



# ACADEMIC COMPETITION FEDERATION

2014 ACF NATIONALS  
PACKET BY CHICAGO A

## TOSSUPS

1. In a piece in this genre, Herbert Howells commemorated both the loss of his son and the death of President Kennedy. One of Orlando di Lasso's pieces in this genre begins with the singers stuttering the open lines, in mockery of inept performers. Allegri's *Miserere* and a Mozart piece in this genre are the two pieces transcribed in Liszt's *A la Chapelle Sixtine*. Henri Dumont established the tradition at the *Chapelle royale* of composing the "grand" style of this genre, whose Anglican equivalent is the anthem. An isorhythmic piece in this genre, written for the consecration of the dome of the Florence Cathedral, is Guillaume Dufay's "Nuper Rosarum Flores." The *Cantiones sacrae* is a collection of these pieces by William Byrd and Thomas Tallis, and one of the last major ones is Mozart's "Ave verum corpus." For 10 points, name these polyphonic settings of religious texts, the sacred equivalent of the madrigal.

ANSWER: MOTETS

2. This man used the motto "bona conscientia paradisus," or "a good conscience is paradise," and early on he was opposed by his colleague Petrus Plancius, who responded to this man's analysis of Romans 9 by accusing him of endorsing Pelagianism. He delivered a set of speeches to the High Council, published in his treatise "Declaration of Sentiments," in which he suggested several revisions to the Heidelberg Catechism and denounced the doctrine of supra-lapsarianism, as part of his feud with his fellow divinity professor Franciscus Gomarus. He died shortly after those speeches, but 43 of his supporters including Simon Episcopius signed a document known as the Five Articles of the Remonstrance. Despite their effort, this man's teaching was condemned by a set of 93 canonical rules adopted at the Synod of Dort. For 10 points, name this Dutch theologian who took his family name from the victor at the Battle of Teutoburg Forest.

ANSWER: Jacobus ARMINIUS [or James Arminius or Jakob HERMANDSZOON or HERMAN or HARMEN or HARMENSEN]

3. In a location from this work, vain flatteries take the physical form of a garland concealing a noose, and piles of wasted time stack up in the Valley of Lost Things where everything lost on Earth is stored. In this work, the lady-in-waiting to the daughter of the King of Scotland frames her mistress for adultery by kissing a knight while dressed as her mistress. One character flies to the moon on Elijah's chariot to recover a bottle filled with another character's wits, which cures that character of his love for a woman who had fallen in love with the Saracen soldier Medoro. One character in this work is captured by the sorcerer Atlantes twice and escapes from Alcina's island on a hippogriff before he marries Bradamante. The title character battles with King Agramante after overcoming his love for Angelica. A sequel to a work by Boiardo depicting its title character "in love", for 10 points name this epic poem by Ludovico Ariosto, about a certain paladin of Charlemagne.

ANSWER: ORLANDO FURIOSO [or The FRENZY OF ORLANDO]

4. Less byproduct of this compound and its derivatives is produced when DCAD is used as a reagent in the Mitsunobu reaction instead of DEAD. The last step of the synthesis of the front-line tuberculosis antibiotic that's not rifampicin is a displacement reaction involving this compound. The largest plant for the industrial production of this compound, located in Lannemezan in southern France, primarily uses the Pechiney-Ugine-Kuhlmann process. Abendroth and Hendrich devised an environmentally friendly modification of a reaction that produces this compound by combining sodium hypochlorite with ammonia; that best-known method of making it is the Olin Raschig process. Reaction of an N-alkylphthalimide with this compound yields a primary amine in the Gabriel synthesis. A similarly-named functional group with an "o" instead of an "i" in its name is formed after this chemical is condensed with a ketone or aldehyde in the Wolff-Kishner reduction. For 10 points, name this compound used in rocket fuels, with formula  $N_2H_4$ .

ANSWER: HYDRAZINE

5. This treaty failed to establish ownership of Machias Seal Island, but did put an end to the short-lived Republic of Indian Stream. Its fifth article created a “Disputed Territory Fund” and required payment of three hundred thousand dollars. This treaty assigned ownership of a ruined citadel called Fort Blunder and aimed to remedy a dispute arising from reliance on the Mitchell Map, which erroneously displayed the Mississippi River watershed. Since this agreement did not extradite the mutineers from the *Creole*, that mutiny was the most successful slave uprising in US history. This treaty preserved the Northwest Angle for the United States and was negotiated by Alexander Baring, together with a man who notably did not join a mass cabinet resignation following the second veto of a National Bank bill. For 10 points, name this 1842 treaty which resolved the Aroostook War between the US and British Canada, partly named for a US Secretary of State.

ANSWER: WEBSTER-ASHBURTON Treaty

6. The standard classification reference for the “narrow” type of this language group was created by Malcolm Guthrie, who subdivided it into 15 zones based on shared features and geography. The Nen language is the only known language in this linguistic group which does not follow subject-verb-object syntax, instead using subject-object-verb, and languages in this linguistic group have agglutinative verbs that carry more information than any other word class. A mixed language that combines languages from this linguistic group with a less-popular language with Germanic origins is called “flaaitaal.” This language family was first systematically described by the Capuchin friar Giacinto Brusciotto, who studied its Kikongo language. According to a massive comparison-based hypothesis originally proposed by Joseph Greenberg, this linguistic group displaced the Khoisan as it radiated from the region of southeastern Nigeria and Cameroon and migrated south and east. For 10 points, identify this largest language group in the Niger-Congo phylum which predominates in the southern portion of the African continent.

ANSWER: BANTU languages

7. This artist’s trip to rural brick factories in India inspired his series *The Fertile Crescent*, and he used large books, shards of porcelain plumbing fixture, and bits of a television circuit board to create a massive pyramid in his work *Osiris and Isis*. He did a series of four paintings constructed from strips of woodchip wallpaper specially laid onto canvas to create a massive wooden attic space, which he used as the unusual new setting for his reimagining of the Parsifal legend. This artist placed a palette in the middle of an abandoned plaza based on the courtyard Albert Speer designed for the Reich Chancellery in his work *To an Unknown Painter*, and he used straw embedded in paint to depict the golden hair of a figure from Paul Celan’s poem “Death Fugue” in his piece *Margarethe*. For 10 points, name this contemporary German artist known for his heavy use of impasto whose work deals with German guilt confronting Nazi legacy.

ANSWER: Anselm KIEFER

8. This body’s unique terrain may be caused by diapirs driven by density inversions in a non-water ice layer. The fact that volcanism in this body is most apparent between the latitudes of 50 to 57 degrees south agrees with the hypothesis that it experiences a “solid greenhouse effect” thanks to the layer of translucent solid nitrogen on its surface, since this body’s rotational axis’ angle of inclination makes that region sub-solar. Though this body is not a Jovian moon, it is hypothesized to contain a sub-surface liquid ocean based on its magnetic field, which would imply that its core is sufficiently rocky for radiogenic decay. This object is in both synchronous rotation and retrograde orbit with its planet; the latter explains why its orbit is circular and suggests it was captured from the Kuiper Belt. For 10 points, name this body with nearly identical size and composition to Pluto, by far the largest moon of Neptune.

ANSWER: TRITON

9. This kingdom was briefly conquered by Cadwallon ap Cadfan after the Battle of Hatfield Chase, but it then defeated Cadwallon at the Battle of Heavenfield. However, after that, its leader was defeated and dismembered after losing the Battle of Maserfield. This kingdom came into being after the union of Bernicia and Deira by Aethelfrith, and ended when its king, Erik Bloodaxe, succumbed to annexation by Eadred. One of its rulers invited Saint Aidan from Iona to found a monastery that would produce this kingdom’s patron saint, Cuthbert. That institution, which suffered a Viking raid in 793, is Lindisfarne. Another of its rulers held a meeting which decided that the Easter festival should be timed with customs of the Roman church, the Synod of Whitby. This kingdom contained the Jarrow Abbey, which was home to the author of the *Ecclesiastical History of the English People*, the Venerable Bede. For 10 points, name this Anglo-Saxon kingdom which stretched up into Scotland.

ANSWER: NORTHUMBRIAN kingdom

10. The protagonist of one work in this genre briefly works for the water purifications expert Dr. Irving and is given a new name by Captain Michael Henry Pascal. In another book in this genre, the protagonist defeats Tibaut in hand-to-hand combat even though Tibaut has an axe, after he was drugged by Brown and Hamilton in Washington DC. The narrator uses the term the “loophole of retreat” to refer to a seven-year period she lived in a cramped attic in one of these works that fictionalizes writer Nathaniel Parker Willis as the character Mr. Bruce. In that book the protagonist sleeps with Mr. Sands to avoid being raped by Dr. Flint, and the author wrote it under the pseudonym Linda Brent. One example of this genre was written by Gustavus Vassa, also known as Olaudah Equiano. The most famous work of this genre mentions Sophia Auld teaching the protagonist how to read after he moves to Baltimore. For 10 points, identify this genre of literature that includes memoirs by Harriet Jacobs and Frederick Douglass.

ANSWER: SLAVE NARRATIVES

11. A god once assisted this man by tossing snow, ice, and iron at a fire-breathing horse. This man’s singing was so bad that a crane fled north and woke up everyone in its path. In one story, he and his companion Tiera set sail on a quest of revenge, but were foiled when their foe froze the sea. Several women allowed this man to stay on the Island of Refuge, but he opted to leave after their husbands returned from war. He once showed up late to a party, and was served a beer filled with snakes. In his first appearance, he posed as a herdsman to get closer to one of the women of Saari, then abducted and married her at an opportune time, though he soon divorced her for breaking a promise not to dance with men. He himself broke a vow by attacking a witch who had taken the form of an eagle. After a blind herdsman summoned a snake to kill and maim this man, his mother used a copper rake to gather the pieces of his body and added a drop of honey to revive him. That episode happened just after this man tried to win the hand of Louhi’s daughter by taking aim at the swan of Tuonela. For 10 points, name this companion of Väinämöinen, a hero from the *Kalevala*.

ANSWER: LEMMINKÄINEN [or LEMMINKI]

12. These structures have a density of states given by a series of delta-function-like peaks, which makes them attractive as a lasing medium in their namesake variant of the vertical cavity surface-emitting laser. That same property of the energy spectrum of these structures means that they provide an ideal environment for studying the band gap and exciton binding energy reduction obtained via a variant of the Stark effect. One way of creating these structures out of thin films is via self-assembly during the Stranski-Krastanow mode, which generates these structures when the critical thickness is exceeded. That process involves depositing monolayers via epitaxial growth, with the result that these structures form when the lattice mismatch between substrate and film causes the film to buckle upwards, forming pyramids; they can also be obtained by lithographically etching a pillar from a quantum well or a double-barrier heterostructure. Sometimes known as mesoscopic or artificial atoms, for 10 points, identify these semiconductor structures which confine in three dimensions a small number of electrons, and take their name from the fact that they are zero-dimensional relative to the bulk material.

ANSWER: quantum DOTS [prompt on anything like “quantum islands” before “delta function”]

13. According to legend, this empire suffered a drought of seven years, seven months, and seven days after one of its warriors Amadou the Taciturn rescued his bride Sia. The founder of this empire reportedly had to kill a goblin and then marry his daughters, who became the ancestors of its clans; that founder was Dinga. One of the best sources on this empire is the *Book of Roads and Kingdoms*, by Moorish geographer Abu Ubayd al-Bakri. This empire was ruled by the Cissé Touunkara dynasty, and worshipped the seven-headed snake Bida. Its major cities included the oasis towns of Oulata and Audaghost, and it was populated by Soninke and Mande peoples, with its capital located at Koumbi Saleh. It may have been conquered by the Almoravids, but a more likely theory says it was taken by the Sosso Empire before being supplanted as a major power by the Mali Empire. For 10 points, name this West African empire, which shares its name with a modern-day country once led by Kwame Nkrumah.

ANSWER: GHANA Empire [or WAGADU Empire]

14. An author with this last name placed the poem “The Cracked Mother” at the beginning of a six-poem “Limbo” sequence, which appears in a book whose title poem describes a group of people with “their cardboard grips, felt hats, rain-cloaks,” who gather “on sea-port quays, at airports, anywhere there’s a ship.” One character with this last name is the supposed rival of real

literary critics Enid Starkie and Christopher Ricks and becomes excited when a struggling academic writing a biography of Edmund Gosse, named Ed Winterton, reveals he has discovered Juliet Herbert's lost letters. One author with this last name wrote a modern retelling of *Antigone* set in Africa that renamed the protagonist Odale and included the collections *Rights of Passage*, *Masks*, and *Islands* in his "New World Trilogy". A character with this last name visits the Hotel-Dieu and the Croiset museum to find the object that originally inspired Loulou the parrot in the story "A Simple Heart." The surname of the narrator Geoffrey in *Flaubert's Parrot* by Julian Barnes, for 10 points, identify this last name of the Barbadian author of the *Arrivants* trilogy, Edward Kamau.

ANSWER: BRAITHWAITE [accept Edward Kamau BRAITHWAITE or Geoffrey BRAITHWAITE]

15. Prominent geological formations near this national park include the Bigfork Chert and the Stanley Shale. It absorbed a pre-existing park centered on the Whittington Lake Reserve, and to its south is a Mesozoic-era igneous complex known as Magnet Cove. Large deposits of calcium carbonate on the Tufa Terrace Trail at this park begin at the Stevens Balustrade above its Grand Promenade. This park is located within the Zigzag Mountains, which is a subdivision of the Ouachita Mountain range, and contains the recreational area at Gulpha Gorge. The visitor center for this park is now situated at the Fordyce Bathhouse, which is part of its "Bathhouse Row," an area that boasts itself as part of the "Golden Age of Bathing." For 10 points, name this national park in central Arkansas, which is sometimes called the "American Spa" for its therapeutic water.

ANSWER: HOT SPRINGS National Park

16. In one work, this philosopher suggests that just as when following the a chess game by examining a recording of the moves made, we don't worry about imagining the intrinsic qualities of the chess pieces, neither should we worry about the intrinsic character of thoughts, but should focus instead on the patterns of their relationships. In another work, this philosopher attacks a certain branch of epistemology for conflating the "inner episode" of pre-conceptually perceiving objects like a red triangle with an episode in which such perception counts as non-inferential knowledge. In one work, he discussed how a scientific framework for discussing external reality clashes with man's framework of perceiving himself "in the world", which he terms the "manifest image"; that work is *Philosophy and the Scientific Image of Man*. For 10 points, name this American philosopher who criticized sense-data philosophers' reliance on the "Myth of the Given" in his *Empiricism and the Philosophy of Mind*.

ANSWER: Wilfrid Stalker SELLARS

17. A character in one of this composer's ballets is represented by trombone glissandi playing the interval of a descending minor third. The prologue of an opera by this composer opens with a motif drawn from the pentatonic collection "F#-A-B-C#-E" that's referred to as that opera's "Darkness" motif. Elliot Antokoletz argued that the leitmotif for that opera's protagonist is a modal form of the theme this composer used to represent Stefi Geyer in his first Violin Concerto. In one ballet by this composer, tramps force a girl to seduce the wealthy title character, who refuses to die after being repeatedly stabbed and hanged from a lamp hook. In his only opera the soprano encounters a lake of tears, a bloody torture chamber, and the title character's three other wives behind the seventh door of the title location. For 10 points, name this Hungarian composer of *The Miraculous Mandarin* and *Duke Bluebeard's Castle*.

ANSWER: Bela BARTOK [accept names in either order]

18. Dr. Nathan Shock revolutionized research of this process by using longitudinal methods on the local population of Baltimore; he names a Research Center dedicated to its study in the Johns Hopkins Medical Center. Daniel Martinez published a controversial 1998 article suggesting that members of the genus *Hydra* do not undergo this process. David Gems's experiments with worms have recently cast doubt on the involvement of the gene *Sir2* in controlling this process. Cynthia Kenyon's experiments with daf-2 mutant *C. elegans* provided evidence for the insulin/IGF-1 pathway's regulation of this process, which occurs prematurely in Werner syndrome. Calorie restriction mimetic drugs have been hypothesized to work against this practice. A lot of attention has been showered on resveratrol, an ingredient found in red wine, for its supposed ability to counteract this process. Disease-based theories of this process were weakened when Leonard Hayflick demonstrated that cells divide a finite number of times. For 10 points, name this biological process, also known as senescence, that is accelerated in people with progeria.

ANSWER: biological AGING [or SENESCENCE before mentioned]

19. One character in this play tells a story about men pleading with Jupiter that Phoebus be gelded, for if the sun had children

the world would grow too hot. Another anecdote in this play describes a crocodile that tries to eat the bird that cured it of a tooth-worm. One character in this play relates a dream in which her husband accuses her of trying to uproot a yew tree and attempts to bury her alive, until a whirlwind blows a branch off the yew tree, striking and killing him. In this play, one character is tried for the murder of her husband, who died in a staged horse-vaulting accident, and is sentenced to live in a home for penitent whores. In this play, Cornelia mourns for her son Marcello, who is killed by his brother, and, in the guise of a monk, Ludovico finishes off a man whose helmet he had poisoned. Flamineo aids Brachiano in killing Isabella, so that he may pursue an adulterous affair with its title character. For 10 points, the murderous noblewoman Vittoria Corombona is the title character of what revenge tragedy by John Webster?

ANSWER: The WHITE DEVIL

20. According to a military treatise called the *Strategikon*, these people are “scoundrels” and “devious,” but are also “very experienced in military matters.” A rebellion against these people led to establishment of the tribal union of Samo. Their successful siege of Sirmium could not be repulsed by the emperor Tiberius II, and soon after that they conquered Viminacium, but Tiberius’ successor used the general Priscus to push them back. A leader of these people, Bayan I, suffered several defeats at the hands of the Emperor Maurice, but was saved when Maurice was mutinied against by Phokas. These people had fled from Göktürk rule under their Khagan Bayan, and displaced the Gepids and Lombards to establish a realm often named for the shape of their fortresses. Eric of Friuli and Pepin of Italy destroyed that realm called the “Ring” of these peoples. For 10 points, name this nomadic tribe that vied for power with the Bulgars and Slavs in the Sixth Century Balkan territories.

ANSWER: AVARS

TIEBREAKER

21. Many accounts trace the beginning of this religious sect to a scholar named Huiyan, who called together a group of monks and laymen, and was posthumously called the “First Patriarch” of this belief for his attempt to establish independent monasteries during the Eastern Jin dynasty. The so-called Seventh Patriarch of this school wrote the “One Sheet Document” to summarize its teachings to his followers like Genchi, and he entered the “Seven-Article Pledge” to try to appease the government of Go-Toba, but he was exiled anyway. That man was Honen, who founded a version of this belief called Jodo Shu. Followers of this school study the Infinite Life Sutra and attempt to achieve rebirth in Sukhavati by engaging in *nianfo*, the repetition of the name of Amitabha. For 10 points, name this sect of Buddhism which focuses on achieving enlightenment by entering the namesake geographical location.

ANSWER: PURE LAND Buddhism [accept SUKHĀVATĪ before mentioned; prompt on just “Buddhism” or “Mahayana Buddhism”]

## BONUSES

1. Identify some things interleukins are involved in, for 10 points each.

[10] IL-6 is secreted by osteoblasts to stimulate the formation of osteoclasts, which then resorb this tissue, bringing calcium into the bloodstream.

ANSWER: BONE

[10] IL-5 mediates the activation of, and is primarily expressed in, these white blood cells, which degranulate to produce cytotoxic cationic granule proteins, and are named for their affinity for acidic dyes.

ANSWER: EOSINOPHILS

[10] IL-1, IL-11, and IL-22 all secrete cytokines to get the liver to release these proteins, like serum amyloid A, whose plasma concentrations increase or decrease in the bloodstream depending on whether they're positive or negative.

ANSWER: ACUTE-PHASE proteins [or ACUTE-PHASE reactants; accept APP]

2. The narrator of this book suggests that in response to his sister's elopement, one of its main characters committed suicide because he had run out of "existence coupons." For 10 points each:

[10] Name this paragraph-less novel by Thomas Bernhard, written in the form of a continuous monologue, about Wertheimer, the classmate of Glenn Gould.

ANSWER: The LOSER [or Der UNTERGEHER]

[10] As an autobiographical trademark, Bernhard populated his novels with characters suffering from this disease, which also afflicted Katerina Ivanovna from *Crime and Punishment*. Sufferers of this lung disease have been widely romanticized throughout literature.

ANSWER: TUBERCULOSIS [or MTB; or PHTHISIS pulmonalis; or CONSUMPTION]

[10] Bernhard ended his novel *The Old Masters* at a terrible performance of this Heinrich von Kleist comedy, in which Eve reveals that it was, in fact, the judge Adam who committed an act of vandalism on the title object.

ANSWER: The BROKEN JUG [or The BROKEN PITCHER; or Der ZERBROCHNE KRUG]

3. Answer the following about a site that has a Great Granary and a bronze statue called the "Dancing Girl", for 10 points each.

[10] Name this ancient city, which along with Harappa was an urban center of the Indus Valley Civilization, and has a name translating as "Mound of the Dead."

ANSWER: MOHENJO-DARO

[10] This other Indus Valley site, located in the Indian state of Gujarat, is known for its bead factory, and for being the site of the world's earliest known dock, which made this city a thriving trade center on the Sabarmati River.

ANSWER: LOTHAL

[10] This much more recent archaeological site in the Punjab was a center of Buddhist learning under Asoka, who built a highway linking it with Pataliputra. It was home to the school where Chandragupta's advisor Kautilya studied, and it was given a name meaning "Severed Head."

ANSWER: TAXILA [Taksasila]

4. In July 2010, an effort to reintroduce these organisms in the Raritan River estuary was blocked by the New Jersey Department of Environmental Protection. For 10 points each:

[10] Name these bivalve molluscs, once stupendously abundant in New York Harbor, which are being re-seeded in the hope they will improve water quality.

ANSWER: OYSTERS (or OSTREIDAE)

[10] A 2013 study found that this process threatens oyster populations in the Pacific Northwest since it becomes more energetically expensive to precipitate the material that larval oysters need to form their shells the higher when the CO<sub>2</sub> concentration rises.

ANSWER: ocean ACIDIFICATION (prompt on "climate change")

[10] Acidification also poses future problems for this freshwater system, where it may be driven partly by the presence of invasive zebra mussels. This system, which contains about 20% of the world's freshwater, has in the past been able to resist acidification because of carbonate minerals in its drainage basins.

ANSWER: GREAT LAKES [prompt on any specific lake]

5. Llwyd ap Cil Coed once avenged an insult by turning this kingdom into a barren wasteland and locking its king up in his castle. For 10 points each:

[10] Name this kingdom whose queen was once accused of eating her own child, and whose king traded places with Arawn for a whole year.

ANSWER: DYFED

[10] This king of Dyfed, the son of Pwyll and Rhiannon, is one of the seven survivors of the expedition against the Irish king Matholwch, though he later loses his life in single combat against Gwydion.

ANSWER: PRYDERI

[10] Pryderi is the only person to appear in all four branches of this collection of Welsh mythology, which was first translated into English by Lady Charlotte Guest.

ANSWER: MABINOGION

6. The title character of this film is impregnated by the African-American soldier Bill, but kills him as he brawls with her husband. For 10 points each:

[10] Name this West German film about a woman who becomes the mistress of the industrialist Karl Oswald, while her husband Hermann serves time for Bill's murder. It is the first film of a trilogy together with the same director's *Lola* and *Veronika Voss*.

ANSWER: The MARRIAGE OF MARIA BRAUN [or Die EHE DER MARIA BRAUN]

[10] *The Marriage of Maria Braun* was directed by this major figure in the New German Cinema movement who created the celebrated TV series *Berlin Alexanderplatz*. The cleaning woman Emmi has an affair with the Moroccan guest worker Ali in his *Fear Eats the Soul*.

ANSWER: Rainer Werner FASSBINDER

[10] Another major figure in New German Cinema is this director, who depicted the title conquistador's search for El Dorado in *Aguirre, the Wrath of God* and made a documentary about bear enthusiast Timothy Treadwell called *Grizzly Man*.

ANSWER: Werner HERZOG Stipetic

7. IEEE's POSIX standard 1003.1c specifies the API for a portable implementation of these constructs, which descend from a parent process whose memory it shares. For 10 points each:

[10] Identify these software constructs which execute program instructions on either a single or multiple cores while sharing resources.

ANSWER: THREADS

[10] This most common type of multithreading runs a thread until it runs into an obstacle that would cause it to wait a long time, at which point it runs another thread until the required data for the prior one arrives.

ANSWER: BLOCK multithreading

[10] A common method of thread synchronization is to use these constructs, which prevent different threads from accessing the same resources at the same time. These constructs have semantics similar to those of binary semaphores but unlike semaphores know their owner, who is the only one capable of unlocking these constructs.

ANSWER: MUTUAL EXCLUSION

8. A major work in this genre is Kanze Kojiro Nobumitsu's play *Funa benkei*, about the rivalry of the Minamoto brothers. For 10 points each:

[10] Name this genre of Japanese musical drama, in which performers wear masks, as opposed to the elaborate make-up worn in kabuki.

ANSWER: NOH

[10] This term refers to the group of musical performers in Noh drama, separate from the chorus, who sit at back of the stage completely visible to the audience and play instruments to accompany the theater.

ANSWER: HAYASHI

[10] One of the most famous Noh plays is an adaptation of the *Tale of Genji* focusing on this character, who gives birth to Genji's son Yugiri, and who is possessed by the spirit of Rokujo.

ANSWER: Lady AOI [or AOI no Ue]

9. Canon 13 of an ecumenical council called by this Pope declared anathema those who had violated the "Truce of God." For

10 points each:

[10] Name this man who served as Archbishop of Vienne after being appointed legate to France by Pope Paschal II. This man's brief five-year term as Pope saw him call the First Lateran Council in 1123.

ANSWER: Pope CALLIXTUS II [or GUY DE BURGUNDY]

[10] The First Lateran Council brought a close to this controversy, which originated when Pope Gregory VII and Henry IV butted heads over the right to appoint bishops.

ANSWER: INVESTITURE Controversy

[10] At the First Lateran Council, the terms of this agreement, which was made the previous year between Callixtus II and Holy Roman Emperor Henry V, were read and ratified, including its distinction between investiture "by the lance" and that "by ring and staff"

ANSWER: CONCORDAT of WORMS [prompt on PACTUM CALIXTINUM]

10. With Harrison Birtwistle, this man co-founded the Pierrot Players, and he composed his ten *Strathclyde Concertos* for the Scottish Chamber Orchestra. For 10 points each:

[10] Name this contemporary British composer who parodied tunes George III taught to bullfinches in an opera in which the musicians are meant to be enclosed in birdcages, his *Eight Songs for a Mad King*.

ANSWER: Peter Maxwell DAVIES

[10] The seventh movement of *Eight Songs for a Mad King* includes a parody of "Comfort Ye, My People", an excerpt from this Handel oratorio that includes a famous "Hallelujah" chorus.

ANSWER: MESSIAH, HWV 56

[10] Davies composed a series of ten string quartets commissioned by, and named for, this record label. It started out as a budget label for recordings of rare music with Eastern and Central European artists, but now records some major Western orchestras, and has a popular online music library.

ANSWER: NAXOS Records

11. The researcher most responsible for popularizing this cognitive bias, Melvin Lerner, explored it by constructing experiments in which subjects who were unable to alleviate pain caused to ostensible victims instead resorted to denigrating the victims themselves. For 10 points each:

[10] Identify this cognitive bias, which consists of insisting that outcomes reflect desserts; Lerner himself called it a "fundamental delusion" in a book titled for it.

ANSWER: JUST WORLD bias hypothesis or fallacy

[10] The just world fallacy could be interpreted as an example of this larger psychological phenomenon in which people aduce false patterns in data, such as seeing the Virgin Mary in a grilled cheese sandwich. Paraedolia is a special type of this phenomenon with respect to images or sounds.

ANSWER: APOPHENIA

[10] The research of Lerner and others has concluded that those who believe in the just world hypothesis tend to also have this property, which also correlates highly with conservatism and is manifested in such practices as regularly attending a church or synagogue.

ANSWER: they were more RELIGIOUS [accept anything mentioning religiosity, prompt on any specific religion]

12. One theorem central to this discipline establishes that an external potential  $V$  is a unique function of the ground-state, to within an additive constant. For 10 points each:

[10] Identify this field expanded upon by Walter Kohn in the 60s, with the help of Hohenberg and Sham. It seeks to describe the workings of many-electron systems through knowledge of  $\rho$  in the ground state.

ANSWER: DFT [or DENSITY FUNCTIONAL theory]

[10] One of the earliest models in density functional theory was developed by Llewellyn Thomas and this Italian, who supervised the construction of the Chicago Pile-1, the first nuclear reactor.

ANSWER: Enrico FERMI

[10] DFT models often use this approximation, in which the contribution of exchange-correlation energy in each infinitesimal volume is assumed to have the value that it would have if the whole space were filled with a homogenous electron gas with the same density as that volume.

ANSWER: LOCAL DENSITY approximation



13. This author included the stories “Yellow Woman” and “Tony’s Story” in the collection *Storyteller*. For 10 points each:

[10] Name this author of *Almanac of the Dead* and *Gardens in the Dunes* whose most famous novel concerns Tayo recovering from traumatically seeing his cousin Rocky die during the Bataan Death March.

ANSWER: Leslie Marmon SILKO

[10] Silko wrote this short story in which Ken and Leon convince the Catholic priest Father Paul to sprinkle holy water on the title character’s grave even though the funeral is a traditional Indian burial ceremony.

ANSWER: “The MAN TO SEND RAINCLOUDS”

[10] In the essay “An Old-Fashioned Indian Attack in Two Parts” Silko attacked this Beat poet for stealing the title of his collection *Turtle Island* from Pueblo Indians.

ANSWER: Gary SNYDER

14. In his memoir *The Prince of Darkness*, Robert Novak revealed this man to be the person who caused George McGovern to be called the candidate of “Acid, Amnesty, and Abortion.” For 10 points each:

[10] Name this Missouri Democrat who was chosen as McGovern’s running mate, but then dumped 18 days later in favor of Sargent Shriver.

ANSWER: Thomas EAGLETON

[10] The only state that McGovern was able to carry was this one, whose Senators at the time included Ted Kennedy.

ANSWER: MASSACHUSETTS

[10] Before his presidential run, McGovern sponsored a 1970 amendment together with this Oregon Senator, which would have set a deadline on withdrawing from the Vietnam War by the end of 1971.

ANSWER: Mark HATFIELD

15. Identify the following concepts in Fiqh, or Islamic jurisprudence, for 10 points each.

[10] This school, or madhab, of jurisprudence stresses the analogy of the Koran’s precepts to novel fields of law such as taxation. The Kanuns of Suleiman the Magnificent are considered to have applied the precepts of this tradition and displaced *sharia*. Its founder had disciples including al-Shaybani.

ANSWER: HANAFI

[10] Abu Hanifah, the founder of the Hanafi Madhab, was a member of this group. It refers to the generation of Muslims who did not know the prophet but did know his companions.

ANSWER: TABI’I [singular: TABI’UN]

[10] That generation, including scholars like Jafar al-Sadiq and Malik ibn Anas, were often concentrated in this city, which was the destination of the Hegira.

ANSWER: MEDINA

16. This artist, who inscribed the Gettysburg Address on the verso of a bucolic scene “On the Farm,” was the first untrained artist shown in an American exhibition. For 10 points each:

[10] Name this self-taught Pittsburgh artist whose *Scene of the Scottish Highlands* was accepted into the 1927 Carnegie International Exhibition. He also painted the industrial landscapes where he worked.

ANSWER: John KANE

[10] John Kane is often compared as an example of naive art with this figure whose work was discovered in a drugstore window in Hoosick Falls by Louis Caldor.

ANSWER: GRANDMA MOSES [or Anna Mary Robertson MOSES]

[10] This Quaker minister who painted a lion eating straw beside an ox in *The Peaceable Kingdom* is often cited as the original American example of naive art.

ANSWER: Edward HICKS

17. The intensity at the output of these devices is given by the product of the square of two sinc (i.e. sine of x over x) functions whose arguments are the spacing between slits and the width of the slits. For 10 points each:

[10] Identify these common physical devices which employ a series of identical slits at fixed intervals to separate light by wavelength.

ANSWER: DIFFRACTION GRATINGS [prompt on any partial answers]

[10] The basic governing equation of diffraction gratings is this physical law, which sets the product of wavelength and order equal to the product of twice the slit separation and the sine of the incident angle.

ANSWER: BRAGG's equation or law

[10] The Bragg equation can be transformed to the von Laue equations when the analysis needs to be performed in this domain, which corresponds to the Fourier transform of the original lattice.

ANSWER: RECIPROCAL lattice or domain or space

18. Name some French Finance Ministers under the *Ancien Régime*, for 10 points each.

[10] This mercantilist is famous for his service under Louis XIV from 1665 to 1683. He replaced the extravagant and corrupt Nicolas Fouquet, and reformed the taille taxation scheme.

ANSWER: Jean-Baptiste COLBERT

[10] This aristocrat served as Finance Minister from 1715 to 1718. However, he's perhaps better known for his military service during the War of the Austrian Succession, which saw him defeated by Britain's King George II at the Battle of Dettingen.

ANSWER: Adrien Maurice de NOAILLES, 3<sup>rd</sup> duc de Noailles

[10] This physiocrat served under Louis XVI from 1774 to 1776. While in office, he spoke out against French financial support for the American Revolution, but fell from power by alienating many with policies such as free trade in grain and the abolition of the *corvée*.

ANSWER: Anne-Robert-Jacques TURGOT, Baron de Laune

19. This essay begins with the author describing how he assisted the escape of a spider in his study, before claiming that without the title activity, "we should lose the very spring of thought and action." For 10 points each:

[10] Name this 1823 essay, a paean to an activity that "eats into the heart of religion, and turns it into ranking spleen and bigotry." The author concludes by saying that he does it to himself for not having done it to the world enough.

ANSWER: "ON THE PLEASURE OF HATING"

[10] In "On the Pleasure of Hating," William Hazlitt praises this fictional character's *Epistle to Robert Southey* for describing an ornery "set of whist-players." This character, a persona created by its author, is the ostensible narrator of "Christ's Hospital Five-And-Thirty Years Ago" and "The South-Sea House."

ANSWER: ELIA [prompt on Charles LAMB]

[10] Hazlitt surmises that the success of this author's novels, like *Rob Roy*, owes to their ability to transport readers back to a time when feuds were common and people hated each other a lot.

ANSWER: Sir Walter SCOTT, 1st Baronet

20. In medieval Islamic philosophy, the so-called *Theology of Aristotle* was actually largely a translation of the last three sections of this philosophical work. For 10 points each:

[10] Name this collection of philosophical texts, which put forth a metaphysical system in which existence emanates from the three foundational elements of the One, the Intelligence, and the Soul.

ANSWER: The Six ENNEADS

[10] The *Enneads* were compiled by this student of Plotinus. He introduced his namesake tree diagram for illustrating scales of being in his commentary on Aristotle's *Categories*, known as the *Isagoge*.

ANSWER: PORPHYRY of Tyre

[10] Porphyry's works also included an introduction to the *Elements* of this Greek mathematician, whose five postulates include his namesake parallel postulate.

ANSWER: EUCLID of Alexandria

EXTRA BONUS

21. Apparently Will Nediger is going to suffer from Ted Gioia's literary taste, so in the spirit of fairness name these contemporary writers who Ted despises and Will presumably adores, for 10 points each.

[10] This author wrote about two people who are hired to live in a cave pretending to be prehistoric cavemen in the title story of his *Pastoralia*. This experimental short story writer also wrote the collections *Tenth of December* and *CivilWarLand in Bad Decline*.

ANSWER: George SAUNDERS

[10] This novelist often writes about technology such as his novel *Galatea 2.2* about the computer scientist Philip Lentz trying to train a computer named Helen to produce literary analysis. He also wrote *The Time of Our Singing* and *The Echo Maker*.

ANSWER: Richard POWERS

[10] This author wrote about returning to Ukraine to find the woman who saved his grandfather from the Holocaust in his novel *Everything is Illuminated*. He continued his streak of bad novels adapted into worse movies with his second book *Extremely Loud and Incredibly Close*.

ANSWER: Jonathan Safran FOER