett after hearing the repeated phrase "There must be more money". This author of "The Snake" wrote a novel whose protagonist leaves Miriam Lievers in favor of Clara Dawes, but remains attached to his (\*) mother Gertrude. Another of his novels is set at the estate of Wragby, where the protagonist has an affair with Michaelis and divorces Clifford after being impregnated by Oliver Mellors. For 10 points, name this author of "The Rocking Horse Winner", who wrote about Paul Morel in *Sons and Lovers* and penned *Lady Chatterley's Lover*.

ANSWER: David Herbert Richards Lawrence

<Graebner>

24. This man's enemies included a political partner who did nothing but watch the skies for omens to block his legislation. In one written work, this victor over Pharnaces II described human sacrifices being burnt inside a huge wooden effigy, or "wicker man." This winner at Zela also won one battle after building booby-trapped walls surrounding a city held by the Arverni. This man was consul with Bibulus, and he wrote a (\*) third-person account recalling his victory at Alesia against Vercingetorix during his invasion of Transalpine Gaul. For 10 points, name this man who famously took troops across the Rubicon, a Roman dictator who said "Veni, vidi, vici" and was stabbed in the Senate on the Ides of March.

ANSWER: Gaius Julius Caesar [prompt "Julius"]

<Jackson>

1. This novel ends with Maureen running after a mysterious helicopter, while items that cause conflict in it include a shotgun belonging to Bam and a small truck called a bakkie. For 10 points each:

[10] Identify this 1981 novel in which the Smales family is forced to flee war-torn Johannesburg to live in the home village of their servant, the title character.

ANSWER: **July's People**

[10] This female South African author of *The Conservationist* and *Burger's Daughter* wrote *July's People*.

ANSWER: Nadine **Gordimer**

[10] In the title of a 2007 short story collection, Gordimer asserted that this composer "was one-sixteenth black". Adrienne Rich described this man's most famous symphony as "yelling at Joy from the tunnel of the ego" in a poem about that work "understood at last as a sexual message".

ANSWER: Ludwig van **Beethoven**

<Carson>

2. These entities are handled in try/catch blocks in Java and are usually preferred over error checking. For 10 points each:

[10] Identify these errors, which alter the flow of a program's execution. In Java, they include NullPointerException, NegativeArraySize, and IllegalAccess.

ANSWER: **exceptions**

[10] Java supports these types of exceptions, which are defined in a function's signature. For instance, the IOException in InputStreamReader.read() is this type of exception.

ANSWER: **checked** exceptions

[10] If a method does not handle a checked exception in Java, it must use this keyword to propagate the exception up the stack.

ANSWER: **throws**

<Mukherjee>

3. This ruler was deposed after the 1997 financial crisis, and a group of academics questioned his use of his predecessor's Pancasila political philosophy in the Petition of Fifty. For 10 points each:

[10] Name this longtime dictator and head of the New Order government who was succeeded by his vice-president BJ Habibie.

ANSWER: **Suharto**

[10] Suharto succeeded Sukarno as the leader of this island nation. East Timor gained independence from this nation in 2002.

ANSWER: Republic of **Indonesia** [or **Republik Indonesia**]

[10] Suharto hosted the first summit this multinational entity, which originally included Indonesia, Singapore, the Philippines, Malaysia and Thailand. It created a free-trade area using the Common Effective Preferential Tariff scheme.

ANSWER: **ASEAN** [or **Association of Southeast Asian Nations**]

<Mukherjee>

4. Answer the following about some less than optimistic economic theories, for 10 points each:

[10] John Maynard Keynes became a household name after publishing this 1919 book predicting the disastrous fallout of the harsh terms enforced on Germany through the Treaty of Versailles.

ANSWER: *The Economic Consequences of the Peace*

[10] The denigration of economics as the "dismal science" was popularized by the debate around this man's *Essay on the Principle of Population*, which warned of the dangers of exponential growth.

ANSWER: Thomas Malthus

[10] The term "dismal science" was coined in this Scottish thinker's exceptionally racist "Occasional Discourse on the Negro Question." This author of a major study on heroic leadership incorporated many of his philosophical ideas into his novel *Sartor Resartus*.

ANSWER: Thomas Carlyle

<Ray>

5. His opera *Lady Macbeth of the Mtsensk District* was denounced in the *Pravda* article "Chaos Instead of Music." For 10 points each:

[10] Name this 20th century Russian composer of fifteen symphonies, including ones nicknamed "Babi Yar" and "Leningrad."

ANSWER: Dmitri Shostakovich

[10] In 1937, Shostakovich responded to the accusations in "Chaos Instead of Music" by composing this D minor symphony, which became known as "a Soviet artist's creative response to justified criticism." It rehabilitated his relationship with Soviet authorities.

ANSWER: 5th symphony

[10] Shostakovich's first concerto for this instrument was dedicated to David Oistrakh, who premiered it. Modern players of this instrument include Sarah Chang, Hilary Hahn, and Itzhak Perlman.

ANSWER: violin

<Thompson>

6. Answer the following about the Acts of the Apostles, for 10 points each.

[10] Acts begins with Matthias being chosen in the upper room to replace this disciple of Jesus, a fellow who died shortly after he betrayed Jesus in the garden of Gethsemane.

ANSWER: Judas Iscariot

[10] One section in Acts tells of this deacon, who performs miracles in Samaria. Known as the evangelist, this man baptizes Simon Magus, who then later attempts to buy the power of miracles from Peter.

ANSWER: Philip the Evangelist

[10] After his stay in Samaria, Philip then meets a eunuch from this modern-day country, which was one of the first countries, along with Armenia, to adopt Christianity as a state religion.

ANSWER: Ethiopia

<Cheyne>

7. Answer some questions about crystals like sodium chloride, for 10 points each:

[10] Crystals like sodium chloride are held together by these kinds of bonds, which are simply electrostatic interactions between species of opposite charge.

ANSWER: ionic bonds

[10] There are two crystal configurations that maximize the amount of space taken up in the unit cell, with a packing factor around 74%. Name either.

ANSWER: face-centered cubic or hexagonal close-packed [or FCC or HCP]

[10] These phenomena are disruptions of the regularly ordered lattice structure of a crystal. Some of them are named for Schottky and Frenkel.

ANSWER: defects

<Mukherjee>



8. Answer the following about governing bodies during the French Revolution, for 10 points each.

[10] The history of this political body is divided by the Coup of 18 Fructidor. The Constitution of Year III stipulated that it would be made up of 750 representatives.

ANSWER: The **Directory** [or **Directoire** executive]

[10] Representation in the Directory was split between the Council of Five Hundred and this other body. This body selected the five Directors.

ANSWER: Council of the **Ancients** [or Council of the **Elders**; or Conseil des **Anciens**]

[10] The Directory ended through the Coup of 18 Brumaire, which brought this general to power as a consul.

ANSWER: **Napoleon** I Bonaparte [or Napoleon **Bonaparte**]

<Bentley>

9. Leucippus's student Democritus refuted Parmenides's theory of illusory change by arguing for these objects' existence. For 10 points each:

[10] Name these eternal objects surrounded by void, which can rearrange to form visible physical objects. By definition, they cannot be cut or divided.

ANSWER: **atoms** [or **atomoi**]

[10] This Latin thinker repeated the claim that the random "swerve" of atoms from a straight path allows for free will in his poetic *De rerum natura*, or *On the Nature of Things*.

ANSWER: Titus **Lucretius** Carus

[10] Lucretius attributed the formation of the "swerve" theory to this atomist, who prized a serenity known as "ataraxia," taught at The Garden, and held that pleasure was the ultimate good.

ANSWER: **Epicurus**

<Jackson>

10. In one poem, this man wrote "Though the night was made for loving, and the day returns too soon, yet we'll go no more a-roving, by the light of the moon". For 10 points each:

[10] Name this poet who began one work with the exhortation, "Maid of Athens, ere we part, give, oh, give, me back my heart." and wrote another poem about a figure who moves "like the night of cloudless climes and starry skies".

ANSWER: Lord **Byron** [or George Gordon **Byron**; or George Gordon Noel, 6th Baron **Byron**]

[10] This last aforementioned poem was inspired by Byron's cousin Lady Anne Wilmot. It says of the title female figure that "all that's best of dark and bright meet in her aspect and her eyes".

ANSWER: "**She Walks in Beauty**"

[10] Lord Byron insulted Robert Southey in the preface to a satiric epic in ottava rima about this famous Spanish lover, whose first literary appearance was in Tirso di Molina's *The Trickster of Seville*.

ANSWER: **Don Juan** [Byron's is pronounced "don JOO-uhn"; prompt on "Don Giovanni"]

<Gioia>

11. Players on the Miami Heat wore hoodies in a show of solidarity with this figure. For 10 points each:

[10] Name this African-American teenager from Florida who was walking home from a corner store when George Zimmerman shot him.

ANSWER: Trayvon **Martin**

[10] This Florida governor, who defeated Alex Sink in 2010, appointed Angela Corey to be the special prosecutor in the Trayvon Martin Case.

ANSWER: Richard Lynn "Rick" **Scott**

[10] This Fox News Channel personality asserted that Martin's "gangsta style clothing" was as culpable in the shooting as Zimmerman.

ANSWER: Geraldo **Rivera** [prompt on "Geraldo"]

<Mukherjee>

12. One protagonist of this novel sees a comet at the end of a volume in which he joined the Freemasons, while another loses 40,000 rubles gambling with Dolokhov. For 10 points each:

[10] Name this novel in which Nikolai Rostov enlists in General Kutuzov's army while his sister Natasha pines after Prince Andrei.

ANSWER: War and Peace [or Voyna i Mir]

[10] This author donated the royalties from his novel *Resurrection* to the Doukhobors' migration effort, completing his religious self-distancing from his two largest novels, *War and Peace* and *Anna Karenina*.

ANSWER: Leo Tolstoy [or Lev Nikolayevich Tolstoy]

[10] This family in *War and Peace* includes Pierre Bezukhov's wife Hélène and the panderer Anatole, who almost seduces Natasha at the opera. Its patriarch, Vassily, speaks in French with Anna Scherer at the novel's opening.

ANSWER: the Kuragin family

<Jackson>

13. [Note to Moderator: Please read part 2 slowly]

For a charge in an electric field, this value is equal to  $q$  times  $V$ . For 10 points each:

[10] Identify this value representing the stored energy of a system, the gravitational version of which is equal to  $m$  times  $g$  times  $h$ .

ANSWER: potential energy [do NOT accept or prompt on "potential"]

[10] For a horizontal spring at displacement  $x$  from the equilibrium point, with a spring constant of  $k$ , and a mass of  $m$  on the end, this is the potential energy of the spring-mass system. You may assume at equilibrium the PE is zero.

ANSWER: one-half  $k x^2$

[10] On a potential energy surface, equilibria can be found at both maxima and minima. Equilibria that occur on maxima have this property, in which very small perturbations will push the system out of equilibrium.

ANSWER: unstable [do NOT accept "stable" or "metastable"]

<Mukherjee>

14. Forces commanded by Sir Thomas Fairfax and this man defeated Prince Rupert of the Rhine at Naseby. For 10 points each:

[10] Name this Lord Protector, whose New Model Army perpetrated massacres at Drogheda and Wexford during his invasion of Ireland.

ANSWER: Oliver Cromwell

[10] Charles I created this legislative body, that was purged by Cromwell's general Thomas Pride. This body abolished the Star Chamber.

ANSWER: Long Parliament

[10] Cromwell presided over these discussions about the formation of a new constitution, during which Henry Ireton opposed attempts by the Levellers to institute universal male suffrage.

ANSWER: Putney debates

<Kothari>

15. The artist behind this work also created *A Nonsite, Franklin, New Jersey*, and it was constructed using materials like basalt rocks. For 10 points each:

[10] Identify this work of Robert Smithson completed in 1970 that was submerged for many years after its creation.

ANSWER: *The Spiral Jetty*

[10] Smithson's oeuvre shares motifs with public-art projects like *The Gates* and *Running Fence* created by this man and his wife, Jeanne-Claude.

ANSWER: **Christo** Vladimirov **Javacheff** [accept either underlined answer]

[10] Christo and Jeanne-Claude once wrapped this building in polypropylene. A famous photo by Yevgeny Khaldei sees a Soviet soldier holding a flag on top of this building.

ANSWER: **Reichstag** Building

<Bentley>

16. This figure was born after a group of birds ate all of the grass in Emain Macha and a creature jumped into Deichtine's mouth. For 10 points each:

[10] Identify this 14-fingered, 14-toed hero of the Ulster cycle, who wielded the spear Gae Bolg and fought in the Cattle Raid of Cooley.

ANSWER: **Cu Chulainn** [or **Setanta**]

[10] Cu Chulainn got his name after killing one of these animals belonging to the smith Culainn. For his final labor, Heracles captured one of these animals with three heads.

ANSWER: **dog**

[10] Cu Chulainn spurned this goddess of death and war, who often appears as a crow. During the Cattle Raid of Cooley, she turned herself into an eel and tripped Cu Chulainn.

ANSWER: The **Morrigan**

<Mukherjee>

17. Nearly 50 years after its debut, this play's author wrote a prequel for it called *Homelife* in which one of its characters converses with his wife Ann before leaving to read a book in Central Park. For 10 points each:

[10] Identify this play, set mostly on a park bench, in which Jerry continually attempts to converse with Peter. It ends with Peter picking up a knife Jerry drops, prompting Jerry to impale himself on it.

ANSWER: *The Zoo Story*

[10] In this play by the author of *The Zoo Story*, George and Martha tear down the illusions surrounding their marriage while Nick and Honey are dragged into their argument.

ANSWER: **Who's Afraid of Virginia Woolf?**

[10] This absurdist American playwright wrote *The Zoo Story* and *Who's Afraid of Virginia Woolf?*.

ANSWER: Edward Franklin **Albee** III

<Neithalath>

18. Several female figures in an Arcadian setting surround this god in a painting by Francois Boucher where he is *A Captive*. For 10 points each:

[10] Identify this god of love who was commonly depicted in art rescuing Psyche with a kiss.

ANSWER: **Cupid** [or **Eros**]

[10] A shoe is flung towards a statue of Cupid holding his finger to his lips in the best known painting by this artist. A prostitute holds a bouquet of flowers in his *The Love Letter*, and he was a contemporary of Boucher.

ANSWER: Jean-Honore **Fragonard**

[10] The Madame du Barry commissioned this series of paintings by Fragonard. A laurel wreath is held above one figure's head in *The Lover Crowned*, while other paintings in this series include *The Surprise*.

ANSWER: *The **Progress of Love*** [or *La **Poursuite de l'Amour***]

<Bentley>

19. Answer the following about the Montgomery bus boycott, for 10 points each:

[10] It all began when this secretary of the Montgomery chapter of the NAACP refused to give up her seat when bus driver James F Blake asked her to.

ANSWER: Rosa Louise MacCauley **Parks**

[10] In the aftermath of the boycott, a group of sixty ministers formed this organization, whose first president was Martin Luther King, Jr.

ANSWER: **Southern Christian Leadership Conference** [or **SCLC**]

[10] King's chief advisor during the formation of the SCLC was this oft-imprisoned former Communist, who was the chief organizer of the March on Washington. Congressman Adam Clayton Powell forced him to resign from the SCLC by threatening to reveal his homosexuality.

ANSWER: Bayard **Rustin**

<Mukherjee>

20. The pathogenicity of this bacterium was established when Barry Marshall drank a culture of it and developed gastritis five days later. For 10 points each:

[10] Name this unusual bacterium that can survive in the stomach and is the causative agent of most gastric ulcers.

ANSWER: **H. pylori** [or **Helicobacter pylori**]

[10] H. pylori has the ability to cleave this nitrogenous compound, which is created from arginine in a namesake metabolic cycle. In humans, this is the primary molecule used to excrete nitrogen into the urine.

ANSWER: **urea**

[10] This hormone, which is secreted from the G cells of the stomach's antrum, is the primary driving force for the secretion of acid from parietal cells.

ANSWER: **gastrin**

<Mukherjee>

21. The protagonist of this novel offers shelter to Crazy Ivar. For 10 points each:

[10] Identify this novel in which the protagonist eventually marries Carl Lindstrum after the death of her brother Emil.

ANSWER: **O Pioneers!**

[10] *O Pioneers* was written by this American author, who wrote about Jim Burden and the Shimerda family in her novel *My Antonia*.

ANSWER: Willa Sibert **Cather**

[10] In this other Cather novel, Mr. Harsanyi talks Moonstone, Colorado native Thea Kronborg into taking singing lessons with Madison Bowers, furthering her rise to become a world-famous opera singer.

ANSWER: *The* **Song of the Lark**

<Bentley>

22. This hormone is synthesized by a protein that has both a heme and BH4 cofactor, and is released from endothelial cells in blood vessel walls. For 10 points each:

[10] Identify this small gaseous hormone which relaxes blood vessels. Viagra notably works by increasing the downstream effects of this hormone.

ANSWER: **nitric oxide** [or **NO**]

[10] People with this condition often do not secrete as much nitric oxide as they should. This condition is defined as blood pressure above 140 over 90 millimeters of mercury.

ANSWER: **hypertension**

[10] Viagra works by inhibiting PDE5, which degrades this cyclic nucleotide that has a structure similar to cAMP ("c-A-M-P"). This molecule activates protein kinase G, which then activates downstream signals.

ANSWER: **cGMP** [or **cyclic GMP**; or **cyclic guanosine monophosphate**; do NOT prompt on or accept "guanine", "guanosine", "guanosine monophosphate", "guanine monophosphate", "GMP", or other partial answers]

<Mukherjee>

23. One World Heritage site in this city was originally designed by the Czech architect, Jan Letzel. For 10 points each:

[10] The *Enola Gay* dropped Little Boy on what city, the first target of an atomic bomb in history?

ANSWER: **Hiroshima**

[10] One of the justifications for the use of the atomic bomb was that this operation, an invasion of mainland Japan, would have cost far more casualties on both sides.

ANSWER: Operation **Downfall** [prompt on "Operation Olympic" or "Operation Coronet"]

[10] Although Kyoto was originally listed as a target for the atomic bomb, this Secretary of War removed it from the list. His "doctrine" pledges non-recognition of territorial changes made by force.

ANSWER: Henry Lewis **Stimson**

<Ueda>