



ACADEMIC COMPETITION FEDERATION

2015 ACF NATIONALS
PACKET BY HARVARD AND OTTAWA

TOSSUPS

1. In a novel by this author, a character bursts into tears after overhearing a joke about her getting abducted by a black tam-bourine player. In another novel by this author, a character drowns while fighting a schoolteacher, and earlier provides a false affidavit against a man who makes a living robbing drowned bodies. This author wrote a novel in which a character teams up with the hangman Ned Dennis to abduct two girls during an event in which both of his legs are crushed. Another of his characters marries Bella Wilfer after being fired by Mr. Boffin, and changes his last name from Harmon to Rokesmith after a body mistaken for his is found by Gaffer Hexam. One of this author's title characters has a raven that repeats the phrase "Never say die!" named Grip, and works at the Maypole Inn in a novel set largely during the Gordon Riots. For 10 points, name this author of *Our Mutual Friend* and *Barnaby Rudge*.

ANSWER: Charles Dickens [or Charles John Huffam Dickens]

2. This technique can be applied to study membrane-bound ion channels by tagging parts of the channel with nitro groups and using this method to approximate the distance. This method was used to measure the effects of symmetry-enhanced or forbidden hyperconjugation in cyclic systems by David Whiffen. High-frequency and parallel-mode variants of this technique are used to probe intermediates in the catalytic cycles of ribonucleotide reductase and phenylalanine hydroxylase. Information on the coupling between the centers studied in this technique and their environment can be studied using pulsed ENDOR. Peak splitting in this technique is caused by hyperfine coupling. Absorbances in this technique occur in multiples of the Bohr magneton times the magnetic field strength times the Lande g-factor. This technique is analogous to NMR, but it studies the spins of electrons rather than nuclei. For 10 points, name this method used to probe unpaired electron systems such as free radicals.

ANSWER: EPR spectroscopy [or electron paramagnetic resonance spectroscopy; or electron spin resonance spectroscopy; or ESR spectroscopy]

3. An expert on this language, Larry Trask, died while completing an etymological dictionary of it. Theo Vennemann pointed to this language's vigesimal counting system as evidence that it is the survivor of a far-reaching substratum. A classification of the dialects of this language was created by Louis Lucien Bonaparte, who argued that this language has a number of words for tools based on the root word for "stone" in the so-called *aizkora* controversy. A "proto" form of this language was reconstructed by Koldo Mitxelena. Intransitive verbs in this language are conjugated with the irregular verb *izan*. In the seventeenth century, a pidgin of this language was brought by sailors from its homeland to Iceland. Dialects of this language include Zuberoan and Gipuzkoan, while its standard form was developed in the 1960s and is named Batua. For 10 points, name this language isolate spoken by an autonomous region of the Pyrenees.

ANSWER: Basque [or Euskara; or El Vasco; or Navarrese; or Biscayan; or Vascuence]

4. A cleaning of this rectangular painting revealed that it was originally intended to be a ceiling painting with its corners cut so that its final shape is octagonal. This painting, which was originally painted for the Scuola Grande, depicts a marble temple in the background whose façade consists of four pilasters that have human forms as tops. A man in this painting is about to be blinded for travelling to Alexandria to venerate a certain saint. On its right side, a knight of Provence sits on a throne and gives orders to a white-turbaned man, whose two hands clutch a broken hammer. At the top of this painting, which depicts a man who is about to be tortured and executed, a red-robed, orange-caped saint intervenes from the skies. For 10 points, name this painting in which St. Mark descends and frees the title servant, the first mature masterpiece of Tintoretto.

ANSWER: The Miracle of the Slave [or St. Mark Freeing a Christian Slave; or The Miracle of St. Mark]

5. A force in this conflict was supported by Walter Espec, but he changed his mind after his nephew Jordan de Bussey was abandoned at the fortress of Wark. Another man switched sides after his property, including Walden Castle, was seized and he was arrested. That man, Geoffrey de Mandeville, may be referenced in the eyewitness account of this conflict in the Peterborough Chronicle. It saw the early victory of Archbishop Thurstan at the Battle of the Standard, while Robert of Gloucester was exchanged for a captive following the Rout of Winchester. To escape a siege on Oxford castle, a certain female walked across the frozen Thames during this conflict, which ended when the Battle of Lincoln led to signing of the Treaty of Wallingford. It was initiated by the sinking of a ship killing William Adelin, the only heir of Henry I. For 10 points, name this succession struggle between Stephen of Blois and Empress Matilda, a nineteen-year civil war in England.

ANSWER: The Anarchy [or Nineteen-Year War or Nineteen-Year Winter until “nineteen” is read]

6. A prostitute delivers a monologue to this play’s protagonist in which she describes looking through a window at the drowned body of a past lover and concludes, “the person who enjoys the most, prays the most.” The title character of this play tells his wife that in order for them to know each other, they would need to crack open their skulls and manually draw out thoughts from their brains. That protagonist of this play refers to his body as a “broken fiddle” after being condemned to death for plotting to blow up the National Convention. In this play, Lucile Desmoulins yells out, “Long live the King!” during her husband’s execution. In the first act of this play, a member of the Jacobin Club delivers a monologue advocating for the use of weapons of terror, and later uses the Revolutionary Tribunal to oversee the execution of this play’s title character. For 10 points, name this historical play in which Robespierre is responsible for the title event, a work by Georg Büchner.

ANSWER: Danton’s Death [or Dantons Tod]

7. In a piano work by this composer, three *fortississimo* eighth-note chords and five descending dotted half-note *pianissimo* chords coming to rest on a third inversion of a C major chord precede a stormy coda. A book criticizing assertions that this man’s works have no extra-musical significance is titled for this composer “at the boundaries,” and was written by Jeffrey Kallberg. When performing this man’s music, Nikita Magaloff preferred to use this man’s original manuscripts rather than the ones compiled by Julian Fontana after his death. Rachmaninoff wrote twenty-two variations on one of this composer’s Opus 28 preludes. Another of this composer’s works uses a recurring A-flat to evoke the effect of nasty weather experienced on a trip to Majorca with George Sand. For 10 points, name this composer of four ballades, the “Raindrop Prelude”, and the “Revolutionary Étude.”

ANSWER: Frédéric Chopin [or Frédéric François Chopin; or Fryderyk Franciszek Szopen]

8. One disease of this organ causes cancer patients who take irinotecan to experience severe diarrhea. The Child-Pugh and MELD scores are used to assess damage to this organ. Pericellular connective tissue acquires a “chicken-wire” appearance in one condition affecting this organ; that condition is also characterized by a type of apoptosis of parenchymal cells called ballooning degeneration. The copper-carrying protein ceruloplasmin is produced in this organ. Growth hormone stimulates the production of IGF-1 in this organ. In addition to the lungs, this organ is damaged as a result of A1AT deficiency. Fatty acids are broken down in this organ to produce ketone bodies. The space of Disse separates this organ’s namesake cells from its sinusoids, which receive blood from the portal vein. Gluconeogenesis takes place in, for 10 points, what organ whose failure can lead to jaundice and can be caused by hepatitis?

ANSWER: liver

9. All officers appointed by this ruler were required to make five promises, among them that they not eat sifted flour or ride Turkic horses. After his armies surrounded a city in Aelia, this ruler delivered a namesake “assurance” to Patriarch Sophronius. He set up an institution for administration of taxes called the *Bayt al-mal*, and negotiated a probably-apocryphal treaty listing the rights of *dhimmis* in Christian Syria, known as his namesake “pact.” He died after being stabbed in the navel by the slave Piruz Nahavandi, and introduced the practice of performing the *adhan*. One of his generals won the Battle of Yarmouk over emperor Heraclius; that general is Khalid ibn al-Walid. His army also defeated Yazdegerd III in the process of conquering Sassanid Persia at the Battle of al-Qadisiyyah. For 10 points, name this predecessor of Uthman and the successor of Abu Bakr, who was the second rightly guided caliph of the Rashidun.

ANSWER: Umar ibn al-Khattab [or Omar]

10. Charles Dacre Parsons, the son of Talcott Parsons, wrote an essay about Immanuel Kant's use of spatio-temporality as it relates to this discipline. In an essay found in *Meaning and Method*, Alexander Esenin-Volpin and Edward Nelson promote an extreme form of the philosophy of this field called ultrafinitism. In a work that discusses meta-theories of this field, Stephen Kleene considered whether the foundations of L.E.J. Brouwer's intuitionist program were valid. A realist argument that we must be ontologically committed to objects used in this discipline is known as the Quine-Putnam indispensability thesis. A philosophical treatise named for this discipline posits a paradox involving the set of all sets that are not members of themselves. For 10 points, a logical basis for what discipline is the subject of a collaboration by Bertrand Russell and Alfred North Whitehead?

ANSWER: mathematics [or arithmetic; or the use of numbers; prompt on "science", "logic", and "set theory"]

11. This object is listed between "Grani's fair burden" and "the down of Grafvitnir" in a poem from the *Bjarkamal*. A dwarf with the same name as this entity is the first of the list of Dvalin's throng in the "Dvergatal" of the *Voluspo*, the only reference to this object's name in eddic poetry. In the *Skirmismal*, Skirnir offers eleven golden apples and this item to Gymir's daughter Gerd on behalf of Freyr. During the creation of this object, its creator was bitten on the neck by a fly. Hermod brings this artifact back to Asgard from Hel after it was thrown onto the funeral pyre of Baldr. It was created as part of a wager between Loki and Brokkr and Sindri, who forge this artifact along with Gullinbursti and Mjöltnir. Like Andvaranaut, this annular artifact also produces eight similar objects of the same weight every ninth night. For 10 points, name this magic golden ring initially possessed by Odin.

ANSWER: Draupnir

12. This author used the line "The bottle crashed his skull and he was out" to depict a man's death in a bar-room; that line was praised by Sartre in an essay calling this author "the greatest writer of our time." Another novel by this author ends with the pages of the composition "The Body and Soul of John Brown" blowing off a desk as a character is arrested for desertion. One section of a novel by this author opens with the declaration, "they have clubbed us off the streets" and later states, "all right we are two nations" in response to the executions of Sacco and Vanzetti. Another novel by this author ends with a section about the dead body of the soldier John Doe at Chalons-sur-Marne. The public relations executive J. Ward Moorehouse appears in his best-known work, which includes journalistic "Newsreels" and impressionistic "Camera Eye" sections. For 10 points, name this author of *Three Soldiers* and the *U.S.A. Trilogy*.

ANSWER: John Dos Passos [or John Roderigo Dos Passos; do not accept or prompt on "(John) Passos"]

13. This equation is connected to the "modified" version of this equation via the Miura transform. While this equation possesses an infinite number of conservation laws, a related equation proposed by Benjamin, Bona, and Mahony only possesses three. This equation is integrable via the inverse scattering transform for the 1-dimensional Schrodinger equation. A 2+1 dimensional analogue of this equation is the Kadomtsev-Petviashvili equation. For a function f of one spatial dimension and time, this equation sets $f_{\text{-sub-t}} + \alpha f \text{ times } f_{\text{-sub-x}} + f_{\text{-sub-x-x-x}}$ to zero. A hyperbolic-secant-squared solution to this equation is one of the first discovered examples of soliton behavior. For 10 points, name this doubly eponymous nonlinear PDE used to model shallow water waves.

ANSWER: Korteweg-de Vries equation [or KdV equation]

14. During a meeting of the Executive of the International, this leader was repeatedly insulted by another leader for his "stupid mistakes," such as his support of Nestor Makhno. This man's government was supported by a group of leather-jacket clad enforcers called the Lenin Boys. After being released from prison, he came to power after the issuance of the Vix Note, demanding that the eastern limits of his country be pushed inward. In collaboration with Zinoviev, he supported a failed KPD-led workers' uprising in Germany called the "March Action." He controlled most of the power as Commissar of Foreign Affairs in a government nominally headed by Sándor Garbai. This man's coalition brought down the "Democratic Republic" led by Mihály Károlyi, but he was exiled to Vienna after being overthrown in 1919 by forces led by Miklós Horthy. For 10 points, name this communist leader of the short-lived Hungarian Soviet Republic.

ANSWER: Béla Kun

15. Zoroastrians celebrate this event by performing the Haft-Sin, in which they set a table with seven items that are chosen because they all start with the latter “S” in Arabic. That tradition celebrating this event was initiated by King Jamshid on the day that he was raised up into the heavens on a throne of jewels. A Yoruban custom of celebrating this event is now called the Odunde Festival. Shinto practitioners have gatherings called *shinenkai* to celebrate this event on *gantan-sai*, and Tibetans refer to it as Losar. Other rituals performed on this day include the playing of a dice game called “fish-prawn-crab,” and the throwing of bread crumbs into a flowing body of water. Elders give red envelopes filled with money to their children in a Vietnamese custom on this day, which is the first of the Jewish High Holy Days. For 10 points, name this celebration which includes the Tet holiday and Rosh Hashanah.

ANSWER: New Year’s Day [or answers about festivals in honor of the New Year; or New Year’s Eve]

16. The “Rotating Staircase Deadline” one of these programs led Ingo Molnar to replace the “big oh of 1” version of this type of program with the Completely Fair type. Windows NT and Mac OS X both use a multilevel feedback queue to implement this type of program, of which the medium-term type is responsible for swapping in and out. The short-term form of one type of this program relies on a dispatcher for context-switching and CPU control. That type of this program relies on a programmable interval timer. The preemptive type of this program is distinguished from the cooperative type, because the former responds to interrupts. The priority type of this program can lead to starvation, while the round-robin method for this type of program allocates a quantum to each process. This type of program is used to achieve load balance in a multitasking system. For 10 points, name this type of program that allocates computing time to processes.

ANSWER: process scheduler [or scheduling algorithms; or word forms]

17. This was the popular nickname of James Cole, a Grand Dragon of the Ku Klux Klan who attacked the Lumbee Indians in North Carolina in the late 1950s, only to get routed. One of these animals is the only member of the genus *Satan*, while another called the Candiru, or Vandellia Cirrhosa, is a parasite native to Brazil and Bolivia. One of them named Namazu causes earthquakes in Japanese legend, and Slue-Foot Sue rode one with just one hand while taking pot shots at the clouds with her six-shooter. This animal and a chisel represent the name of Menes on the Narmer Palette. This animal’s maxilla exists only to support its barbels, which are the proper name for its most recognizable feature. The Great Mekong type is revered in Thailand. The setting of George Gershwin’s Porgy and Bess is named after, for 10 points, what group of fish whose Channel type is a Southern delicacy, and which appear to have whiskers?

ANSWER: catfish [prompt on “fish”]

18. One work by this poet grumpily declares, “I hate the bard who strolls along / And sells in streets his borrowed song,” while another describes how “thrice the thrifty earth has drank the wine” of a host with a “secret wound deep- rankling in his breast.” A poem originally by this author is about a woman who “with curious and enlarged eye / surveyed the splendid glories of the sky” and uses a braid of hair to narrate the wedding night of a new queen. A translation of that poem, “Berenice’s Lock,” comprises Catullus 66. This poet used the phrase “mega biblion, mega kakon,” or “big book, big evil,” in a debate about the proper length of poems with his student Apollonius of Rhodes. The opening line of Ezra Pound’s “Homage to Sextus Propertius” refers to the “shades” of this poet, who wrote the *Pinakes*, an extensive record of the holdings of the Library of Alexandria. For 10 points, name this Cyrenaic poet who wrote about the “causes” of things in his *Aetia*.

ANSWER: Callimachus

19. The colonial treasury of this U.S. state, housed at the mansion of Stephen Skinner, was robbed in 1768, resulting in a loss of 6,750 pounds. Its patriots have included Philemon Dickinson and Captain Joshua Huddy, whose lynching led to the Asgill Affair. A mayor in this state, Mark Fagan, led a Progressive offshoot of the Republican Party called the New Idea Movement. Its governor Peter D. Vroom was one of five men involved in this state’s election controversy called the Broad Seal War. This state’s first income tax was implemented by a much later governor, Brendan Byrne. It’s the subject of the book “The Traitor State” by Lincoln Steffens, who denounced the family of its politician Theodore Frelinghuysen. A mansion in this state, Drumthwacket, is now the official residence of its governors, like James Florio and a woman who became the EPA director under George W. Bush. For 10 points, name this state governed by Christine Todd Whitman, Woodrow Wilson, and Chris Christie.

ANSWER: New Jersey [or NJ]

20. In one film by this director, four young people wearing stocking masks jump into a pool repeatedly then eventually disappear; later a man and a woman come to the title location and are turned into statues. A sculpture by this man was inspired by a certain novel's line about the chance meeting of an umbrella on a dissecting table. With an alphabetically prior artist, this director of *The Mysteries of the Chateau of Dice* can be seen playing a game of chess, then suddenly disappearing in Rene Clair's *Entr'acte*. This artist's 1919 gouache called *Seguidilla* was the first of his "aerographs," which he made using an airbrush. He wrapped a sewing machine in an army blanket and tied it with yellow string to create *The Enigma of Isidore Ducasse*. He painted f-holes onto the back of a photograph of Kiki Montparnasse to create *The Violin of Ingres*. Known for photographing Marcel Duchamp as Rose Selavy, for 10 points, identify this surrealist and Dadaist who was born Emmanuel Radnitzky.

ANSWER: Man Ray [or Emmanuel Radnitzky until it is read]

TIEBREAKER

21. In exchange for donations, this politician helped the former Iron Guard member Nicolae Malaxa start an oil factory in his home state. While getting into a car with Anna Chennault, this man cracked his forehead open on the door and bled all over her dress. This man's presidency witnessed the Hard Hat Riot, where his support for construction workers led him to appoint Peter Brennan as his Secretary of Labor. He won an early political campaign by deriding his opponent, Helen Gahagan Douglas, as "The Pink Lady." His aide Donald Segretti coined the name for the tactic of "ratfucking," and was a member of a fundraising organization for this politician headed by his Attorney General John Mitchell. During a speech, he referred to drug use as "public enemy number one." For 10 points, name this politician who also delivered the "Checkers Speech" and resigned after the Watergate scandal.

ANSWER: Richard Milhous Nixon

BONUSES

1. In 1919, this man purchased an auditorium in Harlem and named it Liberty Hall. For 10 points each:

[10] Identify this black nationalist who established the Universal Negro Improvement Association and organized the formation of the Black Star shipping line, as part of his Back-to-Africa movement.

ANSWER: Marcus Garvey [or Marcus Mosiah Garvey, Jr.]

[10] This organization, partly founded by Charles Fenton Mercer and Robert Finley in 1816, made an earlier push for the Back-to-Africa movement. Its first ship, the Elizabeth, arrived in Freetown, Sierra Leone in 1820.

ANSWER: American Colonization Society [or the ACS; or Society for the Colonization of Free People of Color of America]

[10] A contributor to Marcus Garvey's *Negro World* newspaper was this Afro-Latin historian and writer born in Puerto Rico. This author of the essay "The Negro Digs Up His Past" founded The Negro Society for Historical Research with John Edward Bruce.

ANSWER: Arthur Schomburg [or Arturo Schomburg]

2. The ABC model is a three-gene model for the development of these plant structures. For 10 points:

[10] Name these reproductive plant structures of angiosperms that contain both vegetative and sexual substructures.

ANSWER: flowers

[10] This non-reproductive portion of a flower consists of the corolla, which is the whorl of petals, and the calyx, which is the whorl of sepals.

ANSWER: perianth

[10] This gene family, which controls all aspects of development in plants and muscle development in animals and is similar to the *Hox* genes, contains a namesake conserved sequence motif. The Arabidopsis gene AGAMOUS and the yeast gene MCM1 are two members of this family of transcription factors.

ANSWER: MADS-box

3. Answer the following about tales narrated by Filomena in Giovanni Boccaccio's *Decameron*, for 10 points each:

[10] In a tale later adapted into a long poem by John Keats, the brothers of Lisabetta murder her love interest Lorenzo, after which she exhumes his body and places his head into a pot of this substance.

ANSWER: basil [prompt on "herbs"]

[10] Filomena also narrates a story in which Bruno and Buffalmacco steal one of these animals from Calandrino and then give him ginger pills.

ANSWER: a pig

[10] In the third tale of the *Decameron*, this historical figure asks Melchizedek to state whether Judaism, Christianity, or Islam is the one true faith. This founder of the Ayyubid dynasty reappears later in the *Decameron* during a tale set during the Third Crusade.

ANSWER: Saladin [or Ṣalāḥ ad-Dīn Yūsuf ibn Ayyūb]

4. Cuthbert Girdlestone wrote an extensive Romantically-inclined study of these works, the penultimate one of which has a lot of inexplicable gaps in which nothing was written for the left hand. For 10 points each:

[10] Identify this group of 27 concertos, the 21st of which was given an anachronistic nickname after it was featured in the film *Elvira Madigan*. They were written by the composer of *Eine Kleine Nachtmusik*.

ANSWER: Wolfgang Amadeus Mozart's piano concertos

[10] Mozart's highly-regarded *Piano Concerto No. 24* is in this key, which Mozart also used for a "Great Mass" he completed eight years before his death.

ANSWER: C minor

[10] The slow movement of Mozart's second piano concerto adapted music from harpsichord sonatas by this older composer, a developer of the *ad libitum* sonata form who feuded with Leopold Mozart over the ease of his works. He died after convincing himself, his family, and some servants that some mushrooms weren't poisonous. They were.

ANSWER: Johann Schobert

5. Nodules of this metal are often found on the ocean floor. For 10 points each:

[10] Name this transition metal that is found in the +7 oxidation state in a polyatomic ion which is deep purple in aqueous solution.

ANSWER: manganese [or Mn]

[10] A manganese complex containing a salen ligand is used in the Jacobsen-Katsuki reaction, which generates these compounds. Aziridines are a nitrogen-containing analogue of these compounds.

ANSWER: epoxides [prompt on “cyclic ethers”]

[10] This piano-stool manganese compound is used as an additive to gasoline following the phase-out of tetraethyl lead. It is an 18-electron complex with three carbonyl ligands.

ANSWER: methylcyclopentadienyl manganese tricarbonyl [or MMT; or MCMT]

6. A stone head that the artist called the “Phyidian head of Jupiter” features in a depiction of this man called *Patriae Pater*. For 10 points each:

[10] Name this man who was depicted nearly eighty times by Rembrandt Peale. A fresco by Constantino Brumidi depicts his “apotheosis.”

ANSWER: George Washington

[10] This other artist produced an unfinished portrait of George Washington titled *The Athenaeum*, which is used on the dollar bill.

ANSWER: Gilbert Stuart

[10] In 1801, Rembrandt Peale painted a celebrated portrait of this twenty-three year old botanist, who is seen with a geranium. Light refracts into this subject’s glasses, so that two disks of illumination appear just below his eyes.

ANSWER: Rubens Peale [prompt on “Peale”]

7. Cyril of Alexandria advocated a form of this position in a dispute with Nestorius, who was declared a heretic for advocating its antithesis at the First Council of Ephesus and the Council of Chalcedon. For 10 points each:

[10] Name this doctrine which maintained that Jesus Christ had only a single nature.

ANSWER: monophysitism [or miaphysitism]

[10] This similarly named theological position holds that God alone is responsible for the regeneration step of the order of salvation. Lutheran and Reformed churches that believe this doctrine reject the “decision theology” of Sinner’s Prayers and altar calls.

ANSWER: monergism

[10] This other heresy claimed that the entire idea of spiritual regeneration was nonsense because people were born with God’s spirit already perfected. This heresy’s namesake and his follower Caelestius were condemned by the Tractoria of Pope Zosimus.

ANSWER: Pelagianism

8. In this battle, commander Zhao Yu packed ships full of dry reeds, set them on fire, and floated them into an immobilized fleet, forcing the opposing crew to jump into small escape boats. For 10 points each:

[10] Name this naval battle where Cao Cao (“sau sau”) was defeated by an alliance of his rivals Liu Bei and Sun Quan.

ANSWER: Battle of the Red Cliffs [or Chibi]

[10] The Battle of the Red Cliffs occurred about a decade before this period of Chinese history, which saw conflict between the states of Wei, Shu, and Wu. Its namesake “Romance” was penned by Luo Guanzhong.

ANSWER: the Three Kingdoms

[10] Modern Chinese historiography tries to paint Cao Cao as a chill guy because he wrote poetry, neglecting the fact that, early in his career, he ordered the deaths of enough civilians in this province to dam up the Si River. Cao Cao invaded this province twice in 193 and 194 to avenge the murder of his father by its governor, Tao Qian.

ANSWER: Xuzhao Province (“shu-zhao” or “zoo-zhao”)

9. In this novel, Currer dies of yellow fever while enslaved on a plantation in Natchez before the daughter of John Peck can free him. For 10 points each:

[10] Name this novel whose title character, a daughter of Thomas Jefferson, dies by flinging herself into the Potomac.

ANSWER: Clotel; or, The President’s Daughter

[10] William Wells Brown, the author of *Clotel*, is probably best known as the author of an 1847 work in this genre, which was second in sales only to one by Frederick Douglass. Another well-known work in this genre was penned by Solomon Northup.

ANSWER: slave narratives

[10] In 1982, this literary critic and Harvard professor discovered an autobiographical 1859 slave novel by Harriet Wilson. He wrote *The Signifying Monkey*.

ANSWER: Henry Louis Gates, Jr.

10. Philip Hensher wrote the libretto to this opera, which ends with an electrician and a maid destroying its setting, a lavish hotel room. 10 points each:

[10] Name this chamber opera by Thomas Adès, which musically depicts fellatio in its treatment of the “Dirty Duchess of Argyll.”

ANSWER: **Powder Her Face**

[10] Another opera by Thomas Adès, *The Tempest*, premiered at this opera house in London. Its current music director is Sir Antonio Pappano.

ANSWER: **Covent Garden** Opera House [prompt on “**Royal** Opera House”]

[10] In 1947, this George Bizet opera became the first full opera to be performed at the Covent Garden Opera House. Its musical numbers include the “Toreador Song.”

ANSWER: **Carmen**

11. Answer the following related to the renormalization of US-Cuba relations, for 10 points each.

[10] This American, who had been imprisoned by the Cuban government since 2009 after bringing communications equipment to Cuban Jews, was freed in 2014.

ANSWER: Alan **Gross**

[10] One important back-channel diplomat who helped to free Gross was Tim Rieser, an aide to Patrick Leahy, who is a senator from this state. This 49th most populous state is governed by Peter Shumlin.

ANSWER: **Vermont**

[10] This project started by Oswaldo Payá and the Christian Liberation Movement in 1998, and named for a Cuban priest, had been supported by the US in its efforts to establish democratic reforms in Cuba. Many of its members were imprisoned in the 2003 Black Spring.

ANSWER: **Varela** Project

12. Answer the following about thinkers who have developed theories about the roles of railroads in society, for 10 points each.

[10] This sociologist came to the conclusion that cities tend to arise where transportation routes converge in his dissertation, *A Theory of Transportation*. He also developed the concept of the looking-glass self.

ANSWER: Charles Horton **Cooley**

[10] This thinker argued that the replacement of the stagecoach with the railroad, which he calls the “machine-ensemble,” led people to develop a mechanized method of perceiving time and space in *The Railway Journey*.

ANSWER: Wolfgang **Schivelbusch**

[10] Robert Fogel used cliometrics in a book that examines this country’s railroads and their relationship to its economic growth. Charles Beard wrote an “economic interpretation” of this country’s constitution arguing that its drafters were motivated by self-interest.

ANSWER: **USA** [or **United States** of America; or **America**; or obvious equivalents]

13. Discovered by Clyde Tombaugh, this object is the largest known in the Kuiper belt. For 10 points each:

[10] Name this “dwarf planet” which has Charon as its moon. It will be visited by the New Horizons mission.

ANSWER: **Pluto**

[10] According to this model of the dynamic evolution of the Solar System, the Kuiper belt is the remnants of scattered primordial planetesimals. This model is named for a city of France and postulates that at some point, Jupiter and Saturn were in mean-motion resonance with each other.

ANSWER: **Nice** model

[10] The orbital migration of the gas giants in the Nice model explains this event during the Hadean eon, in which asteroids and other objects repeatedly collided with the terrestrial planets and Earth’s moon.

ANSWER: **Late Heavy Bombardment** [or the **LHB**]

14. Answer the following about ugly politics behind the Iron Curtain, for 10 points each.

[10] Together with Petru Groza, this Romanian leader reportedly held King Michael at gunpoint to convince him to abdicate. After becoming prime minister in 1952, he forged alliances with China and other non-communist states, before being succeeded as party leader by Nicolae Ceausescu (“chow-SHES-koo”).

ANSWER: Gheorghe Gheorghiu-Dej (“GEHR-gay gehr-GUE dezh”)

[10] The bodies of up to a quarter million people killed by the NKVD under Stalin from 1937 to 1941 were discovered in 1988 at this forest on the outskirts of Minsk, Belarus. Bill Clinton made a visit to this site to present a memorial to Belarusians in 1994.

ANSWER: Kurapaty Forest

[10] Muhammet-nazar Gapurow, of the Turkmen SSR, was removed by Moscow in a 1985 scandal involving this commodity. Irrigation to support this crop, known as “white gold,” led to the desiccation of the Aral Sea.

ANSWER: cotton [or Gossypium]

15. This work’s chapter “The Sorrows of Misfortune” deals with the death of Chen Yün, whom this work’s author describes marrying in the earlier chapter “The Joys of the Wedding Chamber.” For 10 points each:

[10] Name this 1809 autobiographical work by the secretary Shen Fu, which devotes an enormous number of pages to describing gardening.

ANSWER: Six Records of a Floating Life [or Fú Shēng Liù Jì]

[10] This book by Jung Chang, published nearly two centuries later, contains the biographies of her mother and grandmother, before describing her own experiences during the Cultural Revolution.

ANSWER: Wild Swans: Three Daughters of China

[10] This Chinese-American author of *Tripmaster Monkey* is best known for an unusual memoir which tells the story of “No-Name Woman,” Fa Mu Lan, Brave Orchid, Moon Orchid, and herself, *The Woman Warrior*.

ANSWER: Maxine Hong Kingston

16. This character lived in Vrindavan in the Yamuna River, which he made so poisonous that only one Kadamba tree grew on its back. For 10 points each:

[10] Name this naga whose attempt to kill a young ball-playing Krishna was foiled when Krishna assumed the entire weight of the universe and started jumping on his head.

ANSWER: Kaliya

[10] Kaliya was driven out of his original home of Ramanaka Dwipa by this humanoid eagle, the foe of all nagas and serpents. This figure also served as the mount of Vishnu.

ANSWER: Garuda

[10] To release his mother Vinata from her enslavement by Kadru, the mother of the nagas, Garuda was required to bring the nagas this elixir of immortality that was released from the churning of the ocean. Fortunately, he was able to trick them out of drinking it.

ANSWER: amrita [do not accept or prompt “soma”]

17. This work claims that numbers were invented by humans to signify a collection of things, and that all numbers are relative, since one, three, and thirty-six are the same in reference to a yard, foot and inch. For 10 points each:

[10] Name this 1710 work, written after its author’s *A New Theory of Vision*. This text was the first of its author’s to claim that matter does not exist and that there are no abstract ideas.

ANSWER: A Treatise Concerning the Principles of Human Knowledge [prompt on “Principles”]

[10] *A Treatise Concerning the Principles of Human Knowledge* is by this Irish philosopher and idealist, who later outlined the same ideas in *Three Dialogues Between Hylas and Philonous*.

ANSWER: George Berkeley

[10] The idealism of Berkeley partially inspired this German philosopher’s idealism. This advocate of empirio-criticism and wrote *The Science of Mechanics* and *The Analysis of Sensations*.

ANSWER: Ernst Mach [or Ernst Waldfried Josef Wenzel Mach]

18. Answer the following about the literary criticism of C. S. Lewis, for 10 points each:

[10] Lewis' best-known piece of criticism is probably a 1942 preface for a new edition of this John Milton poem in which he characterizes Satan as self-deluded and comic.

ANSWER: Paradise Lost

[10] In his 1936 book *The Allegory of Love*, Lewis gave extended treatment to this John Gower poem, whose frame story centers on an old man's lengthy account of his sins to Genius, a chaplain of Venus.

ANSWER: Confessio Amantis [or The Lover's Confession]

[10] This later critical work by Lewis divides readers into "unliterary" and "literary" types and argues that the mark of good literature is its re-readability.

ANSWER: An Experiment in Criticism

19. This effect is applied in either current-in-plane or current-perpendicular-to-plane configurations. For 10 points each:

[10] Name this phenomenon whose tunnel form consists of two ferromagnets separated by a nanometer-thin insulating strip, allowing electrons to cross the barrier. In this phenomenon, a material's conductivity is changed due to the presence of a magnetic field.

ANSWER: magnetoresistance [or tunnel magnetoresistance; or giant magnetoresistance; or TMR; or GMR]

[10] Devices using tunnel and giant magnetoresistance are used in this field of physics, which seeks to create solid-state devices in which the electrons' value for both charge and this field's namesake property are manipulated.

ANSWER: spintronics [or spin electronics; or spin transport electronics; or fluxtronics]

[10] The "spin" version of this effect is used in spintronics to generate or detect spin currents. Classically, this effect is the production of a transverse voltage when a current-carrying wire is placed in a magnetic field.

ANSWER: Hall effect

20. A 1348 instance of one of these events in Friuli occurred the same year that the Black Death struck Italy. For 10 points each:

[10] Name these natural disasters, one of which destroyed most of Lisbon on All Saints Day in 1755.

ANSWER: earthquakes

[10] This notoriously anti-Jesuit Portuguese statesman led the effort to rebuild Lisbon. Later on, this prime minister executed most of the Távora family after an assassination attempt against his king, Joseph I.

ANSWER: 1st Marquis of Pombal [or Sebastião José de Carvalho e Melo]

[10] The chaos in the decades following the Lisbon earthquake led Maria I to found this still-extant social institution, which administers a set of schools for at-risk youth. Recently, this institution was the subject of an enormous sex abuse scandal that led to the imprisonment of television host Carlos Cruz.

ANSWER: Casa Pia