

1. In this region, a paramilitary hit squad was trained during "Operation Marion." In 2002, this region became home to a breakaway republic attempting to recreate the ancestral Lozi kingdom of Barotseland. Mishake Muyongo was allegedly promised independence for this region in exchange for supporting SWAPO. This region's existence was acknowledged in the (\*) "Heligoland Treaty" that also acknowledged a British protectorate in Zanzibar. This geopolitical entity was originally created to provide a nonexistent outlet to the Indian Ocean, as German authorities conveniently disregarded Victoria Falls. For 10 points, name this region of Southern Africa that was named for Otto von Bismarck's successor and tacked onto what is now Namibia.

ANSWER: Caprivi Strip [or Caprivi Finger; or Caprivi Zipfel]

<Wynne>

2. One writer with this name urged believers not to be like a man who looks in the mirror and immediately forgets what his face looks like. Another man with this name is executed at the beginning of Acts 12, making him the second Christian to be martyred, after Stephen. This is the name of the first bishop of Jerusalem. Martin Luther attacked a writer with this name as producing an "epistle of straw" and wanted it out of the New Testament. One man with this name wrote an epistle which asks "what (\*) good is it, if a man claims to have faith but has no deeds?" This is the name shared by the oldest brother of Jesus and the patron saint of Spain, who was known as the "Son of Thunder." For 10 points, give this common name held by an apostle who was the brother of John.

ANSWER: James [accept James of Zebedee, James the Just, James the Great, or Santiago; prompt on "Son of Thunder" before mention]

<Cheyne>

3. This man chose a Weegee photo in which a drunk lunges into a portrait of two high society women as the cover image for his most famous work. He claimed that women avert their eyes in "licensed withdrawal" in his study of commercial images, *Gender Advertisements*. This thinker considered various forms of the vacationing Preedy in a work that built on the theories of Herbert Blumer and drew from research on the (\*) Shetland Islands to conclude that people rely on "cues" while playing social roles and conceiving of others as an "audience." The concept of dramaturgy was introduced into symbolic interaction theory by, for 10 points, what sociologist who compared social interaction to theater in *The Presentation of Self in Everyday Life*?

ANSWER: Erving Goffman

<Ray>

4. In one of this man's novels, a pastor adopts and becomes obsessed with a blind girl named Gertrude, whom he takes to see a certain Beethoven work. La Perouse's grandson Boris commits suicide on a dare from Gheridanisol in another novel by this author. This author of *The Pastoral Symphony* was widely condemned for defending pederasty in a 1924 set of dialogues called (\*) *Corydon*. He wrote a novel which details the semi-incestuous relationship of Edouard X. and the protagonist Olivier. In another of his novels, the protagonist's recovery from tuberculosis prompts him to neglect his wife and travel across Europe and North Africa living hedonistically. For 10 points, identify this French author of *The Counterfeiters* and *The Immoralist*.

ANSWER: Andre Paul Guillaume Gide

<Carson>

5. This substance was first synthesized by using the LEAR apparatus to launch particles at xenon clusters. The ALPHA project uses minimum-B traps to contain this substance. One can analyze the 1S-2S transitions in this substance's absorption spectrum to confirm the CPT theorem. One method of synthesizing this substance involved collecting radioactive sodium in a Penning trap in the ATRAP and ATHENA experiments. The fact that this substance is (\*) rare in the universe is the subject of the baryon asymmetry problem. When one atom of this substance collides with a hydrogen atom, it forms two gamma rays and two pions in an annihilation reaction. For 10 points, name this atom which consists of a single positron orbiting an antiproton, the lightest element of antimatter.

ANSWER: antihydrogen [or h-bar; accept antimatter until "orbiting", prompt after]

<Mukherjee>

6. Robert Schumann wrote that all composers should make this work their "daily bread." Many scholars contend that this work was composed to demonstrate the musical possibilities of a tuning system in which the octave is divided into twelve equal semitones. This work was the foundation of Nadia Boulanger's musical pedagogy and is often called "the 48." It begins with a C-major progression of simple arpeggios. This polytonal work consists of two (\*) books, the first composed in 1722 and the second in 1742, each of which contain twenty-four preludes and fugues in every key. For 10 points, name this collection of keyboard music by Johann Sebastian Bach.

ANSWER: *The Well-Tempered Clavier* [or *Das Wohltemperierte Klavier*; or BWV 846-893]

<Magin>

7. Fred Nijhout described these creatures' coloration using the nymphalid ground plan. *Bicyclus anynana*'s pronounced seasonal polyphenism makes it a model organism of this type. In 2011, sequencing experiments by Naomi Pierce, Kurt Johnson, et al. confirmed that the polyommatus blue type of this creature migrated in waves from Asia into the Americas, validating a theory by amateur scientist Vladimir (\*) Nabokov. The *Heliconius* type of these lepidopteran insects serve as a textbook example of Mullerian mimicry, as do the viceroy type. For 10 points, name these large-winged insects which usually emerge from a chrysalis and include the poisonous orange monarch type.

ANSWER: butterflies [or moths until "Bicyclus" is read; prompt "Lepidopter" or "Lepidoptera" until read]

<Jackson>

8. This character tortures his young servant boy by burning two tickets to the carnival he wants to attend in front of him. His only love interest is a Memphis prostitute named Lorraine. This man scams his niece out of four thousand dollars worth of checks from her mother, but she takes her revenge by stealing all the money in his iron strongbox and running away. This character is the narrator of the section "April 6, 1928". This employee at Earl's Hardware Store has his (\*) retarded brother castrated after he attacks a girl. Cold and greedy, he embezzles from his niece Quentin and despises his siblings Caddy and Benjy. For 10 points, name this racist third child of the Compson family from Faulkner's *The Sound and the Fury*.

ANSWER: Jason Compson IV [prompt on "Compson"; do NOT accept or prompt on "Jason Compson III"]

<Bollinger>

9. **This work criticized Schopenhauer's "principle of individuation," instead longing for "glorious transport which arises in man, even from the very depths of nature." Later editions of this work were published with a prefatory essay called "An Attempt at Self-Criticism." This work claims that the spirit of science clashed with the power of myth creation in the new Attic dithyramb. (\*) Euripides is called a hypocrite in this work, which lays out the paradoxical "cheerfulness" of the title entity. This work symbolizes the interplay between chaos and harmony with the mythological emblems of Apollo and Dionysus. For 10 points, name this work of aesthetics written by Nietzsche.**

ANSWER: *The Birth of Tragedy From the Spirit of Music* [or *The Birth of Tragedy, or Hellenism and Pessimism*; or *Die Geburt der Tragödie aus dem Geiste der Musik*; or *Die Geburt der Tragödie, Oder: Griechentum und Pessimismus*]

<Gupta>

10. **Participants in this mission included the *Whiskey Pete* and the *Ruptured Duck*. Harold A. Spatz and William G. Farrow were executed following this operation. One participant in this operation was assisted by the missionary John Birch. This operation began aboard the *Hornet* and resulted in damage of the *Ryuhō*. Initial plans called for this mission to end in (\*) Vladivostok, where the planes involved would be turned over to the Soviets as part of the Lend-Lease program. The Zhejiang-Jiangxi Campaign retaliated against this operation, during which several B-25s crash-landed in China. This mission was dramatized in the film *Thirty Seconds Over Tokyo*. For 10 points, name this April 18, 1942, bombing of mainland Japan.**

ANSWER: **Doolittle Raid** [prompt on "bombing of Japan", "bombing of Tokyo", or other descriptive answers]

<Bentley>

11. **This ability is given by Poseidon to his lover Mestra, who uses it to thwart her father's plan to sell her to a suitor. Prophecy and this other power are possessed by the husband of Doris, who tells Heracles how to obtain the apples of the Hesperides. While in Egypt, Menelaus fought with another person with this ability, who told him that Agammemnon was dead. This ability was possessed by a person who herds a group of Poseidon's seals and can only give prophecy if he is captured and held. It is possessed by Nereus and "the (\*) old man of the sea," Proteus. In order to forestall a prophecy that his children would be more powerful than he, Zeus tricked Metis into doing this and swallowed her. For 10 points, name this power, the ability to change form.**

ANSWER: **shape-shifting** [or the ability to **change form** before it is mentioned; accept synonyms of the above; accept **becoming** an **animal** or synonymous things since that's what they often shifted shapes to]

<Mukherjee>

12. **According to Suetonius, this man once jokingly asked if certain coins reeked, since they came from the tax that he levied on urine. He was actually in Egypt, not Rome, when the Senate first officially recognized him, having been sent to the eastern reaches of the empire four years earlier with orders to suppress a (\*) Jewish revolt, a charge he had received from Nero. During his reign, the first stones were laid for the Colosseum. He was the ultimate survivor of the Year of Four Emperors after Galba, Otho, and Vitellius. For 10 points, name this emperor who ruled from 69 to 79 CE, the founder of the Flavian dynasty and father of both Titus and Domitian.**

ANSWER: **Vespasian** [or Titus Flavius Caesar **Vespasianus** Augustus]

<Thompson>

13. An estuary that is part of this sea, fed by the Nene (NEN) and Great Ouse (OOZ) rivers and known as "the Wash," has been the subject of land reclamation projects. The city of Stavanger, which is located on this sea, relies economically on the oil wells in it, including the offshore Ekofisk oil field. Fishing boats in this sea often congregate near Dogger Bank. (\*) Dundee is a port on the Firth of Tay, which feeds into this sea. This sea is at the western end of the Kiel Canal. The busiest port in Europe by tonnage, Rotterdam, can also be found on this sea. For 10 points, name this sea that borders England, Norway, Germany, and the Netherlands.

ANSWER: North Sea

<Haddad-Fonda>

14. One character in this novel owns a heavily annotated and clipping-filled copy of Herodotus's *Histories*. Another character in this novel was trained to defuse bombs by Lord Suffolk, while a third had his thumbs cut off after an interrogation led by Ranuccio Tomassoni. The title character of this novel is shot down while flying back from the Cave of Swimmers, where he had previously hidden (\*) Katharine Clifton's body. Its characters include the thief-turned-spy David Caravaggio and a sapper named Kip, the latter of whom falls in love with Hana, a Canadian nurse who tends to this novel's title character in the Villa San Girolamo. For 10 points, name this novel whose title character is the severely burned Laszlo de Almasz, a work of Michael Ondaatje.

ANSWER: *The English Patient*

<Carson>

15. The hyperbolic arctangent of this value is used to test hypotheses about it, and is known as the Fisher transformation. For given sets A and B, this value is equal to the covariance of A and B divided by the product of the standard deviations of A and B. The sampling distribution of this value follows an  $n - 2$  degrees of freedom t-distribution. An alternative to it is Spearman's rho, which is based on ranks. The square of this value is the amount of variation in the (\*) dependent variable that can be explained by the independent variable in a least-squares regression. For a perfectly dependent pair of variables, it is equal to 1. For 10 points, identify this value developed by Pearson which measures how well a particular line fits a series of points.

ANSWER: R [or correlation; accept R-squared; accept Pearson's coefficient before mention]

<Mukherjee>

16. One character in this work sings "I always voted at my party's call, And I never thought of thinking for myself at all" in a song explaining how he achieved his high position, "When I was a lad." This work lampoons the idea that "love levels all ranks" by revealing that two of its characters, including Captain Corcoran, were switched at birth. This operetta begins with the arrival of Sir Joseph Porter to the title (\*) location, and ends with Sir Joseph consenting to the marriage of Josephine and Ralph Rackstraw. Including such songs as "I'm called Little Buttercup" and "A British tar," it is subtitled "The Lass That Loved a Sailor." For 10 points, name this Gilbert and Sullivan operetta set on the title boat.

ANSWER: *H.M.S. Pinafore, or the Lass That Loved a Sailor*

<Magin>

17. In this state, a proposal to flood Lake Pedder led to the formation of what is often called the world's first Green Party. Martin Bryant perpetrated the Port Arthur massacre in this state. George Augustus Robinson was appointed to "conciliate" indigenous inhabitants of this place, but its original population went extinct upon the 1876 death of Truganini. On the orders of George Arthur, a human chain was used to sweep through this entire present-day state to displace the native population in the (\*) Black War. Its discoverer, who worked for the United East India Company, attempted to sail his flagship, the *Heemskerck*, into its Adventure Bay. For 10 points, name this state formerly known as Van Diemen's Land, an island in Australia.

ANSWER: Tasmania [or Van Diemen's Land until mention; prompt on "Australia" until mention]

<Weiner>

18. Helene Toussaint argued that the figures on the left-hand side of this work, long identified only as types like "an Irishwomen" and "a Jew", were portraits of people like Achille Fould and the Duc de Persigny. A young boy in tattered clothes who represents "the people" looks at the title figure of this painting. To his left, a guitar and a dagger lie next to two white dogs. The right third of this painting contains portraits of men like Jules Champfleury and (\*) Charles Baudelaire. The title figure is seated next to a model holding her clothing and is painting a landscape of Ornans in this work. For 10 points, name this Gustave Courbet painting set where Courbet creates his works.

ANSWER: The Artist's Studio: A Real Allegory of a Seven Year Phase in my Artistic and Moral Life [accept The Painter's Studio or The Studio of the Artist or The Studio of the Painter or L'Atelier du peintre, Allégorie réelle]

<Bentley>

19. The speaker of this poem lists "camel-back, horse-back, ass-back, mule-back" as examples of "Old civilizations put to the sword". Its speaker warns that "Aeroplane and Zeppelin will come out, / pitch like King Billy bomb-balls in / until the town lie beaten flat". The declaration "All perform their tragic play" begins its second stanza, which celebrates tragedy's inability to "grow by an inch or an ounce" even "though (\*) Hamlet rambles and Lear rages...upon a hundred thousand stages". It asserts that "all things fall and are built again" and describes "a long-legged bird, a symbol of longevity" that flies above figures whose "ancient, glittering eyes" are gay. For 10 points, name this W.B. Yeats poem describing "Chinamen" carved on the titular blue stone.

ANSWER: "Lapis Lazuli"

<Gioia>

20. This process is inhibited by decitabine and by azacitidine at low doses, and it is detected by bisulfite treatment. It occurs heavily in Alu, LINE, and satellite repeat elements. This modification is used to distinguish the template in mismatch repair. This modification occurs at CpG islands. Its occurrence on the long arm of chromosome 15 is a classic instance of genomic imprinting, and deletion of that region results in Prader-Willi or Angelman syndrome. It occurs extensively in Barr bodies, and along with histone (\*) modification it is a primary mechanism of epigenetic inheritance. It usually occurs at cytosine residues to silence genes. For 10 points, name this chemical modification of DNA that involves adding a CH<sub>3</sub> group.

ANSWER: DNA methylation [do NOT accept "histone methylation" or "protein methylation"]

<Mukherjee>

21. **Ancestors of this work's protagonist include a man who set fire to a village using a pitch-pine knot and a constable who once whipped a Quaker woman in public. One character chides its protagonist for being late, noting that the Old South clock had struck 15 minutes ago. Another character in this work is given a serpentine staff which seems to come to life. This story's protagonist is horrified to find a (\*) pink ribbon in a tree branch, after which he flies with the help of a maple stick. The title character meets Deacon Gookin and Goody Cloyse while walking with a mysterious figure into the forest, where he discovers the townspeople, including his wife Faith, participating in a Satanic ritual. For 10 points, name this short story by Nathaniel Hawthorne.**

ANSWER: "**Young Goodman Brown**"

<Mukherjee>

22. **When this quantity is divided by cross-sectional area and multiplied by the magnetic permeability, it is equal to the Laplacian of the magnetic vector potential. This quantity is proportional to the product of drift velocity, area, and carrier density, and it is multiplied by the differential length in the Biot–Savart law. The line integral of a magnetic field around a loop is proportional to the amount of this quantity (\*) enclosed according to Ampere's Law. Kirchoff's junction rule states that the amount of it leaving a junction is equal to the amount entering, and it is multiplied by resistance in Ohm's law. For 10 points, name this quantity equal to the rate of flow of electric charge that is symbolized I and measured in amperes.**

ANSWER: electric **current**

<Voight>

23. **Two participants in this event were beaten while being marched through an opera house used as a makeshift jail. Participants in this event tore down handbills posted by Sheriff McCleary. Philander Knox served as attorney for one side in this event, while Hugh O'Donnell was the leader of the other side. This incident was resolved after Governor Robert (\*) Pattison sent in the state militia. Alexander Berkman shot and stabbed a man who opposed this event. Participants in it used leftover fireworks to burn some barges used to send Pinkerton detectives up the Monongahela River. For 10 points, Henry Clay Frick's anti-unionist policies led to what clash between the Amalgamated Association and Carnegie Steel in the namesake Pennsylvania town?**

ANSWER: **Homestead** Strike

<Ueda>

24. **In one of these poems, the speaker discusses the "sweet love" that makes him "scorn to change my state with kings". Another one begins "Not marble, nor the gilded monuments of princes, shall outlive this powerful rhyme". In one of these poems, the speaker admits "If snow be white, why then her breasts are dun", while another addresses the "master mistress of my passion". Groups of them address the "Fair (\*) Youth" and the "Dark Lady", and they include "Let me not to the marriage of true minds" and "My mistress' eyes are nothing like the sun". Another of them notes "Rough winds do shake the darling buds of May". For 10 points, identify this group of fourteen-line poems, including "Shall I compare thee to a summer's day?", by the author of *King Lear*.**

ANSWER: **sonnets** by William **Shakespeare** [prompt on "sonnets" or other partial answers]

<Gioia>

1. The overture to this composer's "anti-anti-opera" *Le Grand Macabre* includes parts for twelve car horns. For ten points each:

[10] Name this composer whose pieces *Lux Aeterna* and *Atmospheres* were featured in Stanley Kubrick's *2001: A Space Odyssey*.

ANSWER: Gyorgi **Ligeti**

[10] Ligeti was often reluctant to admit the influence of this composer, who imitated the sounds of nature in his "night music." His works include *Allegro Barbaro*, *Mikrokosmos*, and *Concerto for Orchestra*.

ANSWER: Bela **Bartok**

[10] Bartok's fourth piece for this ensemble includes a movement played entirely pizzicato. Joseph Haydn is considered the father of this chamber ensemble, which consists of a cello, a viola, and two violins.

ANSWER: **string quartets**

<Montoya>

2. The last Communist leader of this country was Ramiz Alia. For 10 points each:

[10] Name this European country, once ruled by King Zog, which was occupied by Italy in 1939.

ANSWER: **Albania** [or Republic of **Albania**; or Kingdom of **Albania**]

[10] During the Kosovo War, many refugees fled to Albania from the forces of this Supreme Commander of the Yugoslav Army. This Yugoslav president resigned in 2000 and died in 2006 before his war crimes trial at The Hague concluded.

ANSWER: Slobodan **Milosevic**

[10] Milosevic was an attendee at the meeting which created this peace agreement that ended the early 1990s Bosnian War. This agreement takes its name from the American city where participants met in November of 1995.

ANSWER: **Dayton** Accords [or **Dayton** Agreement; or **Dayton**-Paris Agreement]

<Cheyne>

3. One work in this genre is a satirical poem about a man who attends a Charles Gounod opera, the events of which he mistakes for real life. For 10 points each:

[10] Identify this literary movement which produced such works as Ricardo Guiraldes's *Don Segundo Sombra* and Estanislao del Campo's aforementioned *Fausto*. It purported to use the language of the namesake South American cowboys.

ANSWER: **gaucho** literature [or **gauchoesque**; or **gauchesque**; or **gauchesco**; or really anything involving **gauchos**]

[10] This impoverished gaucho is the protagonist and title character of the most famous work of gaucho literature, a two-part epic poem by Jose Hernandez.

ANSWER: **Martin Fierro** [accept either underlined portion]

[10] This member of the Generation of 1837 contrasted urban "civilization" with the rural "barbarism" he associated with Juan Manuel Rosas in his literary milestone *Facundo*. He later served as Argentina's seventh president.

ANSWER: Domingo Faustino **Sarmiento**

<Carson>

4. The Madhyamaka school of philosophy was founded within this branch by Nagarjuna. For 10 points each:

[10] Name this branch of Buddhism in which becoming a Bodhisattva is encouraged in order to help others achieve enlightenment. Its name means “Greater Vehicle” and it has more adherents than the Theravada.

ANSWER: **Mahayana** Buddhism

[10] Before Mahayana came about, there were thousands of different schools headed by different members of this group. This is the term for the entire community of ordained Buddhist monks and nuns.

ANSWER: **sangha**

[10] Nagarjuna introduced the concept of the “non-self” to contrast with this Buddhist concept of the inner or true self. In Hinduism it is contrasted with the universal spirit, or Brahman.

ANSWER: **atman**

<Mukherjee>

5. Henrietta Levitt discovery of the period-luminosity relationship for Cepheid variables allows them to be used as these. For 10 points each:

[10] Name these astronomical entities whose predictable luminosity are used to measure distances to far away objects. The Faber–Jackson and D-sigma relationship for elliptical galaxies allow them to be used as these objects.

ANSWER: **standard candles**

[10] Instances of the type Ia version of these celestial events were used as standard candles by Perlmutter, Schmidt and Riess to show that the rate of the universe’s expansion is accelerating. The type II version of these events are the result of a collapsed core and contain hydrogen in their spectrum.

ANSWER: **supernova** [or **supernovae**]

[10] This supernova occurred near the Tarantula Nebula in the Large Magellanic Cloud. This was the closest supernova to earth in over 400 years and launched a flood of neutrinos towards earth-based detectors.

ANSWER: SN **1987A**

<Hothem>

6. This artist painted a very young girl in his portrait *Catharine Hooft and her Nurse*. For 10 points each:

[10] Identify this painter of works like *Banquet of the Officers of the St. George Civic Guard Company* and a work which, despite its title, shows a mustachioed soldier smiling.

ANSWER: Frans **Hals**

[10] Frans Hals was a painter from this modern-day country. *Banquet of the Amsterdam Civic Guard* was a painting by Bartholomeus van der Helst, another artist of its “Golden Age”.

ANSWER: The **Netherlands** [or **Nederland**; prompt on “Dutch” or “Holland”]

[10] Another Dutch artist, Judith Leyster, painted many of these objects. They’re paired with birds in a style of Chinese painting, and Ophelia holds on to some of these in a John Everett Millais painting.

ANSWER: **flowers** [or **tulips** or **poppies**]

<Bentley>



7. Jacopone da Todi was imprisoned for opposing this man's election following the resignation of Celestine V. For 10 points each:

[10] Name this pope whom Dante didn't actually place among the simoniacs because he wasn't dead at the time. This man published the *Liber Sextus* collection of decretals in 1298 and, four years later, issued the bull *Unam sanctam*.

ANSWER: **Boniface VIII** [or Benedetto **Caetani**; prompt on "Boniface"]

[10] This Italian author of *Accidental Death of an Anarchist* and inexplicable Nobel Prize winner depicted Boniface VIII getting his butt kicked by Jesus Christ after failing to recognize him in a scene from his play *Mistero Buffo*.

ANSWER: Dario **Fo**

[10] In another scene from *Mistero Buffo*, a group of paying spectators, refreshment vendors, and others mill about while waiting for Jesus to perform a magic act by raising this person from the dead.

ANSWER: **Lazarus** of Bethany [or Saint **Lazarus**; or **Lazarus** of the Four Days]

<Wynne>

8. Answer these questions about the evolution of birds, for 10 points each.

[10] The LMAN brain area and FOXP2 gene help birds such as the zebra finch acquire this critical period-governed faculty which is aided by an organ called the syrinx.

ANSWER: bird **song** [or bird **calls** or bird **vocalization**]

[10] This foot-long Jurassic-era fossil is now classified as a bird. Though it was found near fossilized feathers and has long wingbones, we cannot know if it flew or glided.

ANSWER: **Archaeopteryx lithographica** [or **A. lithographica**]

[10] Many biologists think that this process undergone by the skeletons of birds, in which cavities open up within the bones, helps them fly. In human skulls this process created the sinuses.

ANSWER: **pneumatization** [or **pneumatized** bones; or **pneumaticity**]

<Jackson>

9. This philosopher drew a distinction between justifications and excuses in his "A Plea For Excuses" and revisited the topic in "Three Ways of Spilling Ink". For 10 points each:

[10] Name this American philosopher who outlined three levels of analyzing speech acts in his *How to Do Things with Words*.

ANSWER: John Langshaw **Austin**

[10] Austin also wrote a paper asking about the existence of *a priori* concepts, which this philosopher used to describe transcendent knowledge that does not arise from experience. He also formulated the categorical imperative and wrote three critiques.

ANSWER: Immanuel **Kant**

[10] The book *Language and Empiricism* closely examines Austin's work in the aftermath of this group of logical positivists based in a European city, led by Rudolf Carnap.

ANSWER: **Vienna Circle** [or **Weiner Kreis**]

<Mukherjee>

10. Its first assembly was presided over by George Yeardley, who had earlier participated in the ill-fated Third Supply Mission. For 10 points each:

[10] Name this legislative body, the first such body in the British Colonies. White landowning men over 17 had the right to vote in members, and in 1699 it was moved to Williamsburg.

ANSWER: **House of Burgesses**

[10] The House of Burgesses was the legislature of this colony which once had a capital at Williamsburg. This colony was also led by Alexander Spotswood, who led the Knights of the Golden Horseshoe Expedition.

ANSWER: **Virginia**

[10] This man arrived in Virginia in 1610 and persuaded the original colonists not to abandon the settlement. A different state was named in his honor.

ANSWER: Lord **De La Warr** ("Delaware") [or Thomas **West**]

<Mukherjee>

11. This building contained some two-hundred rooms and rested on piers to anchor it in the unstable soil. For 10 points each:

[10] Identify this building designed by the architect of Price Tower. It was torn down in 1967, although its lobby and pool can now be found at the Meiji-Mura museum.

ANSWER: The **Imperial Hotel**, Tokyo

[10] The Imperial Hotel was located in this country, also home to a Renzo Piano-designed airport located on a manmade island in Kansai.

ANSWER: **Japan**

[10] Renzo Piano created this building in Paris with Richard Rodgers. Designed to be an "urban machine", the elevators and pipes of this building are located outside of its main structure.

ANSWER: Georges **Pompidou Centre** [or **Centre** Georges **Pompidou**]

<Bentley>

12. Identify these African countries that have experienced coups in the past several years, for 10 points each.

[10] Moussa Dadis Camara led a coup in this former French colony in December 2008. One year later, Camara was shot and seriously injured in an assassination attempt in this country's capital of Conakry.

ANSWER: **Guinea**

[10] After Tuareg rebels in the northern part of this country declared the independence of the region of Azawad in March 2012, this country's military staged a coup under the leadership of Amadou Sanogo.

ANSWER: **Mali**

[10] Mamadou Tandja was overthrown as president of this country by a coup in February 2010. More recently, this country controversially granted asylum to Italian soccer washout Saadi Gaddafi in contravention of an Interpol warrant.

ANSWER: **Niger**

<Haddad-Fonda>

13. Pachacuti transformed the Kingdom of Cuzco into this empire. For 10 points each:

[10] Name this civilization of modern-day Peru which was conquered by Francisco Pizarro.

ANSWER: **Incan** Empire

[10] This man fought a war of succession with his brother Huáscar to become the last emperor of the Inca Empire. He was executed by Pizarro.

ANSWER: **Atahualpa**

[10] Huáscar and Atahualpa were sons of this emperor, under whom the Inca Empire reached the height of its power.

ANSWER: **Huayna Capac**

<Bentley>

14. P. R. Deltoid works as the "post-corrective advisor" of this novel's protagonist, who regularly hangs out at the Korova Milk Bar. For 10 points each:

[10] Name this novel written by Anthony Burgess which features the fictional language Nadsat and begins with Alex leading a violent gang of young punks called "droogs".

ANSWER: A **Clockwork Orange**

[10] Prison officials use this experimental method on Alex in order to condition him to have an intense aversion towards violence. As an unintended side effect, it prevents him from being able to listen to his beloved Beethoven.

ANSWER: the **Ludovico** Technique

[10] Alex and his droogs break into the house of this writer, a critic of the government, who is working on a manuscript titled "A Clockwork Orange". He shelters Alex in the book's third section until he learns of Alex's role in the earlier crime.

ANSWER: **F. Alexander**

<Gioia>

15. Name some creatures from Native American myth, for 10 points each.

[10] This trickster and culture hero is credited with bringing fire to mankind and for canoeing to the very edge of the world.

ANSWER: **Coyote**

[10] An evil whale was once stopped by this benevolent and gigantic mountain-dwelling creature whose wings and eyes are responsible for meteorological phenomena.

ANSWER: **Thunderbird** [or **Kw-Uhnx-Wa**; or **animikii**; or **binesi**]

[10] The Pueblo and Navajo Indians asserted that the world was created by a woman or a grandmother who assumed this animal form.

ANSWER: **spider** [more specific answers fine, as long as **spider** is mentioned]

<Gupta>

16. In a liquidity trap, demand for this entity is infinitely elastic with respect to interest rates. For 10 points each:

[10] Name this entity, used to store value and to facilitate transactions. The M1 is the measure of its supply.

ANSWER: **money** [be lenient and accept equivalents like **currency**, **cold hard cash**, etc.]

[10] The Baumol-Tobin model determines demand for money by optimizing interest earnings against this quantity, incurred as a result of each withdrawal. Ronald Coase explained how examples of this quantity associated with information or enforcement drive the formation of firms.

ANSWER: **transaction costs** [prompt on partial answer]

[10] The Baumol-Tobin model predicts that this quantity increases with interest rates. This quantity is the frequency at which money changes hands, and in early quantity theories of money it was believed to be constant.

ANSWER: **velocity** of money [or **velocity** of circulation]

<Bailey>

17. Answer these questions about the transition from single-variable to multivariable calculus, for 10 points each.

[10] Multivariable calculus uses “double” and “triple” types of this operation to find the volume under a surface. The single-variable type finds the area under a curve and is the inverse operation of the derivative.

ANSWER: **integration** [or word forms like taking an **integral**]

[10] Parametric equations can also describe vector-valued functions, whose second derivatives are always this kind of vector. A plane can be defined by a point and one of these vectors extending away from the plane.

ANSWER: **normal** vector [prompt on "perpendicular" or "orthogonal"]

[10] This type of 3D integral can be used to calculate flux. It involves dotting a vector field with its normal vector at each point and taking the double integral with respect to tiny parallelograms along the namesake area.

ANSWER: **surface** integral [prompt on "double integral"]

<Jackson>

18. The image of fire is repeated throughout a poem by this author about a sleeping pilot titled “The Dead Wingman”, while his other works include *The Woman at the Washington Zoo* and *The Animal Family*. For 10 points each:

[10] Identify this American poet who wrote of a man who woke to "black flak" and "nightmare fighters" in his poem "The Death of the Ball Turret Gunner".

ANSWER: Randall **Jarrell**

[10] Jarrell described papier-mache dinosaur props in the opening poem of his collection *The Lost World*, which was inspired by a film adaptation of this author's novel of the same name about Professor Challenger. He also wrote *A Study in Scarlet*.

ANSWER: Sir Arthur Conan **Doyle**

[10] Jarrell's academic satire *Pictures from an Institution* was based on this author's time teaching at Sarah Lawrence College. This author of *The Group* and *Memoirs of a Catholic Girlhood* carried on a long-running rivalry with Lillian Hellman.

ANSWER: Mary Therese **McCarthy**

<Bentley>

19. Answer the following about Ottoman incursions into Europe, for 10 points each.

[10] Ottoman forces under Bayezid I routed Christian forces at the Battle of Nicopolis, which was fought at a fortress in this modern-day country. Basil II was known for slaying people of this country's namesake ethnicity.

ANSWER: Republic of **Bulgaria** [or **Balgariya**]

[10] Ottoman commander Dragut died during the long Ottoman siege of this island in 1565. It was defended by the Knights Hospitallers under men such as Jean de Valette.

ANSWER: **Malta**

[10] This brother of Radu the Handsome repelled an advance by troops under Mehmet II in the Night Attack.

ANSWER: **Vlad III** Dracula [or **Vlad** the **Impaler** or **Vlad Tepes** or **Vlad Dracula**; prompt on "Vlad"; do not accept or prompt on "Vlad Dracul" or "Vlad the Dragon"]

<Bentley>

20. This process is partially assisted by chaperones like BiP, and it is governed by Anfinsen's dogma. For 10 points each:

[10] Name this process by which a protein spontaneously adopts its three-dimensional structure after being synthesized as a linear strand of amino acids.

ANSWER: **fold**ing

[10] Abnormal protein aggregation occurs when patches of the protein with this property remain exposed. Nonpolar amino acids have this property, which is an aversion to water.

ANSWER: **hydrophobic** [accept word forms]

[10] The peptide bond in a protein consists of one of these functional groups, which consist of a carbonyl group single bonded to an amine.

ANSWER: **amide**

<Mukherjee>

21. The battle of this location during World War I saw the sinking of all but one of the ships commanded by Maximilian von Spee, ending threats to Allied possessions in the region. For 10 points each:

[10] Identify this geographical entity, the subject of a war that saw the sinking of the *HMS Sheffield* by an Exocet missile.

ANSWER: **Falkland** Islands [or The **Falklands**; or Islas **Malvinas**]

[10] The Falklands War was a major political victory for this Conservative British prime minister nicknamed the Iron Lady.

ANSWER: Margaret Hilda **Thatcher**, Baroness Thatcher [or Margaret Hilda **Roberts**]

[10] Thatcher had previously demonstrated willingness to use military force in 1980, when she deployed the SAS in Operation Nimrod to retake this country's London embassy from Khuzestani separatists.

ANSWER: Islamic Republic of **Iran**

<Bentley>

22. He marries the kindly Biddy after the death of his stern first wife, whose favorite tool was a disciplinary cane called "The Tickler." For 10 points each:

[10] Name this kindly character whose first wife dies after being attacked by Orlick. He raises the orphaned protagonist of the work he appears in by taking him on as an apprentice at his forge.

ANSWER: **Joe** Gargery [prompt on "Gargery"]

[10] Philip "Pip" Pirrip is raised by Joe Gargery in this Charles Dickens novel also featuring Miss Havisham, who still wears the dress she was wearing when she was jilted on her wedding day.

ANSWER: **Great Expectations**

[10] Pip is supported by a mysterious benefactor who turns out to be this escaped convict. This man made a fortune in Australia after Pip helped him escape from the police in the marshes.

ANSWER: **Abel Magwitch** [accept either underlined portion]

<Gioia>

23. The Virasoro algebra can be used to describe this theory, an extension of which is called M-theory. For 10 points each:

[10] Name this candidate for the theory of everything which states that fundamental particles are actually vibrations of one-dimensional loops. It predicts the existence of over 10 to the 500 false vacua and 10 dimensions.

ANSWER: **superstring theory**

[10] An early incarnation of string theory predicted the existence of 26 dimensions and only describes these particles. Unlike fermions, these particles have integer spin.

ANSWER: **bosons**

[10] These two-dimensional objects are created when a string propagates in spacetime. They are not to be confused with branes.

ANSWER: **worldsheet** [do NOT accept "brane"]

<Mukherjee>